

S. VISWANATHAN

CV HIGHLIGHTS



Professor “Vish” Viswanathan obtained a Ph.D. in Operations Research with minor in Operations Management from Case Western Reserve University in 1992, MBA (Gold Medallist) from Indian Institute of Management Calcutta in 1986, and B.Tech (Mechanical Engineering) from Indian Institute of Technology Madras in 1984. He has been a faculty member at the Nanyang Business School, Nanyang Technological University, Singapore for 32 years. He has taught previously at Cox School of Business, Southern Methodist University in Texas.

Currently, he is Professor of Operations & Corporate Sustainability at Nanyang Business School. He also serves as the Director of the Centre for Business Sustainability, and as Cluster Director of the Energy Research Institute @ NTU (ERI@N). He has previously served as Associate Dean (Research), Head of the Division of Information Technology & Operations Management (ITOM), Director of the PhD Program, Program Director of MBA specialization in Technology & Operations and Program Director of MDP@Nanyang. Prior to entering academia, Vish worked as an Operations Auditor and as an IT Software Specialist.

Vish was a member of the team responsible for the curriculum design and redesign of the full-time MBA into a one-year MBA program. As Head of ITOM, he was involved in developing the initial curriculum for the MSc (Technology Management) segment of the Renaissance Engineering Program. He was the founding Program Director of the NTU-Waseda double MBA program and was involved in developing the curriculum for the NTU-Waseda double MBA and the MBA (Technology & Operations) curriculum. He was also involved in developing the curriculum for the Management Development Program @ NTU, as its Founding Program Director. He also recently championed the program design for the MBA (Business Sustainability) Track. In addition, as Program Director, he has been recently involved in designing the curriculum for several in-company executive programs on Climate and Sustainability and for the NTU Executive MSc in Sustainability Management.

Vish’s teaching interests are in Corporate Sustainability, Decarbonization, Circular Economy, and Operations. He currently teaches in the MBA, EMBA, PMBA, Nanyang Fellows, EMSc and Executive Programs. His research interests are in Corporate Sustainability, Energy Modelling, Life Cycle Analysis, Business Model Innovation, Supply Chain Management, Manufacturing Systems, Urban Mobility, Optimization, and Scheduling.

His research has been published in Financial Times and Business Week ranked top tier Business journals such as *Management Science*, *Operations Research*, *Production & Operations Management*, and *Journal of Operations Management*; and other top journals such as *International Journal of Production Research*, *European Journal of Operational Research*, *Naval Research Logistics*, *IIE Transactions*, *Operations Research Letters*, *Journal of the Operational Research Society*, *International Journal of Production Economics*, *Integrated Manufacturing Systems*, *International Journal of Technology and Management*, *International Journal of Logistics*, and *International Journal of Physical Distribution & Logistics Management*.

He is serving or has served as Senior Editor, Editorial Board Member, or Associate Editor in top journals such as *Decision Sciences*, *Production & Operations Management*, *Journal of Operations Management*, *IEEE Transactions in Automation Science & Engineering*, and *International Journal of Production Research*. He has made several appearances in Who’s who in the World, Who’s Who in Asia, Who’s Who in Finance and Industry and Who’s Who in Science and Engineering lists. He was selected for the Albert Nelson Marquis Lifetime Achievement Award in 2017. He was awarded the prestigious Nanyang Award for Research Excellence in 2010.

CONTACT ADDRESS

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PERSONAL PARTICULARS

- Date of Birth: June 17, 1962.
- Nationality: Singapore.
- Marital status: Married, 2 children (27 and 29).

EDUCATION

1992	Ph.D, Operations Research with Minor in Operations Management, CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, U.S.A
1990	<i>MS in Management Science</i> CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, U.S.A
1986	MBA (Gold Medallist and First Rank Holder) INDIAN INSTITUTE OF MANAGEMENT, CALCUTTA, INDIA.
1984	<i>B.Tech (Mechanical Engineering)</i> INDIAN INSTITUTE OF TECHNOLOGY, MADRAS, INDIA

PROFESSIONAL MEMBERSHIP

1990 – Present: INFORMS (Operations Research Society of America until 1995)

1995 – Present: Production & Operations Management Society

1998 – Present: International Society for Inventory Research

WORK EXPERIENCE

NANYANG BUSINESS SCHOOL, NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE.

Academic Appointments

- *Professor* (with Tenure), From Feb 2008.
- *Associate Professor* (with Tenure), Aug 1999 – Jan 2008.
- *Associate Professor*, Jan 1999 – Jul 1999.
- *Lecturer*, Oct 1992 – Dec 1998.

Key Service Appointments

- Director, Centre for Business Sustainability, 2016 – 2026.
- Cluster Director, Energy Research Institute @ NTU, 2016 – 2024.
- Academic Director, Executive Masters in Sustainability Management, 2023-
- Program Director, BCG Program in Climate and Sustainability Stewardship, 2023-
- Associate Dean (Research), 2014 – 2019.
- Head, Academic Division of IT & Operations Management (ITOM), 2008 – 2014.
- Program Director, Management Development Program @ NBS, 2011 – 2015.

- Director, PhD Program in Business, 2001 – 2005.
- Associate Director (Academic), Nanyang MBA Program, 2008-2012.
- Programme Director, MBA (Technology & Operations), 2001 – 2008.

SOUTHERN METHODIST UNIVERSITY, DALLAS, TEXAS, USA

- *Visiting Assistant Professor*, Edwin L. Cox School of Business, Sep 1997 – Aug 1998.

CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, USA

- *Software Specialist, IT Support Group* (Part-time), Jan 1991 – Sep 1992.

BP OIL COMPANY, CLEVELAND, OHIO, USA

- *Research Associate, Information Systems* (Part-time), May 1989 – Dec 1990.

TUBE INVESTMENTS OF INDIA LTD., MADRAS, INDIA.

- *Internal Auditor*, Dec 1986 – Sep 1988.

SUNDARAM CLAYTON LTD., MADRAS, INDIA.

- *Management Trainee (Purchasing)*, May 1986 – Dec 1986.

ACADEMIC HONORS AND AWARDS

- BP America Research Fellowship, Case Western Reserve University, 1989-1990.
- B.P. Poddar Merit Scholar, 1985, IIM Calcutta.
- Won several prizes at IIM Calcutta including the Chairman's Prize, John Wyne Prize, Calcutta Management Association Prize, Dr. BC Roy Gold Medal, Dr. K. Nath Public Trust Gold Medal and BP Poddar Merit Scholarship.
- Gold Medallist & First Rank Holder at IIM Calcutta. Included in the Institutes Honour Roll.
- Rank of 222 out of over 250,000 applicants in 1979 for All-India, Joint Entrance Exam for IIT admissions.

RESEARCH

KEY RESEARCH AREAS

Corporate Sustainability, Life Cycle Analysis, Energy Modelling & Optimization, Energy Logistics, Policies for Carbon Control, Techno-Economic Analysis, Inventory Management, Optimization, Transportation and Urban Mobility, Supply Chain Management, Remanufacturing & Reverse Logistics, Manufacturing Systems, Forecasting.

RESEARCH AWARDS

- IEOM Outstanding Faculty Advisor and Mentor Award, by Industrial Engineering and Operations Management (IEOM) Society International, March 2021.
- Award for Outstanding Senior Editor of *Decision Sciences Journal*, 2014.
- Nanyang Award for Research Excellence, 2011. (University-wide research excellence award given to only one or two researchers across the whole university each year).
- Who's who in the world, 1997, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019; Who's who in Science and Engineering, 2001, 2003; Who's who in Finance and Industry, 2001, 2002; Who's who is Asia, 2006,2011.
- Selected for the 2017 and 2018 Albert Nelson Marquis Lifetime Achievement Award.

RESEARCH SERVICE

- Editorial Review Board, *Production and Operations Management*, From 2002-.
- Member of the Advisory Board, Singapore University of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2020-2023.
- Chair of the Advisory Board Subcommittee for local board members, Singapore University of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2021-2023.
- Associate Editor, *Management & Business Review*, From 2022-.
- Senior Editor, *Decision Sciences*, 2014 - 2017.
(recognized as Outstanding Senior Editor for the Journal in 2014)
- Co-Editor, *Journal of Operations Management*, Special Issue on “Supply Chain Management in Emerging Markets”, 2014/15.
- Editorial Board Member, *International Journal of Production Research*, 2009-2019.
- Reviewer/Evaluator, Singapore Israel Industrial R&D Foundation, 2022.
- Reviewer, Israel Science Foundation Grant Proposals, 2016, 2018.
- Associate Editor, *IEEE Transactions on Automation Science and Engineering*, 2005-2008.
- Associate Editor, *Asia Pacific Journal of Operational Research*, 2005 – 2012.
- Special Issues Editor, *Asia Pacific Journal of Operational Research*, 2008-2010.
- Editorial Board Member, *Technology, Operations and Management*, From 2010 -
- Editorial Board Member, *International Journal of Services and Operations Management*, 2004-
- Editorial Board, *International Journal of Integrated Supply Chain Management*, From 2009-
- Editorial Advisory Board, *IIM Shillong Journal of Management Science*, From 2015-.
- Editorial Board, *PRERANA:Journal of Management Thought and Practice*, From 2010-.
- Member of the review panel, Science & Engineering Research Council (SERC) Programme in Logistics and Supply Chain Management, Agency for Science, Technology & Research (A*STAR), Singapore, 2012, 2014.
- External Assessor, Research Grants Council (RGC) of Hong Kong, 2002, 2003, 2012, 2013, 2016.
- External Reviewer, Tenure & Promotion Case for several business schools such as SUNY (State University of New York), Melbourne Business School, Singapore Management University, IIM Bangalore, IIM Calcutta, City University of Hong Kong, Hong Kong Polytechnic University, Hang Seng Management College, Hong Kong Baptist University.
- Reviewer for following Journals:

Journal of Cleaner Production, Sustainability, Frontiers in Sustainability, Management Science, Operations Research, Decision Sciences, MSOM, Production and Operations Management, Naval Research Logistics, IIE Transactions, Transportation Science, International Journal of Production Research, IEEE Transactions on Automation Science and Engineering, European Journal of Operational Research, International Journal of Production Economics, Omega: International Journal of Management Science, Annals of Operations Research, INFOR, Computers and Industrial Engineering, Computers and Operations Research, Asia Pacific Journal of Operational Research, International Journal of Operational Research, IEEE Transactions on Systems, Man and

Cybernetics, IMA Journal of Management Mathematics, International Journal of Logistics: Research & Applications, International Journal of Computer Integrated Manufacturing, OR Spektrum, OPSEARCH, Optimal Control Applications and Methods, Transportation Research, International Transactions in Operations Research.

RESEARCH FUNDING

External Grants

[Total: \$10.21 Million, Last 3 years: \$6.90 Million]

- Transport Decision Making Study, \$392,202, Research Consultancy Project from Land Transport Authority to Centre for Business Sustainability, PI, 2023-2024.
- Singapore's Pathway to Carbon Neutrality: Analysis of New Technologies," \$4.99 Million, NRF grant under Intra-CREATE Collaborative grant, Lead PI for NTU. NTU share of the grant is \$2.246 Million, 2022-2025.
- Protein4Singapore, \$24.9 Million, NRF Grant under CREATE Program for 5 years for TUM and NTU Researchers, Lead PI for the research topic – Life Cycle Analysis and Total Supply Chain Value Assessment, for which the grant amount is \$1.52 Million, 2022-2027.
- End-to-End Supply Chain Design for Additive Manufacturing, \$520,000, NRF Grant through HP-NTU Corporate Lab, 2020-2023.
- Carbon Reduction Strategies for Top Chemical Companies, \$200,000, NRF CREATE Program – C4T Emerging Opportunities Fund Grant, NRF, 2020-2023.
- Carbon Reduction in Chemical Technologies Phase 2, \$35 Million (across 17 PIs), NRF Grant under CREATE program for 5 years. My share of grant under the Interdisciplinary Research Program "Better Business Models" is \$1,149,183, 2018-2025.
- Locating Stewardship, Governance and Sustainability, \$57,780, research project from Stewardship Asia Centre, Temasek, 2018.
- Achieving "Car-Lite Singapore": Understanding Motorist Behaviour and Developing Interventions, \$679,782.00, [Co-PI], National Research Foundation (NRF) Grant, 2017-2021.
- Optimization of Service Networks for Reverse Logistics, \$632,406, [Co-PI], AStar, Strategic Research Theme Grant, 2006.
- Invited as collaborator for a research project on forecasting by leading researchers in UK. Project funded by Engineering & Physical Sciences Research Council (EPSRC, UK)
- Closed Loop Manufacturing and Service Networks. \$37,000, [Co-PI], Astar Project # 0421120027, Strategic Research Theme Pilot Grant, 2004.
- Integrated Manufacturing and Service Systems. \$38,000, [Co-PI], Astar Project # 0421120026, Strategic Research Theme Pilot Grant. , 2004.

Internal Grants

[Total: \$750,838, Last 3 years: \$200,000]

- Towards a Data-Driven, Explainable Framework for AI Start-ups' Due Diligence, \$200,000, [Co-PI], NTU ACE (Accelerating Creativity and Excellence) Grant, 2020.
- Carbon Control Policies for Climate Change Mitigation, \$81,114.77, MOE AcRF Tier 1 Grant, 2016-2019.
- Optimization Models for Capacity and Service Enhancements in Rail Systems, \$84,834,

MOE AcRF Tier 1 Grant, 2014-2017.

- Inventory control policies for after-market service networks, \$10,000, Nanyang Research Excellence Award, 2012.
- Impact of Carbon Control on Operations & Supply Chain, \$250,000, NTU Initiative Fund Grant, 2011.
- Decision Models for Optimal Positioning and Use of Information and Communication Technologies (ICT) in the Supply Chain, \$60,000, MOE AcRF Tier 1 Grant, 2010.
- Mathematical Programming Approach to Multi-item Lot Sizing & Scheduling Problems, \$4990, NTU-MOE Applied Research Fund Grant, 2005.
- Coordination Issues in Supply Chain Management. \$4,900, NTU-MOE Applied Research Fund Grant, 2001.
- Global Supply Chains: Benchmarking Singapore's Competitiveness. [Co-PI]: \$50,000, NTU-MOE Applied Research Fund Grant, 1995.
- Studies in Multi-Stage and Multi-Item Production and Inventory Systems. \$5,000, NTU-MOE Applied Research Fund Grant, 1993.

CITATION SUMMARY

Database	Citation Count	H-index	i10-index
Google Scholar	3499	25	40

PUBLICATIONS

JOURNAL ARTICLES

1. V. Khanpit, S. Viswanathan, & O. Hinrichsen (2024) "Environmental impact of animal milk vs plant-based milks: Critical review" *Journal of Cleaner Production*, <https://doi.org/10.1016/j.jclepro.2024.141703>.
2. J. L. Martin & S. Viswanathan (2023) "Feasibility of Green Hydrogen-Based Synthetic Fuel as a Carbon Utilization Option: An Economic Analysis," *Energies*, <https://doi.org/10.3390/en16176399>.
3. G. A. Chua, Y. Feng, J. R. L. Senga, S. Viswanathan (2023) "An Efficient Approximation to the Pull Policy for Hybrid Manufacturing and Remanufacturing Systems with Setup Costs ," *Institute of Industrial and System Engineering (IISE) Transactions*, <https://doi.org/10.1080/24725854.2023.2253294>
4. G. A. Chua, A. Ravindran, J. R. L. Senga, and S. Viswanathan, (2023) "Job scheduling for maximum revenue on uniform, parallel machines with major and minor setups and job splitting," *Computers and Industrial Engineering*, 178, April 2023, 373-385. <https://doi.org/10.1016/j.cie.2023.109147>
5. S. Srivathsan and S. Viswanathan, (2017), "A queueing based optimization model for planning inventory of repaired components in a service center". *Computers and Industrial Engineering*, 106, April 2017, 373-385. <http://dx.doi.org/10.1016/j.cie.2017.01.020>.

6. K. Z. Zhou, C. Su, A. Yeung, S. Viswanathan (2016), Supply Chain Management in Emerging Markets,” Special Issue Editorial, *Journal of Operations Management*, 46, September 2016, 1-4. <https://doi.org/10.1016/j.jom.2016.07.007>
7. N. Bryan, M. M. Srinivasan, and S. Viswanathan (2016), “Managing Supply Systems with Partial Information on Shipment Locations,” *International Journal of Production Research*, 54, 2771-2779.
8. S. Ghosh, R. Piplani, and S. Viswanathan (2015) “A new two-bin policy for inventory systems with differentiated demand classes,” *Production and Operations Management*, 24, 840-850.
9. Y. Feng, and S. Viswanathan (2014), “Heuristics with guaranteed performance for a manufacturing system with product recovery,” *European Journal of Operational Research*, 232, 322-329.
10. S. Ghosh, R. Piplani, and S. Viswanathan (2014) “Optimal inventory rationing policy under service differentiation for multiple customer classes with deterministic demand,” *International Journal of Services and Operations Management*, 18, 38-56.
11. S. Axsater, and S. Viswanathan (2012), “On the value of customer information for an independent supplier in a continuous review inventory system,” *European Journal of Operational Research*, 221, 340-347.
12. Yan Feng, and S. Viswanathan, (2011), “A new lotsizing heuristic for manufacturing systems with product recovery,” *International Journal of Production Economics*, 133, 432-438.
13. C. Zhou and S. Viswanathan, (2011), “Comparison of a new bootstrapping method with parametric approaches for safety stock determination in service parts inventory system,” *International Journal of Production Economics*, 133, 481-485.
14. M. M. Srinivasan and S. Viswanathan, (2010), “Optimal WIP Inventory Levels for High-Variety Low-Volume Manufacturing Systems,” *IIE Transactions*, 42, 379-391.
15. R. Bhatnagar and S. Viswanathan, (2010), “Analysis of Warehouse Location Decisions in Urban Distribution Systems,” *Technology, Operations and Management*, 1, 1-10.
16. S. Viswanathan, (2009), “Coordination in Vendor-Buyer Inventory Systems: On Price Discounts, Stackelberg Game and Joint Optimization,” *International Journal of Operational Research*, 6, 110-124.
17. H. Widiarta, S. Viswanathan and R. Piplani, (2009), “Forecasting Aggregate Demand: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production Planning Framework,” *International Journal of Production Economics*, 118, 87-94.
18. S. Viswanathan, H. Widiarta, and R. Piplani, (2008), “Forecasting aggregate time series with lumpy subaggregate components: Top-down versus bottom-up Forecasting,” *IMA Journal of Management Mathematics*, 19, 275-287.
19. H. Widiarta, S. Viswanathan and R. Piplani, (2008), “Evaluation of Hierarchical Forecasting for Substitutable Products,” *International Journal of Services and Operations Management*, 4, 277-295.
20. H. Widiarta, S. Viswanathan, and R. Piplani, (2008), “Forecasting Item-Level Demands: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production Planning Framework,” *IMA Journal of Management Mathematics*, 19, 207-218.
21. Viswanathan, (2007), “An Algorithm for determining the best lower bound for the Stochastic Joint Replenishment Problem,” *Operations Research*, 55, 992-996.

22. H. Widiarta, S. Viswanathan, and R. Piplani, (2007), "On the Effectiveness of Top-Down Approach for Forecasting Autoregressive Demands," *Naval Research Logistics*, 54, 176-188.
23. Yan Feng and S. Viswanathan, (2007), "Impact of Demand Uncertainty on Coordinating Supply Chain Inventories Through Common Replenishment Epochs," *Journal of Operational Research Society*, 58, 964-971.
24. S. Viswanathan, H. Widiarta, R. Piplani, (2007), "Value of Information and Synchronization in a Multi-Tier Supply Chain," *International Journal of Production Research*, 45, 5057-5074.
25. S.K. Goyal and S. Viswanathan, (2006), "On Optimal production policy with shelf life including shortages," *Journal of the Operational Research Society*, 57, 747-754.
26. S. Viswanathan and R. Bhatnagar, (2005), "The application of ABC Analysis in Logistics and Production: An explanation for the apparent Contradiction," *International Journal of Services and Operations Management*, 1, 257-267.
27. R. Piplani and S. Viswanathan, (2004), "Supply Chain Inventory Coordination through Multiple Common Replenishment Epochs and Selective Discount" *International Journal of Logistics: Research and Applications*, 7, 109-118.
28. S. Viswanathan and S.K. Goyal, (2003), "Corrigendum: Optimal Cycle Time and Production Rate in a Family Production Context with Shelf Life Considerations," *International Journal of Production Research*, 41, 3389.
29. S. Viswanathan and Q. Wang, (2003), "Discount Pricing Decisions in Distribution Channels with Price-Sensitive Demand," *European Journal of Operational Research*, 149, 571-587.
30. R. Piplani and S. Viswanathan, (2003), "A Model For Evaluating Supplier Owned Inventory Strategy," *International Journal of Production Economics*, 81-82, 565-571.
31. W.K. Ng, R. Piplani, S. Viswanathan, (2003), "Development of a Simulation Workbench for Analysing Information Flow in Multi-echelon Supply Chains," *Integrated Manufacturing Systems*, 14, 449-457.
32. S. Viswanathan and S.K. Goyal, (2002), "On Manufacturing Batch Size and Ordering Policy for Products with Shelf Lives", *International Journal of Production Research*, 40, 1965-1970.
33. U. M. Apte, and S. Viswanathan, (2002), "Strategic and Technological Innovations in Supply Chain Management," *International Journal of Manufacturing Technology and Management*, 4, 264-282.
34. S. Viswanathan, (2002), "On Optimal Algorithms For The Joint Replenishment Problem," *Journal of the Operational Research Society*, 53, 1286-1290.
35. S. Viswanathan and R. Piplani, (2001), "Coordinating Supply Chain Inventories Through Common Replenishment Epochs," *European Journal of Operational Research*, 129, 277-286. [This was among the top 4 requested papers on the EJOR website in 2001]
36. U. M. Apte, and S. Viswanathan, (2000), "Effective Cross Docking For Improving Distribution Efficiencies," *International Journal of Logistics: Research and Applications*, 3, 291-302.
37. R. Bhatnagar and S. Viswanathan, (2000), "Reengineering Global Supply Chains: Alliances between Manufacturing Firms and Global Logistics Services Providers," *International Journal of Physical Distribution and Logistics Management*, 30, 13-34.

38. S. Viswanathan and S.K. Goyal, (2000), "Incorporating planned backorders in a family production context with shelf life considerations," *International Journal of Production Research*, 38, 829-836.
39. S. Viswanathan, (1998), "Optimal Strategy for the Integrated Vendor-Buyer Inventory Model," *European Journal of Operational Research*, 105, 38-42.
40. S. Viswanathan, (1997), "Periodic Review (s, S) Policies for Joint Replenishment Inventory Systems", *Management Science*, 43, 1447-1454.
41. S. Viswanathan and K. Mathur, (1997), "Integrating Routing and Inventory Decisions in One Warehouse Multi-Retailer Multi-Product Distribution Systems", *Management Science*, 43, 294-312.
42. S. Viswanathan, and S.K. Goyal, (1997), "Optimal Cycle Time and Production Rate in a Family Production Context with Shelf Life Considerations", *International Journal of Production Research*, 35, 1703-1711.
43. S. Viswanathan, (1996), "A new optimal algorithm for the Joint Replenishment Problem", *Journal of the Operational Research Society*, 47, 936-944.
44. S. Viswanathan, (1996), "A New Approach for Solving the P-Median Problem in Group Technology", *International Journal of Production Research*, 34, 2691-2700.
45. S. Viswanathan, (1995), "Configuring Cellular Manufacturing Systems: A Quadratic Integer Programming Formulation and a Simple Interchange Heuristic", *International Journal of Production Research*, 33, 361-376.
46. S. Viswanathan, (1995), "A note on Effect of production cost on shelf life", *International Journal of Production Research*, 33, 3485-3486.
47. S. Viswanathan and Rohit Bhatnagar, (1995), "An Alternative Approach for Modelling Multi-Item Inventory Problems", *Malaysian Journal of Management Science*, 4, December 1995.
48. S. Viswanathan, (1993), "Optimal Policies for the Capacitated Two-Stage Multi-Item Inventory Model with Joint Setup Costs", *Operations Research Letters*, 14, 43-48.
49. S. Viswanathan, (1993), "Algorithms for configuring GT cells", *Malaysian Journal of Management Science*, 2, 72-83.

BOOK CHAPTERS

50. G. A. Chua, E. D. Davis, and S. Viswanathan (2023) "Business Models and Supply Chain Strategy for Digital Manufacturing," in *Digital Manufacturing Volume 2*, Elsevier.
51. K. R. Preethi, C. Rajendran, and S. Viswanathan (2021) "Mathematical Models and Heuristics for an Inventory Routing Problem Without Split Deliveries" in *Emerging Frontiers in Operations and Supply Chain Management: Theory and Applications*, Springer, 2021.
52. M. M. Srinivasan and S. Viswanathan, (2014), "Evaluating South East Asian Supply Chains on an EPIC framework", Chapter 5 in *Global Supply Chains: Evaluating Regions on an EPIC framework*, McGraw-Hill, New York, 2014.
53. U. Apte, and S. Viswanathan, (2007), "A Proactive Demand Management Model for Controlling e-Retailer Inventory," *To appear in "Managing in the Information Economy: Current Research Issues*, Edited by U. Karmarkar and U. Apte, Springer, ISBN: 978-0-387-34214-6.
54. S. Viswanathan, (1996), "Operational Auditing" in *Issues and Developments in Auditing*, Singapore Business Development Series, Addison Wesley.

55. S. Viswanathan, Cheryl Tay, Venson Shaw, (1995), "Productivity through Strategy: The Case of NTUC Fairprice", in NPB Casebook on Productivity Successes of Singapore Companies, published by National Productivity Council.

KEYNOTE & INVITED PRESENTATIONS, & SPONSORED SESSIONS AT CONFERENCES

56. S. Viswanathan (2022), "Sustainable Impact Reference Framework: A Strategic Framework for Implementing Corporate Sustainability Efforts," *Invited Keynote Address*, 6th International Research Conference on Economics, Business & Social Sciences: Digitalization for Sustainable Business & Society in Emerging Economies, Universiti Utara Malaysia, Kuala Lumpur, Malaysia, August 17, 2022
57. S. Viswanathan (2018), "Challenges in Business Sustainability," *Invited Keynote Address*, 3rd International Research Conference on Economics, Business and Social Sciences: Sustainable Economy, Business and Society in Emerging Economies in the Age of Industrial Revolution 4.0, University of Malaya, Kuala Lumpur, Malaysia, November 09, 2018.
58. S. Viswanathan, (2018), "Sustainable Operations and Supply Chains," *Invited Public Lecture*, UCSI University, Kuala Lumpur, Malaysia, July 19, 2018.
59. Raychaudhuri, F. Liu, and S. Viswanathan (2016) "Fostering responsibility in supply chains: Are existing practices effective," *POMS Annual Conference*, Orlando, Florida, USA, May 2016.
60. Raychaudhuri, F. Liu, and S. Viswanathan (2015) "Evaluating alternative strategies for fostering responsibility among suppliers," invited session, *INFORMS Conference*, Philadelphia, USA. November, 2015.
61. S. Viswanathan (2014), "Emerging trends in supply chain management," *Invited Keynote Address*, *International Conference on Advances in Design & Manufacturing*, National Institute of Technology, Trichy, India, December , 2014
62. M. Bihade, R. Bhatnagar, and S. Viswanathan (2014), "An Integrated Model for Train Timetabling and Platforming in High Density Double Track Corridor," *INFORMS Annual Conference*, San Francisco, CA, USA, November, 2014.
63. Geoff Chua, Yan Feng, S. Viswanathan, (2012), "On (r, Q) policies in continuous review inventory systems with remanufacturing and setup costs," *POMS Annual Conference*, Chicago, USA, April, 2012.
64. S. Viswanathan, (2011), "Sustainability Curriculum in Graduate Business Programs," *Symposium on Accounting, Reporting and Assurance for a Sustainable Future : Risks and Opportunities*, Organized by NTU and UNSW, Singapore, November 01, 2011.
65. S. Viswanathan (2010), "Research Issues in Maritime Logistics," invited presentation, *International Conference on Vision and Roadmap for R&D Priorities in Maritime Environment*, Technology, Business, Policy and Security, Singapore, April, 2010.
66. S. Viswanathan and Chenxi Zhou, (2009), "Inventory Planning for Spare Parts with Long Inter-Demand Intervals," Presented at *Production and Operations Management Society (POMS) Annual Conference*, Orlando, Florida, April, 2009.
67. S. Viswanathan and M. M. Srinivasan, (2008), "Optimal WIP Inventory Levels for High-Variety Low-Volume Manufacturing Systems," Presented at *Operations Research and Management Science Symposium*, NUS Business School, SINGAPORE.
68. H. Widiarta, S. Viswanathan and R. Piplani, (2006), "Forecasting Aggregate Demand: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production

Planning Framework,” presented at 14th *International Symposium on Inventories*, Budapest, Hungary.

69. U. Apte, and S. Viswanathan, (2002), “Managing Inventory for e-Commerce Retailers Through Proactive Demand Management,” presented at POMS Annual Conference, 2002, San Francisco.
70. S. Viswanathan, (1999), “Joint Replenishment Inventory Models: A Review of Applications and Algorithms”, Presented at *The Fourth Summer School on Inventory Modelling*, Exeter, U.K. organised by International Society for Inventory Research.

CONFERENCE PRESENTATIONS

71. S. Ng, S. Viswanathan and O. Hinrichsen (2024) “Controlled Environment Agriculture in Prospective Energy Scenarios,” 26th SETAC Europe LCA Symposium, Gothenburg, Sweden, October 21-23, 2024.
72. S. Viswanathan, H. Qiu, T. Massier (2024) “Infrastructure planning for cross-border renewable electricity imports: A Stochastic Programming Approach” INFORMS Annual Meeting, October 20-23, Seattle, Washington, USA.
73. M. J. Lemuel and S. Viswanathan, (2023) “A Game Theoretic Approach for Evaluating & Pricing Alternative Business Models for Clean Technology Adoption: Application to Solar Panels,” INFORMS Annual Meeting, Phoenix, AZ, USA, October 2023.
74. G. A. Chua, A. Ravindran, J. R. L. Senga, and S. Viswanathan, (2022) “Job scheduling for maximum revenue on uniform, parallel machines with major and minor setups and job splitting,” *INFORMS Annual Conference*, Anaheim, CA, USA, October 2022.
75. M. Jagannathan, S. Viswanathan, G. A. Chua, E. D. Davis (2022) “Resilient end to end supply chain design: Model to evaluate alternative configurations,” 21st International Symposium on Inventories, August 22-26, 2022, Budapest, Hungary.
76. M. Jagannathan and S. Viswanathan (2020) “New heuristics for the dynamic demand Joint replenishment problem” *INFORMS Annual Conference*, Online, USA, November 2020.
77. K. R. Preethi, and S. Viswanathan (2020) “Carbon Pricing Strategies for Multi-Unit Firms,” *INFORMS Annual Conference*, Online, USA, November 2020.
78. Y. Wang, K. Savani, and S. Viswanathan (2020), “Encouraging People to Drive Less: An Experimental Investigation,” Poster Presentation, *19th General Meeting of the European Association of Social Psychology*, Krakow, Poland. July 2020.
79. Y. Wang, K. Savani, and S. Viswanathan (2020), “The Role of Normative Information in Encouraging People to Drive Less: An Experiment,” Poster # 31428, *32nd Annual APS Convention, Association of Psychological Science*, Chicago. May 2020.
80. K. R. Preethi, and S. Viswanathan (2020) “Carbon Pricing Strategies for Multi-Unit Firms,” *POMS Annual Conference*, Minneapolis, Minnesota, USA, April 2020.
81. K. Verma, and S. Viswanathan (2019), “Moral Character and Stewardship: Explaining the Role of Enlightened Self-Interest,” Academy of Management (AOM) Specialized Conference: Responsible Leadership in Rising Economies, Bled, Slovenia, October 2019.
82. Y. Wang, K. Savani, S. Viswanathan (2019), “Encouraging People to Drive Less: Experimental Evidence Based on Varying Fixed Costs and Variable Costs,” *MSOM Conference*, Singapore. July 2019.
83. Raychaudhuri, F. Liu, and S. Viswanathan (2019) “Buyer-Supplier Relationships in the Context of Social Responsibility,” *MSOM Annual Conference*, Singapore, July 2019.

84. S. Viswanathan, M. Birhade, and R. Bhatnagar, (2017), "Scheduling trains to minimize peak power and maximize regenerative braking power utilization," *INFORMS Conference*, Houston, Texas, USA, October, 2017.
85. S. Viswanathan (2016) "Multi-Item Inventory Systems with Capacity Constraint Constraint on the Major Setup," *POMS Annual Conference*, Orlando, Florida, USA, May 2016.
86. Raychaudhuri, F. Liu, and S. Viswanathan (2015) "Profitability of corporate strategies for promoting responsibility in supply chains," *MSOM Conference*, Toronto, Canada. June, 2015.
87. S. Ghosh, R. Piplani, and S. Viswanathan (2015) "Critical level rationing policy for continuous review inventory systems with multiple demand classes," *POMS Annual Conference*, Washington DC, USA, May 2015
88. Raychaudhuri, F. Liu, and S. Viswanathan (2015) "Guidelines for corporate investments for promoting social responsibility in global supply networks," *POM-HK Conference*, Guangzhou, China. January, 2015.
89. A. Sainathan, and S. Viswanathan, (2014), "Modeling Carbon Control Policies: Tax versus Cap & Trade," *INFORMS Annual Conference*, San Francisco, CA, USA, November, 2014.
90. M. Birhade, R. Bhatnagar, and S. Viswanathan (2014), "An Integrated Model for Train Timetabling and Platforming," *POMS International Conference*, Singapore, July, 2014.
91. A. Sainathan, S. Viswanathan, J. Wang (2013), "Modeling Carbon Control Policies: Tax versus Cap & Trade," *INFORMS Annual Conference*, Minneapolis, MN, USA, October, 2013.
92. S. Viswanathan, S. Ghosh, R. Piplani, (2012), "A New Class of Two Bin Policy for Inventory Rationing in a Continuous Review System," *INFORMS Annual Conference*, Phoenix, AZ, USA, October, 2012.
93. Geoff Chua, Yan Feng, S. Viswanathan, (2012), "Near optimal algorithms for a class of policies for the stochastic inventory problem with remanufacturing," *MSOM Annual Conference*, New York, USA, July, 2012.
94. Geoff Chua, Yan Feng, S. Viswanathan, (2012), "On the effectiveness of (r, Q) policies in continuous review inventory systems with remanufacturing and setup costs," *POMS International Conference*, Hong Kong, January 2012.
95. S. Viswanathan, (2011), "The Joint Replenishment Problem with Capacity Restrictions," Presented at *Production and Operations Management Society (POMS) Annual Conference*, Reno, Nevada, April-May, 2011.
96. R Piplani, S Viswanathan and S Ghosh (2011) "A new two-bin policy for inventory control of multi-priority demands in a continuous review environment." *International Conference on Operations Research*, September, 2011, Zurich, Switzerland.
97. S. Ghosh, R Piplani and S Viswanathan (2009) " Inventory Policies for service differentiation with deterministic demand," *9th International Workshop on Closed-Loop Supply Chain Management*, September 17-19, 2009, Braunschweig, Germany
98. S. Ghosh, R Piplani and S Viswanathan (2009) "Inventory models for differentiated service," *IS DSI Conference*, January, 2009, IIT Mumbai, India.
99. Chenxi Zhou and S. Viswanathan, (2008), "A New Bootstrapping Based Method for Forecasting and Safety Stock Determination for Managing Service Parts Inventory," Presented at *15th International Symposium on Inventories*, Budapest, Hungary.

100. Yan Feng and S. Viswanathan, (2008), "A New Lotsizing Heuristic for Manufacturing Systems with Product Recovery," Presented at *15th International Symposium on Inventories*, Budapest, Hungary.
101. Yan Feng and S. Viswanathan, (2006), "The impact of demand uncertainty on coordinating supply chain inventories," APORS Conference, January, 2006.
102. S. Viswanathan and Ying Hang Chen, (2006), "The Joint replenishment problem with capacity constraint," APORS Conference, January, 2006.
103. S. Viswanathan, and Yan Feng, (2005), "Forecasting of service arrivals in a repair center," IEEE Conference on Automation Science and Engineering, August, 2005, Edmonton, Canada.
104. S. Viswanathan, Handik Widiarta, R. Piplani, (2004), "Forecasting aggregate time series with lumpy subaggregate components," POMS Annual Conference, 2004, Cancun, Mexico
105. Handik Widiarta, S. Viswanathan, R. Piplani, (2003), "On the effectiveness of top-down versus bottom-up forecasting: The case of lumpy subaggregate time series," *8th Annual International Conference on Industrial Engineering Theory, Applications and Practice*, Las Vegas, Nevada, USA.
106. R. Piplani, and S. Viswanathan, (2003), "Supply chain inventory coordination through multiple, common replenishment epochs and selective discounts," *6th International Conference of the Asia-Pacific Operational Research Society (APORS)*, New Delhi, India. Won the best paper award.
107. D.G. Allampalli and S. Viswanathan, (2003), "Komala's Restaurant of Singapore," *6th Annual Convention, Strategic Management Forum, India*, Jamshedpur, April.
108. Woon Kian Ng, R. Piplani and S. Viswanathan, (2002), "Information Exchange Mechanisms for a 4-Echelon Supply Chain," *30th International Conference on Computers & Industrial Engineering*, Tinos Island, Greece.
109. S. Viswanathan, (2002), "Inventory Coordination in Supply Chains: On Price Discounts and Joint Optimization under Stackelberg Game Framework," presented at *12th International Symposium on Inventories*, Budapest, Hungary.
110. D. Ng, R. Piplani, S. Viswanathan, (2002), "A Simulation Based Study of Information Exchange Mechanisms for Multi-Echelon Supply Chain," presented at POMS Annual Conference, 2002, San Francisco.
111. S. Viswanathan, and R. Piplani, (2001), "Supplier Buyer Inventory Systems with Supplier Owned Inventory," presented at INFORMS Annual Conference, Miami Beach.
112. R. Piplani and S. Viswanathan, (2000), "A Model For Evaluating Supplier Owned Inventory Strategy," presented at *11th International Symposium on Inventories*, Budapest, Hungary.
113. S. Viswanathan, (2000), "Coordination in Supply Chains: On Price Discounts, Stackelberg Game and Joint Optimization," presented at *INFORMS Multi-Echelon Inventory Conference*, Ann Arbor, Michigan, USA.
114. S. Viswanathan and Q. Wang, (1999), "Discount Pricing Decisions in Distribution Channels," presented at *INFORMS Conference*, Philadelphia, USA.
115. S. Viswanathan, (1997), "Analysis of Warehouse Re-location Decision in an Urban FMCG Distribution System", *APORS'97*, December 1997, Melbourne, Australia.
116. S. Viswanathan and S.K. Goyal, (1997), "Algorithms for the Joint Replenishment Problem: A Survey", *APORS'97*, December 1997, Melbourne, Australia.

117. S. Viswanathan, (1997), "An algorithm for determining the Optimal Q(s, S) Policy for Joint Replenishment Inventory Systems", *Presented at INFORMS National Conference*, May 1997, San Diego.
118. S. Viswanathan, (1995), "One Warehouse Multi-Retailer DR Systems with Vehicle Routing Costs: A Computational Comparison of Two Classes of Policies", *Presented at the INFORMS International Conference*, June 1995, Singapore.
119. S. Viswanathan and Rohit Bhatnagar, (1995), "An Alternative Approach for Modelling Multi-Item Inventory Problems", *Proceedings of the National Conference on Management Sciences*, Kuala Lumpur, October 1995.
120. S. Viswanathan, (1994), "A New Measure of Similarity Coefficient for Solving the P-Median Problem in Group Technology", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 6, 423-431, World Scientific Publishing Co.
121. S. Viswanathan, (1994), "The Joint Replenishment Problem with Ordering Restrictions", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 9, 593-601, World Scientific Publishing Co.
122. S. Viswanathan, (1994), "A Hierarchical Approach to Solving Facility Layout Problems", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 7, 531-538, World Scientific Publishing Co.
123. S. Viswanathan, (1993), "Solving the Cell-Configuration Problem in Group Technology as a Linear-Integer Program", *Proceedings of the Second International Conference on Computer Integrated Manufacturing*, Vol. 2, pg. 396-406, September 1993, Singapore.
124. S. Viswanathan, and K. Mathur, (1992), "An $O(n^2)$ Heuristic for the Joint Replenishment Problem With General Setup Costs", *Presented at the 33rd TIMS/ORSA Joint National Conference*, April 1992, Orlando, Florida, USA.

CASE STUDIES

125. T. Quader and S. Viswanathan, (2016), "Sustainability Case Study on Maritime and Port Authority of Singapore (MPA)," in *Corporate Sustainability Case Studies 2016: Featuring Singapore Sustainability Awards 2015 Winners*, Published Jointly United Nations Global Compact Network Singapore and Nanyang Business School, NTU, 2016, 41-48.
126. T. Quader and S. Viswanathan, (2016), "Sustainability Case Study on Canon Singapore Pte Ltd.," in *Corporate Sustainability Case Studies 2016: Featuring Singapore Sustainability Awards 2015 Winners*, Published Jointly United Nations Global Compact Network Singapore and Nanyang Business School, NTU, 2016, 27-33.
127. T. Quader and S. Viswanathan, (2016), "Sustainability Case Study on Buckman Laboratories (Asia) Pte Ltd.," in *Corporate Sustainability Case Studies 2016: Featuring Singapore Sustainability Awards 2015 Winners*, Published Jointly United Nations Global Compact Network Singapore and Nanyang Business School, NTU, 2016, 18-26.
128. T. Quader and S. Viswanathan, (2016), "Sustainability Case Study on Elmich Pte Ltd.," in *Corporate Sustainability Case Studies 2016: Featuring Singapore Sustainability Awards 2015 Winners*, Published Jointly United Nations Global Compact Network Singapore and Nanyang Business School, NTU, 2016, 34-40.
129. S. Viswanathan and D. G. Allampalli, (2014), "SMRT Trains," Case study on Quality Management, Asian Business Case Centre, Nanyang Business School, Nanyang Technological University. [**Among the top 5 downloaded cases from Asian Business Case Centre**].

130. S. Viswanathan and D. G. Allampalli, (2014), "SMRT Trains," Teaching Note for Case on Quality Management, Asian Business Case Centre, Nanyang Business School, Nanyang Technological University.
131. S. Viswanathan, (2012), "Four Star Industries, Singapore: Matching Supply with Demand," Teaching Note for Case on Supply Chain Management, Asian Business Case Centre, Nanyang Business School, Nanyang Technological University.
132. S. Viswanathan and D. G. Allampalli, (2009), "Four Star Industries, Singapore: Matching Supply with Demand," Case study on Supply Chain Management, Asian Business Case Centre, Nanyang Business School, Nanyang Technological University. [**Among the top 5 downloaded cases from Asian Business Case Centre**].
133. D.G. Allampalli and S. Viswanathan, (2002), "Komala's Restaurant of Singapore," Case Study on Service Operations Management/Process Analysis, *AsiaCase.Com*, Nanyang Business School, Nanyang Technological University.

NON-REFEREED ARTICLES

134. S. Viswanathan, K. Verma, Y. Toh, B. H. Ong (2020) "Understanding Corporate Stewardship, Governance & Sustainability: A Landscape Study," Stewardship Asia Centre Research Paper Series, 2020.
135. A.Raychaudhuri and S. Viswanathan (2014), "How remanufacturing can be made a norm," *Business Times*, September 23, 2014.
136. S. Viswanathan, and R. Bhatnagar (2009), "Keeping an Eye on the Market Changes: Operations and Innovation in Small Enterprises," *Business Times*, Enterprise 50 Supplement, Page 31, November 3, 2009.
137. R. Bhatnagar and S. Viswanathan (2009), "Operations and Innovations in Small Enterprises," Springnews, December, 2009, SPRING, Singapore.
138. S. Viswanathan, (2002), "Effective e-Procurement: Exploiting the Full Potential of a Coordinated Supply Chain," *Making IT Happen*, Vol. 4, No.2, 1-3.
139. S. Viswanathan, (1994), "Keeping Updated on the Latest Developments in Operations Research through the INTERNET", *Newsletter of the OR Society of Singapore*, May, 1994, 5-6, Singapore (1994)

WORKING PAPERS

140. H. Qiu, S. Viswanathan, T. Massier, and W. Gu, (2024) "Infrastructure Portfolio for Regional Cross-border Renewable Electricity Import," submitted to *Energy & Environmental Science*.
141. H. Qiu, and S. Viswanathan, (2024) "Renewable Reshapeability and Sost Competitiveness of Locations in Achieving Net-Zero Electricity Supply," to be submitted to *Nature Communications*.
142. M. J. Lemuel and S. Viswanathan, (2024) "A Game Theoretic Approach for Evaluating Alternative Business Models for Clean Technology Adoption: Application to Solar Panels," to be submitted to *Production & Operations Management*.
143. V. V. Khanpit, S. Viswanathan, & O. Hinrichsen (2024) "Life cycle assessment of nutrients from animal and plant-based milk: weighted goal modelling for sustainable and nutritious milk".
144. V. V. Khanpit, S. Viswanathan, & O. Hinrichsen (2024) "Sustainability assessment of animal protein import: Case study for Singapore," under preparation.

145. M. Jagannathan, G. Chua, and S. Viswanathan (2022), "Arms-length platform-based approach to logistics alliances for full truck-load delivery between two locations," Submitted to *Transportation Research, Part E*.
146. M. Jagannathan and S. Viswanathan (2024), "An independent platform-based approach for implementation of logistics alliances in last mile delivery," to be submitted.
147. M. Jagannathan and S. Viswanathan (2024), "Multiple item dynamic lot sizing problem with joint replenishment cost: New heuristics and extensive computational study," to be submitted.
148. G. A. Chua, A. Ravindran, J. R. L. Senga and S. Viswanathan, (2023) "Production scheduling on a single machine with characteristics-dependent setups and precedence constraints," Submitted to *Computers and Industrial Engineering*.
149. A. Gadgil, S. Viswanathan, (2022), "Attitudes of senior managers towards clean technology adoption,".
150. S. Viswanathan, (2021), "The Joint Replenishment Problem with Capacity Constraint on the major setup," under revision.
151. Y. Wang, A. Low, K. Savani and S. Viswanathan(2021), "Modal shift from private car to public transport in daily commuting: Accessibility and efficiency of public transport,".
152. Y. Wang, A. Low, K. Savani and S. Viswanathan(2021), "Encouraging people to drive less: Experimental evidence based on varying fixed costs and variable costs,".
153. Y. Wang, A. Low, K. Savani and S. Viswanathan(2021), "Descriptive norms and car usage: An experiment,".
154. Y. Wang, A. Low, K. Savani and S. Viswanathan(2021), "The roles of prescriptive norms and culture specific norms on car usage in Singapore,".
155. S. Ghosh, R. Piplani, and S. Viswanathan (2017) "Inventory rationing for continuous review system with multiple demand classes," under revision.
156. A. Sainathan, and S. Viswanathan, (2020), "Evaluation of alternative policies for regulating GHG Emissions,".
157. M. Birhade, S. Viswanathan and R. Bhatnagar, (2017), "Scheduling trains in suburban systems to minimize peak power consumption and maximize usage of regenerative breaking power,".
158. M. Birhade, R. Bhatnagar and S. Viswanathan, (2016), "The Integrated Train Timetabling and Platforming Problem,".
159. S. Viswanathan and U. Apte, (2005), "An Inventory model with multiple levels of proactive demand for e-retailing,".

DISSERTATIONS/PROJECTS SUPERVISED

- K. R. Preethi, PhD, 2024 (submitted thesis), "Essays on Sustainable Operations Management," Optimization Engineer Hyundai Motor Group Innovation Centre, Singapore.
- Madhav Jagannathan, PhD, 2023. "Essays on last mile logistics alliances and the finite horizon joint replenishment problem", Supply Chain Consultant, KPMG.
- Yang Yang, PhD, 2023, "A bin-packing based heuristic for the integrated inventory and routing problem," Senior Investment Analyst, Private Equity Firm specializing Web 4.0 technologies.

- Avijit Raychaudhuri, PhD, 2017, “Responsible Supply Chain Operations: Analytical Modeling Of Emerging Issues,” Assistant Professor, Indian Institute of Management.
- Mahendra Birhade, PhD, 2015, “Scheduling & Resource Optimization for Railways,” Chief Operating Officer, Distribution Logistics Infrastructure Pvt. Ltd.
- Sugoutam Ghosh, PhD, 2012, “Algorithms for inventory systems with multi-class demands under continuous review policies with rationing,” Assistant Professor, Singapore University of Social Sciences.
- Yan Feng, PhD, 2009, “Inventory Models for Reverse Logistics,” Assistant Professor, Wuhan Textile University, China.
- Haodong Zhang, MBus, 2007, “Effectiveness of Business Volume Discount as Coordination mechanism in the Supply Chain,”
- Handik Widiarta, PhD, 2004, “Analytical Evaluation of Top-Down and Bottom-up Forecasting Strategies in a Production Planning Environment,” (Co-Supervisor), Chairman, PT BPR Indra Candra, Director, Indra Motor.
- David Ng, Masters by Research in Mechanical Engineering, 2001, “Information Exchange Mechanisms for 4 Echelon Supply Chain,”.
- Murtaza Attarwala, MBA, 2001, “Feasibility of Implementing CFPR for Asian Division of a Chemical Company,”.
- Jagdish Singh, T. H. Ong, and W. S. Ling, MBA, 2001, “The design and implementation of a Lean Manufacturing System at an Aerospace Repair and Overhaul Facility,”.
- Huang Yunbo, MBus, 1999, “Impact of Plant Practices on Operational Performance,”
- Hia Swee Chay, MBA, 1994, “An Optimization Model for Manufacturing Outsourcing with Special Application to Semiconductor Assembly,”.
- MBA/PMBA/EMBA/Executive Programs Strategy Projects (SPAN) Mentor for over 25 project groups from 2016-2022 (Bread Talk, Ministry of Health Holdings, Tata Communications, Alter Domus, Nikkei Group Asia, Alstom, Teo Garments, Johnson Controls, RGE, Tan Tock Seng Hospital).

MEDIA COVERAGE

- Quoted on issues related to Corporate Sustainability, Circular Economy, Sustainability of F1 Grand Prix etc. by ChannelNews Asia, Lianhe Zaobao, and Chinese TV Channel.
- Live interview on ChannelNews Asia on Sustainability of F1 Grand Prix, 2022.
- Several articles on Sustainability, Operations and Supply Chain in local newspapers and magazines. (See Non-Refereed Articles).
- Invited by Economist as well as by companies, other business schools, and organizations for thought leadership talks and panel discussions on topics related to Corporate Sustainability, Supply Chain Resiliency and Logistics Management.

PANEL DISCUSSANT/MODERATOR IN INDUSTRY CONFERENCES

- *Leadership and Career Planning for Sustainability*, Panel Discussion Moderator, NTU at Nanyang Business School Alumni Event, Singapore, March 18, 2024.
-

- *Sustainability - An HR perspective*, Panel Discussant at HR Connect 360, Connecting Academia, Research and Industry, Conference for HR Professionals, April 2, 2024.
- *Sustainable Finance: Challenges and Opportunities for Achieving Net-Zero*, Fireside Chat Moderator at Nanyang Business School Alumni Event, Singapore, March 18, 2024.
- *Strategies for implementing sustainability in Organizations*, NTU Alumni Office Webinar, February 29, 2024.
- *Sustainability Leadership: Navigating the challenges and opportunities*, Fireside Chat Moderator, Nanyang Executive Programme Alumni and Executive MSc Promotional Event, Singapore, February 21, 2024.
- *Leading Corporate Sustainability and Decarbonization*, Presenter and Fireside Chat Moderator at Nanyang Business School Alumni Event, Bangkok, November 17, 2023.
- *Towards a Net-Zero Economy: Green Economy and Green Resources*, Panel Discussant at Annual Polytechnic Forum, September 18, 2023.
- *EV Manufacturing, EV Adoption and Decarbonization*, Presenter and Panel Discussant at *Engineering Business Summit*, Organized by ASEAN Federation of Engineering Organizations and The Institution of Engineers Indonesia, July 4, 2023.
- *Sustainable Net-Zero Mechanisms for Tropical Cities*, Panel discussant at Asian Clean Energy Summit, as part of Singapore International Energy Week, October 28, 2022.
- *What are the upstream innovative design processes to reduce environmental footprint of packaging material*, Panel discussant at Singapore Environment Council (SEC) Annual Conference Day, August 23, 2022.
- *Financial Reporting Implications – Environmental, Social & Governance in Focus*, Panel discussant at ISCA PAIB Conference, August 25, 2022.
- *How should companies address the sustainability challenge?* Moderator for Panel Discussion at NBS Business Conference, March 15, 2022
- *Research Challenges in Sustainability*, Panel discussant at NBS Business Conference, March 15, 2022
- *Creating cost-effective supply chains in Asia-Pacific*, Panel discussant at The Economist Impact Roundtable: (sponsored by Maersk), February 24, 2022,
- DBS Sustainability, Unboxed! Forum, Panel discussant, December 2, 2021
- *Building a Responsible and Resilient Supply Chain in ASEAN*, Presenter and Panel Discussant at GCNS-ACN Supply Chain Series, December 6, 2021
- *Building Resiliency in Supply Chains*, Moderator and Organizer, NBS Knowledge Lab Webinar, October 29, 2020.
- *Preparing for Sustainability Careers*, Panel Discussant at Maybank Cooler Earth Summit, September 24, 2020
- *Future of Energy in a Post-COVID World*, Moderator and Organizer, NBS-EMBA f2f Panel Discussion, August 14, 2020.

TEACHING

TEACHING INTERESTS

- Corporate Sustainability (EMBA, MBA, PMBA, Nanyang Fellows MBA, MSc (Sustainability Management), Flexi-Masters (Sustainable Business Ecosystems), and various Executive Programs)
- Inventory Theory (PhD)
- Operations Management (Exec, UG, MBA)
- Supply Chain & Logistics Management (Exec, MBA)
- Optimization (PhD)
- Mentor, Strategy Projects @ NTU (SPAN) for MBA, PMBA, EMBA and Executive programmes. Provide mentoring and advise for students groups in experiential learning project with companies.

COURSES TAUGHT

- BM6836: Corporate Sustainability: Strategies & Innovations (MBA Core: From 2023)
- EM6797 Corporate Sustainability: Strategies & Innovations (EMBA, Nanyang Fellows MBA)
- PB8110 Corporate Sustainability: Strategies & Innovations (PMBA)
- B6602 Corporate Sustainability: Strategies, Innovations & Methodologies (MBA Elective)
- B8027 Operations (MBA)
- RE6004 Sustainable Operations: Strategies & Methodologies, (MSc course)
- OM9102 Inventory Theory (PhD Program)
- EM6622 Managing Operations (EMBA)
- B6016 Managing Business Operations (MBA Core)
- B6080 Supply Chain & Logistics Management (MBA Elective)
- OM9101 Optimization (PhD Program)
- OM9201 Contemporary Issues in Operations Management (PhD Program)
- BE1402 Operations and Processes (UG)
- BT204 Service Operations Management (UG Elective)
- BC211 Managing Operations in Services and Manufacturing (UG Core)
- BM333 Logistics Management (UG Elective)
- B6641 Data Modeling & Operations Management (MBA-TOM, Core)
- B6009 Decision Science (MBA Core)
- AC108 Management Science (UG Core)
- BM206 Quantitative Methods (UG Core)
- MIS6386 Supply Chain & Logistics Mgmt. (MBA Elective, at SMU, Dallas, Tx)
- MIS6302 Managing Operations in Mfg. & Svcs (MBA core, at SMU, Dallas, Tx)
- MIS2306 Operations Management (UG Core, at SMU Dallas, Tx)

EXECUTIVE TEACHING

Taught executive programs on topics related to Corporate Sustainability, Supply Chain Management, Operations Management and Logistics to Alstom, BCG, Bridgestone, RGE, OCBC, BI-Norwegian Programme, MDP@Nanyang, INSEAD Leadership Program for Senior Indian Executives, Essilor International, NTPC, Berkeley-Nanyang Advanced Management Program, Nanyang Executive MBA Program, Nanyang Executive Open Program, SPRING High Potential Leaders Program, WDA High Potential Leaders Program, Management Development Program@NBS, Logistics Practitioners Development Program (For Chartered Institute of Transport), Panasonic, Singapore Petroleum Company, TNT Logistics, IBM, Matsushita, NTU-Erasmus SCM Program, Ministry of Foreign Affairs (Government Officers from developing countries) IMARC, and other companies.

TEACHING AWARDS & ACHIEVEMENTS

- Average teaching evaluation score of 4.45 on a 5 point scale for last 5 years.
- Informal Mentor to two NTU MBA Student groups who won 1st and 3rd prize in the MBA Dean's Social Innovation Challenge 2021 organized by NUS.
- Mentor/Advisory Board Member of winning MBA student team for Sasin Bangkok Business Challenge – Sustainability Round, 2020.
- Winner of Teacher of Division Award, Nanyang Business School, 2003.
- Nominated for Teacher of the School, Nanyang Business School, 2003.
- Nominated for Teacher of Division, Nanyang Business School, 2002, 2004, 2005, and 2006.
- As Programme Director involved in curriculum development for BCG Climate and Sustainability Stewardship Program, and Executive Masters in Sustainability Management and related Flexi-Masters certificate programmes.
- Developed a new MBA elective “Corporate Sustainability: Strategies, Innovations and Methodologies” in 2011. Many rounds of offerings, and all have received very good feedback. The syllabus was continuously updated and improved over the years. Now this Corporate Sustainability course is a core course in MBA, PMBA, NF, and EMBA programs.
- Was responsible for launching and stabilizing several Operations and Supply Chain Management courses at UG, MBA and Executive program levels at Nanyang Business School.

SERVICE

SERVICE AWARDS

- IEOM Outstanding Faculty Advisor and Mentor Award, by Industrial Engineering and Operations Management (IEOM) Society International, March 2021.
- Informal Mentor to two NTU MBA Student groups who won 1st and 3rd prize in the MBA Dean's Social Innovation Challenge 2021 organized by NUS.
- Mentor/Advisory Board Member of winning MBA student team for Sasin Bangkok Business Challenge – Sustainability Round, 2020.

- Long Service Medal, Singapore National Day Honours, 2018.
- Award for Outstanding Senior Editor of *Decision Sciences Journal*, 2014.

UNIVERSITY SERVICE

- Director, Centre for Business Sustainability, 2016 to 2026.
- Cluster Director, Energy Research Institute @ NTU (ERI@N), from 2016 - 2024.
- Program Director, Executive Masters in Sustainability Management, 2023-
- Program Director, BCG Program in Climate and Sustainability Stewardship, 2023-
- Associate Dean (Research), 07/2014 to 06/2019.
- Head, Academic Division of Information Technology & Operations Management (ITOM), 07/2008 to 06/2014.
- Acting Interim Dean, Nanyang Business School, as and when required for short durations (one to 2 weeks), 2009-2013.
- Fellow, Renaissance Engineering Program, NTU, 2015 – 2021.
- Programme Director, Management Development Program @ NBS, 2011 – 2015.
Founding Programme Director. Developed the program curriculum.
- Director, PhD Program in Business, 07/2001 to 06/2005.
- Associate Director (Academic), Nanyang MBA Program, 2008-2012.
Was involved in the curriculum design and redesign of the full-time MBA into a one-year program.
- Programme Director, MBA (Technology & Operations), 03/2001 to 06/2008.
Founding Program Director of the NTU-Waseda double MBA Program. Was involved in developing the curriculum for the NTU-Waseda double MBA and the MBA (Technology & Operations) curriculum.
- Member of EP4 Subcommittee of NTU Research Council, 2020 - 2023.
- Member, NTU CRP (Competitive Research Program) Grant Panel, from 2016 - 2019.
- Member, NTU SSRTG (Social Science Research Thematic Grant) Panel, from 2016 – 2019.
- Member, Graduate College Executive Committee, 2018 – 2019.
- Member, NTU Presidential Post Doctoral Fellowship 2019 Evaluation Committee.
- Member, NTU ACE Research Awards Evaluation Committee, 2018, 2019.
- Fellow, Renaissance Engineering Programme, NTU, from 2015 - 2021.
Was involved in developing the initial curriculum for the MSc(Technology Management) segment of the program.
- Member, Working Group for formation of Graduate College, 2018.
- Member RISE review Subcommittee, 2017.
- Member RISE implementation Subcommittees, 2017.
- Member, NTU Teaching Council, 2016 – 2017.
- Member, Dean's Advisory Committee, 2015 - 2020.
- Member, Selection Committee for Director of Air Traffic Management Research Institute,

2016.

- Member, School Review Committee for Promotion and Tenure (SRCPT), Wee Kim Wee School of Communication & Information (WKWSCI), NTU, from 2015 - 2019.
- Member, NTU Review Committee for NUS/NTU-Japan Society for the Promotion of Science (JSPS), 2015.
- Chairman, School Review Committee for Promotion and Tenure (SRCPT), Nanyang Business School, NTU, 2011-2012.
- Member, Special School Review Committee for Promotion and Tenure (Special SRCPT), College of Engineering, NTU, 2012.
- Member, School Review Committee for Promotion and Tenure (SRCPT), School of Computer Engineering, NTU, 2009-2012.
- Co-Chair, Business Sustainability Committee, NBS, 2014-2016.
- Elected Member, University Senate, 2010-2012, 2012-2014.
- Member, Dean Search Committee, Cornell Nanyang Institute, 2009/2010.
- Chairman, School IT Steering Committee, 11/2000 – 10/2001.
- Chairman, School Equipment Committee & IT Support Group, 09/1998- 10/2000. Responsible for overseeing school computing facilities comprising 1000 networked computers and 20 technical and managerial staff.
- Member, NTU Review Committee for NUS/NTU- Japan Society for the Promotion of Science (JSPS) Research Grants, From 2015.
- Chairman, Nanyang Education Award (School) for NBS, 2013.
- Chairman, School committee for Nanyang Award for Teaching Excellence, NBS, 2012.
- Member, Nanyang Education Award (College), 2013.
- Coordinated the development of criterion for the School Teaching Excellence Award, 2010.
- Member, India Outreach Task Force for PhD Programs, NTU, 2011-2012.
- Member, Research Advisory Committee (NTURC), NTU, 2008-2009.
- Member, Provost-Dean Group Research Drivers Committee, NTU, 2008.
- Member, Nanyang Awards Committee (2008).
- Member, PhD & Research Committee, Nanyang Business School, 2008-2009.
- Chairman, ITOM Faculty Search Committee, From 01/2008.
- Member, Marketing Faculty Search Committee, From 01/2008.
- Deputy Chairman, School Equipment Committee, 1994-1998.
- Member, Division Faculty Recruitment Committee, 2005-2006.
- Member, Division Tenure and Promotion Committee, 2005-2006.
- Member, School Productivity Committee, 1999.
- Member, Logistics Committee, MIT-NTU Conference, 1995.
- Member, School Equipment Committee, 1993-1994.

SERVICE TO ACADEMIC COMMUNITY

- Member of the Advisory Board, Singapore University of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2020-2023.
- Chair of the Advisory Board Subcommittee for local board members, Singapore University of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2021-2023.
- External Assessor, Singapore University of Social Sciences, 2023.
- Reviewer/Evaluator, Singapore Israel Industrial R&D Foundation, 2022.
- Member of the review panel, Science & Engineering Research Council (SERC) Programme in Logistics and Supply Chain Management, Agency for Science, Technology & Research (A*STAR), Singapore, 2012, 2014.
- External Assessor, USCI University, Malaysia, for Supply Chain & Operations Management Program, 2016-2018.
- External Expert for Operations Faculty Recruitment, IIM Calcutta, 2013, 2018, 2020, 2021.
- External Expert for Operations Faculty Recruitment, IIM Udaipur, 2019, 2021.
- External Expert for Operations Faculty Recruitment, IIM Tiruchirappalli, June 2012, and December 2016.
- External Reviewer, Tenure & Promotion Case for several business schools such as SUNY (State University of New York), Melbourne Business School, Singapore Management University, IIM Calcutta, IIM Bangalore, City University of Hong Kong, Hong Kong Polytechnic University, Hang Seng Management College, Hong Kong Baptist University.
- Member, Executive Committee, International Society for Inventory Research, 2002-2004.
- Reviewer: Logistics Management, Operations, Manufacturing Management and General Business Textbooks for Prentice Hall, McGraw Hill and World Scientific.
- Member, Program Committee, MSOM Conference, 2019.
- Member, Program Committee, POMS International Conference, 2014.
- Member, International Scientific Committee, Global Business Innovation and Development Conference, Rio de Janeiro, Brazil, 2008.
- Member, Organizing Committee, International Conference on Logistics 2001, Organised by NTU and Carnegie Mellon University.
- Member, Conference Program Committee, Global Business Institute, 2002-2008.
- Member of Management Committee, OR Society of Singapore 1993-1995.

PROFESSIONAL/INDUSTRY SERVICE

- Guest Judge, European Chamber of Commerce (EuroCham) Sustainability Awards 2023.
- Member of Judging Panel, Eco-Business Sustainability Leadership A-List for Asia 2023.
- Member of the Advisory Board, EcoLabs Centre of Innovation for Energy @NTU, 2019-2022.
- Member of the Advisory Board, Singapore University of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2020-2023.
- Chair of the Advisory Board Subcommittee for local board members, Singapore University

of Technology & Design (SUTD), Engineering Systems & Design Pillar, 2021-2023.

- Reviewer/Evaluator, Singapore Israel Industrial R&D Foundation, 2022.
- Member of the Board, ISCN - International Sustainable Campus Network (NTU representative), 2019-2020.
- Member, Singapore Sustainability Reporting Awards Panel, Singapore Institute of Directors, 2018.
- Member, Singapore Business Sustainability Awards Finalists Panel, 2014, 2015.

CONSULTING/EXECUTIVE PROGRAMMES

- BCG, 2023, 204.
- Tan Tock Seng Hospital (2022, 2023)
- Alstom (2018, 2019, 2021, 2022, 2023).
- Bridgestone, (2022, 2023).
- RGE International (2007, 2011, 2012, 2020, 2021, 2022, 2023)
- Stewardship Asia Center, Temasek (2018-19).
- Advisor Shanghai Zhanlai Information Technology Co. Ltd, 2017.
- Essilor International (2007, 2008, 2009, 2012, 2013, 2014, 2015)
- Workforce Development Authority (2015)
- Esade (2014)
- Lagos Business School (2014, 2015, 2016)
- Spring Singapore (2010-2014)
- INSEAD (2012)
- National Panasonic (2007, 2008)
- Singapore Petroleum Company (2008)
- Chartered Institute of Transport (2000 to 2009)
- NTUC FairPrice Supermarkets (2004, 2005)
- RTA Global (2003, 2004)
- TNT Logistics (2003)
- Matsushita Electric (2002)
- Ministry of Foreign Affairs (2002)
- Singapore Airlines Engineering Company (1999)
- IBM/Chartered Institute of Transport, Singapore (1997)
- Rothmans International, Singapore (1996)
- Singapore International Chamber of Commerce (1995)
- Cleveland Clinic Foundation, Cleveland, Ohio, U.S.A. (1989)
- Ohio Bell, Cleveland, Ohio, U.S.A. (1989)

COMPUTER SKILLS

- Good working knowledge of UNIX and Windows, including shell scripts, batch files and Windows OS registry.
- Strong expertise in C, FORTRAN, Pascal, and optimization software such as Gurobi and SAS.
- Expertise and experience in trouble shooting software problems.
- Experienced in developing codes for algorithms and heuristics for optimization problems in Logistics and Operations Management.

REFERENCES

- Will be provided upon request.

September 06, 2024