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Area Operations Research, Quantitative Techniques/  
Methods, Industrial Engineering, Operations and  
Supply Chain Management  
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#### Educational Qualifications

| Exam/Degree | Specialization                      | Year      | Institute/Board | Performance                          |
|-------------|-------------------------------------|-----------|-----------------|--------------------------------------|
| Ph.D.       | Operations Research                 | 2004-2010 | IIT Kanpur      | -                                    |
| M.Tech.     | Industrial & Management Engineering | 2002-2004 | IIT Kanpur      | -                                    |
| B.E.        | Mechanical Engineering              | 1998-2002 | B.I.T Durg      | University Topper<br>(Gold Medalist) |

#### Academic Affiliation

Assistant Professor (Industrial Engineering and Manufacturing Systems), NITIE

#### Roles and Responsibilities

| Sl. | Position                       | Description   | From | To        |
|-----|--------------------------------|---|------|-----------|
| 1.  | Fellow Program Coordinator     | Fellow Program Coordinator  | 2019 | Till date |
| 2.  | Warden                         | Warden of Gilbreth Hall   | 2017 | 2019      |
| 3.  | Cultural Committee Coordinator | Coordination of cultural events   | 2017 | 2019      |
| 4.  | Area Coordinator               | Area Coordinator<br>(Industrial Engineering &<br>Manufacturing Systems) | 2016 | 2018      |
| 5.  | Admission Coordinator          | Admission In charge   | 2014 | 2016      |

## Professional Affiliations

- **Member**, Society of Operations Management (SOM), India
- **Member**, International Association of Computer Science and Information Technology, **IACSIT** (Membership No. 80334364)
- **Member**, International Association of Engineers, **IAENG** (Membership No. 105128)

## Area Of Research

- Modelling in Logistics and Supply Chain Management
- Facilities Planning
- Production Planning
- Large scale Optimization
- Quantitative Methods
- Fuzzy logic

## Publications/ Articles/ Cases

### PAPERS IN REFEREED JOURNALS

1. Shishodia, A., **Verma, P.**, & Dixit, V. (2019). Supplier evaluation for resilient project driven supply chain. *Computers & Industrial Engineering*, 129, 465-478.
2. Kulkarni, S., **Verma, P.** and Mukundan, R. (2019). Performance landscape modeling in digital manufacturing firm. *Business Process Management Journal*, 25(3), 533-552.
3. Dixit, V., **Verma, P.**, Raj, P., & Sharma, M. (2018). Resource and time criticality based block spatial scheduling in a shipyard under uncertainty. *International Journal of Production Research*, 56(22), 6993-7007.
4. Kulkarni, S., **Verma, P.**, & Mukundan, R. (2018). Assessing manufacturing strategy definitions utilising text-mining. *International Journal of Production Research*, 1-28.
5. Shishodia, A., Dixit, V. and **Verma, P.** (2018), Project risk analysis based on project characteristics. *Benchmarking: An International Journal*, Vol. 25(3), pp 893-918.
6. Naskar, S., **Verma, P.**, & Gokhale, R. (2018), Integrated Analytic Hierarchy Process and Mixed Integer Linear Programming for Supplier Selection in Steel Industry with Price Discount. *International Journal of Operations and Quantitative Management*.
7. Kulkarni, S., **Verma, P.**, & Mukundan, R. (2016). Extending Canvas of Manufacturing Strategy: 8Ps model. *International Journal of Global Business and Competitiveness*, Vol. 11 No.1, pp 1-15.
8. Sharma, R.R.K., Mouli, G., Verma, M., & **Verma, P.** (2014). Evaluating strong, weak and hybrid formulations of the single stage capacitated warehouse location problem. *International Journal of Operational Research*, 20(2), 156-179.
9. Dubey, S., Sharma, R.R.K., **Verma, P.**, & Verma, M. (2012, September). Solving Single Stage Uncapacitated Warehouse Location Problem by a combination of OR based Heuristics and Genetic Algorithm: An empirical investigation. *International Journal of Operations & Quantitative Management*, 18(3), 211-228.

10. **Verma, P.,** & Sharma, R.R.K. (2012, March). Hybrid formulations of single stage uncapacitated warehouse location problem: Few theoretical and empirical results. *International Journal of Operations & Quantitative Management*, 18(1), 53-69.
11. **Verma, P.,** & Sharma, R.R.K. (2011). Vertical Decomposition Approach to Solve Single Stage Capacitated Warehouse Location Problem. *American Journal of Operations Research*, 100-117.
12. **Verma, P.,** & Sharma, R.R.K. (2010). Strong and weak formulations of Single Stage Uncapacitated Warehouse Location Problem. *Springer Lecture Notes in Computer Science – Communications in Computer and Information Science*, 70, 656-659.
13. **Verma, P.,** & Sharma, R.R.K. (2010). Vertical Decomposition Approach for Two Stage Capacitated Warehouse Location Problems. *Journal of Global Business and Management Research*, 275-284.

#### PAPERS IN PEER REVIEWED CONFERENCE PROCEEDINGS

14. Narayana S., and **Verma, P.,** Identifying Sustainability Metrics for a Coordinated Value Chain using QFD. In 5th International European Operations Management Association (EurOMA) Sustainable Operations and Supply Chains Forum, University of Kassel, Germany, March 5-6, 2018.
15. Mishra, A., and **Verma, P.,** Quality framework for assessment of cores and its role in closed loop supply chain network. In 5th International European Operations Management Association (EurOMA) Sustainable Operations and Supply Chains Forum, University of Kassel, Germany, March 5-6, 2018.
16. Shishodia, A., Dixit, V. and **Verma, P.** (2017), "Analysis of Project Risks based on Project Characteristics", in Accelerating Development: Harnessing the Power of Project Management proceedings of the Project Management Research and Academic Conference 2017, 2nd – 4th March 2017, IIT Delhi, pp. 401-412.
17. Kulkarni, S., **Verma, P.,** & Mukundan, R. (2017). Modelling Performance Landscape of Digital Firm, 21st International Manufacturing Symposium, University of Cambridge, UK. (Recognised as the “Young scientist’s research by Dept of Science and Technology, Govt of India and received ITS-DST travel grant).
18. Kulkarni, S., **Verma, P.,** & Mukundan, R. (2016). An Industry Perspective on manufacturing strategy Definition. Management science and Practice (MSP) - Sixth edition. IIT Madras, India.
19. Kulkarni, S., **Verma, P.,** & Mukundan, R. (2016). Defining Manufacturing Strategy: A Multi perspective Study. XX Annual International Conference of Society of Operations Management.
20. Kulkarni, S., **Verma, P.,** & Mukundan, R. (2016). Extending Canvas of Manufacturing Strategy: Updating 6Ps model. National conference on Industrial Engineering and Technology Management (NCIETM). NITIE, Mumbai, India.
21. Agarwal, U., **Verma, P.,** Khurana, S., & Singh, R. (2014). Examining Psychological contract in vendor-buyer relationship: proposing a conceptual framework. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 123-138). Mumbai.
22. Gupta, P., & **Verma, P.** (2014). Cycle time compression in loose cement dispatches by bulkers and enhancing customer satisfaction. *NCIETM Challenges and Opportunities for IE in Emerging Economies*, (pp. 429-438). Mumbai, India.

23. Uttam, N., & Verma, P. (2014). Development of fuzzy model to integrate the human intuition with lead time estimation. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 139-149). Mumbai, India.
24. Verma, P., Parida, A., & Uttam, N. (2014). Use of fuzzy demand to obtain optimal order size through dynamic programming. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 150-160). Mumbai, India.
25. Verma, P., Vellanki, S., & Agarwal, U. A. (2014). Development of frameworks for vendor base rationalization and impact of this on Supplier relationship: A study of Indian Manufacturing Sector. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 85-94). Mumbai, India.
26. Verma, P., & Sharma, R. (2009). Relaxations of the Decomposed Single Stage Capacitated Warehouse Location Problem: Empirical Comparisons. *Proceedings of the 2nd International conference on Decision Sciences in Global Enterprise Management* (pp. 526–538). IIT Bombay: Decision Science.
27. Verma, P., & Sharma, R.R.K. (2007). Vertical Decomposition Approach To Solve Single Stage Capacitated Warehouse Location Problems. *IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 907 - 911). Singapore: IEEE.

#### BOOKS

28. Verma, P. (2012). *Formulating and Solving Warehouse Location Problems*. Germany: LAP Lambert Academic Publishing.

#### PAPERS PRESENTED IN CONFERENCES

1. Shishodia, A., Verma, P., and Jain, K. (2019), "Project Driven Supply Chain: An Evaluation of Project Network Resilience", in Production and Operations Management Society (POMS) 30th Annual Conference, 2nd – 6th May, Washington D.C., USA, pp. xx.
2. Shishodia, A., Verma, P., and Jain, K. (2019), " Project Driven Supply Chain: Evaluation of Contractor Resilience in Project Driven Supply Chain: A Case Study", in Production and Operations Management Society (POMS) 30th Annual Conference, 2nd – 6th May, Washington D.C., USA, pp. xx.
3. Verma, P., Dixit, V. Raja, Md. (2019). Design of green supply chain with Packaging Recycling and Emission Constraints. *6th International EUROMA Sustainable Operations and Supply Chains Forum*, 18<sup>th</sup> – 19<sup>th</sup> March. Gothenburg, Sweden.
4. Shishodia, A., Verma, P., and Jain, K. (2019), " Exploring the Enablers of Resilient Suppliers in NPD Projects: An ISM approach", in 5<sup>th</sup> PMI Research & Academic Conference on Project Management in the Emerging World of Disruption, 2019, 28th February to 2nd March 2019 at IIM Kozhikode, Kerala, pp.15.
5. Shishodia, A., Verma, P., and Jain, K. (2018), " Assessment of Project Network Resilience: A conceptual paper", in 12<sup>th</sup> Annual ISDSI conference on Data Driven Decision Making in the digital Age, 2018, 27<sup>th</sup> Dec. – 30<sup>th</sup> Dec, at SPJIMR, Mumbai, Maharashtra, pp. 66.

6. Kulkarni, S., **Verma, P.**, and Mukundan , R. (2018), "Analytical Investigation of Cumulative Capabilities Sequence in Digital Manufacturing Firm", in 12th Annual ISDSI conference on Data Driven Decision Making in the digital Age, 2018, 27th Dec. – 30th Dec, at SPJIMR, Mumbai, Maharashtra, pp. 136.
7. Dutt, S., **Verma, P.**, and Aghalaya, S. N. (2018), " Hospital Registration Process: A system dynamics approach", in 12th Annual ISDSI conference on Data Driven Decision Making in the digital Age, 2018, 27th Dec. – 30th Dec, at SPJIMR, Mumbai, Maharashtra, pp. 133.
8. **Verma, P.**, and Gayke, C. (2018), " Building E-commerce Supply Chain Resilient", in 12th Annual ISDSI conference on Data Driven Decision Making in the digital Age, 2018, 27th Dec. – 30th Dec, at SPJIMR, Mumbai, Maharashtra, pp. 92.
9. Dohale, V., Akarte, M., & **Verma, P.** (2018). "Review of Manufacturing Strategy literature published in "Benchmarking : An International Journal." in 12th Annual ISDSI conference on Data Driven Decision Making in the digital Age, 2018, 27th Dec. – 30th Dec, at SPJIMR, Mumbai, Maharashtra, pp. 24.
10. Dixit, V., **Verma, P.** (2018). "Formulation of risk breakdown structure for green supply chain using interpretive structural modelling." in 18<sup>th</sup> GLOGIFT Conference, December 18-20, at Indian Institute of Management Lucknow, Lucknow.
11. **Verma, P.**, and Daudiyal, G. (2018), " Integration of supplier selection with closed-loop Supply chain for adhesive industries", in 51<sup>st</sup> Annual Convention of Operational Research Society of India and International Conference, 2018, 16<sup>th</sup> – 19<sup>th</sup> Dec., at IIT Bombay, Mumbai, Maharashtra.
12. Mishra, A. and **Verma, P.**, (2018), " Estimation of factors criticality for core quality: An integrative GDM-CCMA-AHP approach", in 51<sup>st</sup> Annual Convention of Operational Research Society of India and International Conference, 2018, 16<sup>th</sup> – 19<sup>th</sup> Dec., at IIT Bombay, Mumbai, Maharashtra.
13. **Verma, P.**, Gokhale, R. and Tyagi, I., (2018), " Comparison of Fuzzy Multi-Objective Programming and Lexicographic Approaches for Integrated supplier selection and Order Allocation in Steel Industry", in 51<sup>st</sup> Annual Convention of Operational Research Society of India and International Conference, 2018, 16<sup>th</sup> – 19<sup>th</sup> Dec., at IIT Bombay, Mumbai, Maharashtra.
14. Akarte, M. and **Verma, P.**, (2018), " Supplier Segmentation using boosting tree – A Machine Learning approach", in Sixth International Conference on Business Analytics and Intelligence, IISc Bangalore, 20-22, December 2018.
15. Shishodia, A., **Verma, P.**, and Jain, K. (2018), " Evaluation of Resilient Capabilities of Project Contractors", in 3<sup>rd</sup> National Conference on Industrial Engineering and Technology Management (NCIETM): Reimagining Industrial Engineering and Technology Management for Value Creation, 2018, 30<sup>th</sup> Nov. – 1<sup>st</sup> Dec, at NITIE Mumbai, Maharashtra, pp. 70.
16. Dohale, V., Akarte, M., & **Verma, P.** (2018). Manufacturing Performance Improvement through Layout analysis using Simulation. in 3<sup>rd</sup> National Conference on Industrial Engineering and Technology Management (NCIETM): Reimagining Industrial Engineering and Technology Management for Value Creation, 2018, 30<sup>th</sup> Nov. – 1<sup>st</sup> Dec, at NITIE Mumbai, Maharashtra, India, pp. 51.
17. Shishodia, A., **Verma, P.**, and Dixit, V. (2018), "Supplier Resilience Assessment of Project Driven Supply Chains (PDSC)", in Production and Operations Management Society (POMS)

- 29th Annual Conference: Expanding Boundaries of POM 2018, 4th – 7th May, Houston, Texas, USA, pp. 183.
18. Narayana S., and **Verma, P.**, Identifying Sustainability Metrics for a Coordinated Value Chain using QFD. In 5<sup>th</sup> International European Operations Management Association (EurOMA) Sustainable Operations and Supply Chains Forum, University of Kassel, Germany, March 5-6, 2018.
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  20. Shishodia, A., Dixit, V. and **Verma, P.** (2017), "Analysis of Project Risks based on Project Characteristics", in Accelerating Development: Harnessing the Power of Project Management proceedings of the Project Management Research and Academic Conference 2017, 2nd – 4th March 2017, IIT Delhi, pp. 401-412.
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  22. Ambati, S. & **Verma, P.** (2016). "Sourcing Strategy of Strategic Items by Considering the Total Supply Chain Cost and Order Allocation to Suppliers in an Auto Industry." Production Operations Management Society (POMS)-HONG KONG -2017, The Eighth POMS – HK International Conference, Hong Kong.
  23. Kulkarni, S., **Verma, P.**, & Mukundan, R. (2016). "An Industry Perspective on manufacturing strategy Definition." Management science and Practice (MSP) - Sixth edition. IIT Madras, India.
  24. Kulkarni, S., **Verma, P.**, & Mukundan, R. (2016). "Defining Manufacturing Strategy: A Multi perspective Study." XX Annual International Conference of Society of Operations Management. IIITM Gwalior, Emerald Group Publishing.
  25. **Verma, P.**, & Ambati, S. (2016). Production-Distribution modelling of a supply chain network for an auto industry. XX Annual International Conference of Society of Operations Management. IIITM Gwalior, Emerald Group Publishing.
  26. Kulkarni, S., **Verma, P.**, & Mukundan, R. (2016). "Extending Canvas of Manufacturing Strategy: Updating 6Ps model." National conference on Industrial Engineering and Technology Management (NCIETM). NITIE, Mumbai, India, 17-19 November 2016.
  27. **Verma, P.**, Agarwal, U., & Karar, S. (2016). Exploring operational and behavioural factors affecting buyer-vendor relationship. SPJIMR-POMS India Chapter Conference on Big Data Analytics for Optimising Supply Chains. S P Jain, Mumbai. 29 - 30 July 2016.
  28. Agarwal, U.A, **Verma, P.**, & Karar, S. (2016). "Behavioral Operations Management: A review and bibliometric analysis." SPJIMR POMS India Chapter Conference on Big Data Analytics for Optimising Supply Chains. S P Jain, Mumbai. 29 - 30 July 2016.
  29. Naskar, S., **Verma, P.**, & Gokhale, R. (2016). "Integrated Procurement, Production and Transportation Planning for Food Processing Industry." SPJIMR-POMS India Chapter Conference on Big Data Analytics for Optimising Supply Chains. S P Jain, Mumbai. 29 - 30 July 2016.

30. **Verma, P.,** & Joshi, K. (2016). Multi objective Heuristic Approach for Multimodal Coordinated Supply Chains. POMS 27th Annual Conference on Innovative Operations in an Information and Analytics Driven Economy. Orlando, Florida.
31. **Verma, P.,** Dixit, V., & Bajpai, R. (2016). "Material Handling Equipment Selection using Fuzzy Analytic Hierarchy Process (FAHP)." 18th International Conference of Operations Research, Rome, Italy, 21-22 March 2016.
32. Singh, V., Dixit, V., & **Verma, P.** (2016). "Shipyard facility layout selection using Fuzzy similarity index." International Conference on E-Business & Supply Chain Competitiveness, IIT Kharagpur, India, 12-14 February 2016.
33. Kastore, J., **Verma, P.,** & Dixit, V. (2016). "Fuzzy approach for measuring supply chain resilience." International Conference on E-Business & Supply Chain Competitiveness, IIT Kharagpur, India, 12-14 February 2016.
34. Uttam, N., **Verma, P.,** & Parida, A. (2015). A comprehensive analysis of warehouse operations and product integrity management at Pon Pure Chem (P) Ltd., Chennai. *TITCON - International Conference on Trends in Technology for Convergence*. Salem, India.
35. Salunke, H., & **Verma, P.** (2015). Optimization of inventory level at Oilfield services: Case Study. *TITCON - International Conference on Trends in Technology for Convergence*. Salem, India.
36. Agarwal, U., **Verma, P.,** Khurana, S., & Singh, R. (2014). Examining Psychological contract in vendor-buyer relationship: proposing a conceptual framework. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 123-138). Mumbai.
37. Uttam, N., & **Verma, P.** (2014). Development of fuzzy model to integrate the human intuition with lead time estimation. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 139-149). Mumbai, India.
38. **Verma, P.,** Parida, A., & Uttam, N. (2014). Use of fuzzy demand to obtain optimal order size through dynamic programming. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 150-160). Mumbai, India.
39. **Verma, P.,** Vellanki, S., & Agarwal, U. A. (2014). Development of frameworks for vendor base rationalization and impact of this on Supplier relationship: A study of Indian Manufacturing Sector. *NITIE POMS Manufacturing Excellence: Imperative for Emerging Economies*, (pp. 85-94). Mumbai, India.
40. Gupta, P., & **Verma, P.** (2014). Cycle time compression in loose cement dispatches by bulkers and enhancing customer satisfaction. *NCIETM Challenges and Opportunities for IE in Emerging Economies*, (pp. 429-438). Mumbai, India.
41. Dubey, S., **Verma, P.,** & Sharma, R.R.K. (2010, September). Developing a GA Based Heuristic for the Single Stage Un-capacitated Warehouse Location Problem. *AIMS International Conference on Value-based Management*, 18. Haridwar, India.
42. **Verma, P.,** & Sharma, R.R.K. (2010). Strong and weak formulations of SSUWLP. *International Conference on Recent Trends in Business Administration and Information Processing, BAIP 2010*. Trivandrum, Kerala, India.
43. **Verma, P.,** & Sharma, R.R.K. (2009). Relaxations of the Decomposed Single Stage Capacitated Warehouse Location Problem: Empirical Comparisons. *Proceedings of the 2nd International*

*conference on Decision Sciences in Global Enterprise Management* (pp. 526–538). IIT Bombay: Decision Science.

44. **Verma, P., & Sharma, R.R.K.** (2009). Vertical Decomposition Approach for Two Stage Capacitated Warehouse Location Problems. *3rd International Online Conference on Business & Management (IOCBM)*.
45. **Verma, P., & Sharma, R. R. K.** (2008). Computational Experiences for the Various Relaxations of Vertically Decomposed Single Stage Capacitated Warehouse Location Problem. *National Conference on Management Science & Practices (MSP), ORSI Ahmedabad Chapter*. IIM Ahmedabad, India.
46. **Verma, P., & Sharma, R.R.K.** (2008). Two Stage Capacitated Warehouse Location Problem: Conceptual Scheme of the Vertical Decomposition Approach. *4th International Conference on Logistics and Supply Chain Management*. PSG College of Technology Coimbatore and Central Michigan University, Mt. Pleasant, MI 48859, USA.
47. **Verma, P., & Sharma, R.R.K.** (2008). Warehouse Location Problems and their solution approaches. *12th International Conference of the 'Society of Operations Management (AICSOM)'*. IIT Kanpur, India.
48. **Verma, P., & Sharma, R.R.K.** (2007). Vertical Decomposition Approach To Solve Single Stage Capacitated Warehouse Location Problems. *IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 907 - 911). Singapore: IEEE.
49. **Modi, P., & Sharma, R.R.K.** (2005). Distribution of food grains in India: An improved formulation of the operational problem. *Fifth International Conference on Operational Research for Development (ICORD-V)*. Jamshedpur.

#### Executive Education Programmes

##### **Management Development Programmes**

- 1) Business Analytics for Managers
- 2) Big data analytics
- 3) Decision making using industrial engineering principles
- 4) Decision making in supply chain
- 5) Decision making using spreadsheet modelling
- 6) Decision making under uncertainty

##### **Unit Based Programmes**

- 1) Manufacturing for Competitive Advantage for Sterlite Technologies Limited, Sylvassa - 2019
- 2) 6 Week Dedicated Industrial Engineering Programme for Bharat Electronics Limited, Bangalore - 2018
- 3) Method Study and work measurement for Jubilant Generics Limited, Gajrola (U.P.) – 2017



## Consultancy Assignments Completed

- Study for improving industrial productivity enhancement for Sundaram Fasteners, Krishnapuram Plant, Madurai.
- Industrial Engineering study for P.D.Hinduja Hospital & Medical Research Centre , Mumbai
- Assessing Pilot Plant Capacity And Capacity Utilization of Hindustan Unilever Limited (HUL), Mumbai
- Manpower assessment of Apcotex Industries Ltd., Navi Mumbai
- Towed Gun System at Larsen & Toubro (L&T), Mumbai