# Vaibhav S. Narwane, Ph.D.

Scopus ID: <a href="https://bit.ly/3bhtTXa">https://bit.ly/3bhtTXa</a>
Orcid ID: <a href="https://bit.ly/2LVG6s4">https://bit.ly/2LVG6s4</a>
Google Scholar: <a href="https://bit.ly/2IPXBZb">https://bit.ly/2IPXBZb</a>
+91-976 976 1576 vsnarwane@gmail.com

**CAREER OBJECTIVE-** To obtain a challenging position in Mechanical Engineering domain where I can apply my rich research experience and academic skills to improve the overall performance of organizations

**EMPLOYMENT-** Associate Professor, K J Somaiya College of Engineering, Somaiya Vidyavihar University (SVU), Mumbai, India

## **EDUCATION**

**University of Mumbai,** Veermata Jijabai Technological Institute (VJTI), Maharashtra **Ph.D.,** Department of Production Engineering, 2020

Dissertation: "Determinants of Cloud of Things in Small and Medium Enterprises"

Committee: Dr B.E Narkhede (NITIE), Dr K.P Karunakaran (IIT Bombay), Dr W.S Rathod (VJTI), Dr Rakesh Raut (NITIE).

Examiners: Dr S. G. Deshmukh (IIT, Delhi), Dr S.S Mahapatra (NIT, Raurkela), Dr M.Rajamohan (Anna University),

**Swami Ramanand Teerth Marathawada University,** Shri Guru Govind Singhji College of Engineering and Technology (SGGS), Nanded, Maharashtra

M.E, Mechanical Engineering (CAD/CAM), First Class with Distinction, 2002

Thesis: Simulation of JIT Manufacturing Systems using ARENA

Advisor: Dr JVL Venkatesh

**Dr. Babasaheb Ambedkar Marathawada University,** Jawaharlal Nehru Engineering College, Aurangabad

**B.E.** Mechanical Engineering, First Class with Distinction, 2000

## **RESEARCH AREAS**

Sustainable manufacturing; Supply Chain; Sustainable Supply Chain management; Smart Manufacturing; Artificial Intelligence; Machine Learning; Circular Economy; Project Management; Decision Support System; Interdisciplinary Research

## RECOGNITIONS

- Chairman, Board of Studies in Robotics and Artificial Intelligence of Mechanical Engineering of K. J. Somaiya COE, Somaiya Vidyavihar University, Mumbai
- Ph.D. Guide in Mechanical Engineering approved by Somaiya Vidyavihar University, Mumbai

- Approved teacher for Post Graduate program in Mechanical Engineering of University of Mumbai
- Approved teacher for Undergraduate program in Mechanical Engineering of University of Mumbai
- Fellow of Indian Institution of Industrial Engineering

# **RESEARCH IMPACT** (as on 31.07.2023)

- Google Scholar Citations :1481; h-index: 19; i10-index: 24
- Research Gate- RI Score: 966.8; Recommendations: 652; Reads: 22,029
- Published 40 research articles in 30 Scopus Indexed Journals
- More than 80 publications in International/National Journals and Conferences
- Guest editor of Special Issue "Machine Learning Methods and IoT for Sustainability" Sustainability Journal (Impact Factor-3.889, Citescore-5.0, MDPI Publisher)
- Editorial Board Member of International Journal "Digital Manufacturing Technology" and "Journal of Management Science & Engineering Research"
- Co-Guide for PhD (Science and Technology) degree course in the subject of Mechanical Engineering for University of Mumbai
- Guided more than 20 Master's Degree Projects

## **ACHIEVEMENTS**

- Secured first rank in Master's Degree at Shri Guru Govind Singhji College of Engineering and Technology, Nanded
- Stood First in the PhD course work (9.75 CPI).
- Best Paper 2016-17, Indian Institution of Industrial Engineering, Awarded on September 15, 2017
- First prize under faculty category National Essay Competition at National Institute of Industrial Engineering (NITIE), Mumbai in February, 2019
- Award of Appreciation in the International Conference on Embracing Industry 4.0 Technologies for Sustainable Growth (ICEI 4.0) at RGIT, Mumbai in April, 2022

## SCHOLARLY PUBLICATIONS

- 1. Kavre, M. S., Narwane, V. S., Gardas, B. B., and Sunnapwar, V. K. (2023) "Role of Human Factors in Cloud Manufacturing Adoption across Manufacturing Micro, Small, and Medium Enterprises" *International Journal of Computer Integrated Manufacturing* 36(4), 611-633 (Scopus Indexed; Impact Factor: 4.42; Publisher: Taylor and Francis DOI: <a href="https://doi.org/10.1080/0951192x.2022.2128215">https://doi.org/10.1080/0951192x.2022.2128215</a>)
- 2. Tambuskar, D. P., Jain, P., and **Narwane, V. S.** (2023). An exploration into the factors influencing the implementation of big data analytics in sustainable supply chain management. *Kybernetes* (*Scopus Indexed; Impact Factor: 1.765; h-index 40; Publisher: Elsevier; DOI: https://doi.org/10.1108/k-07-2022-1057*)
- 3. Jain, P., Tambuskar, D. P., and **Narwane, V. S.** (2023). Is the Implementation of Big Data Analytics in Sustainable Supply Chain Really a Challenge? The Context of the Indian Manufacturing Sector. *International Journal of Innovation and Technology*

- Management, 2350033. (Scopus Indexed; Impact Factor: 1.917; h-index 24; Publisher: World Scientific; DOI: https://doi.org/10.1142/S0219877023500335)
- 4. Pansare, R. B., Nagare, M. R., and **Narwane, V. S.** (2023). Exploring the significant factors of reconfigurable manufacturing system adoption in manufacturing industries. *Journal of Modelling in Management (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Score:* 2.24; h-index 29; Publisher: Emerald; DOI: https://doi.org/10.1108/JM2-12-2022-0286)
- 5. Ganjare, S. A., Satao, S. M., & Narwane, V. S. (2023) "Systematic Literature Review of Machine Learning for Manufacturing Supply Chain" *The TQM Journal (Scopus Indexed; Quartile Q1; Impact Score: 5.85; h-index 74; Publisher: Emerald; DOI: https://doi.org/10.1108/TQM-12-2022-0365)*

- 6. Narwane, V. S., Raut, R. D., Gardas, B. B., Narkhede, B. E., & Awasthi, A. (2022), "Examining smart manufacturing challenges in the context of micro, small and medium enterprises", *International Journal of Computer Integrated Manufacturing*,1-18 (Scopus Indexed; Impact Factor: 4.42; Publisher: Taylor and Francis; DOI: https://doi.org/10.1080/0951192X.2022.2078508)
- 7. Velani, A., Narwane, V.S., and Gardas, B. B. (2022), "Contribution of Internet of Things in Water Supply Chain Management: A Bibliometric and Content Analysis", Journal of Modelling in Management (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Score: 2.24; h-index 29; Publisher: Emerald; DOI: https://doi.org/10.1108/JM2-04-2021-0090)
- 8. Dhage, S.S., Narwane, V.S., Raut, R.D., Gardas, B.B., Dere N., & Narkhede, B.E. (2022) "Mathematical programming model to optimize an environmentally constructed supply chain: A genetic algorithm approach", International Journal of Operational Research 144(2), 226-253. (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Factor: 0.52; h-index 27; Publisher: Inderscience Enterprise Ltd, DOI: https://doi.org/10.1504/ijor.2021.10026395).
- 9. Jain, P., Tambuskar D. P., and **Narwane, V. S.** (2022) "Identification of Critical Factors for Big Data Analytics Implementation in Sustainable Supply Chain in Emerging Economies" Journal of Engineering, Design and Technology, (ahead-of-print). (Scopus Indexed; Impact Factor: 1.765; h-index 40; Publisher: Elsevier; DOI: https://doi.org/10.1108/JEDT-12-2021-0739
- 10. Kavre, M. S., Gardas, B. B., **Narwane, V. S.**, Navimipour, N. J., and Yalcin, S. (2022) "Evaluating the Effect of Human Factors on Big Data Analytics and Cloud of Things Adoption in the Manufacturing Micro, Small, and Medium Enterprises" *IT Professional (Scopus Indexed; Impact Factor: 2.6; h-index 50; Publisher: IIIE Xplore)*
- 11. Parthiban S., Gedam V., Narkhede, B.E, **Narwane, V.S.**, and Gotmare A. (2022) "Sustainable implementation drivers and barriers of lean agile manufacturing in original equipment manufacturers: A literature review study", International Journal of Business Excellence 26(1) (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Factor: 0.95; h-index 26; Publisher: Inderscience Enterprise Ltd, DOI: <a href="https://doi.org/10.1504/IJBEX.2022.121587">https://doi.org/10.1504/IJBEX.2022.121587</a>).

- 12. Narwane, V. S., Yadav, V. S., Raut, R. D., Narkhede, B. E., & Gardas, B. B. (2021), "Sustainable development challenges of the biofuel industry in India based on integrated MCDM approach", Renewable Energy, 164, 298-309 (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 8.001; h-index 110; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.renene.2020.09.077)
- 13. **Narwane, V.S.**, Raut, R.D., Yadav, V. S., Cheikhrouhou, N., Narkhede, B. E. & Priyadarshinee, P (2021) "The role of big data for Supply Chain 4.0 in manufacturing organisations of developing countries" Journal of Enterprise Information Management. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor 5.839; h-index 61; Publisher: Emerald; DOI: https://doi.org/10.1016/j.renene.2020.09.077
- 14. Narwane, V. S., Raut, R. D., Mangla, S. K., Dora, M., & Narkhede, B. E. (2021). "Risks to big data analytics and blockchain technology adoption in supply chains". Annals of Operations Research, 1-36. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 4.854; h-index 96; Publisher: Springer; DOI: https://doi.org/10.1007/s10479-021-04396-3).
- 15. Narwane, V.S., Gardas, B.B., Raut, R.D., Priyadarshinee P., and Narkhede, B.E. (2021) "The influence of Internal-External Factors on the Cloud Computing Adoption", International Journal of Business Information Systems, 38(3), 324-342 (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Factor: 0.95; hindex 26; Publisher: Inderscience Enterprise Ltd; DOI: https://doi.org/10.1504/ijbis.2021.119415 ).
- 16. Raut, R., **Narwane, V. S.**, Mangla, S. K., Yadav, V. S., Narkhede, B. E., & Luthra, S. (2021). "Unlocking causal relations of barriers to big data analytics in manufacturing firms", Industrial Management & Data Systems. (*Scopus Indexed; ABDC indexed Journal:* 'A' Category; Impact Factor: 4.42 ;h-index 103; https://doi.org/10.1108/IMDS-02-2020-0066)
- 17. Maroli, A., Narwane, V. S., & Gardas, B. B. (2021). "Applications of IoT for achieving sustainability in agricultural sector: A comprehensive review", Journal of Environmental Management, 298, 113488. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 6.789; h-index 179; Publisher: Elsevier; DOI: <a href="https://doi.org/10.1016/j.jenvman.2021.113488">https://doi.org/10.1016/j.jenvman.2021.113488</a>)
- 18. Thavi, R.R., **Narwane, V.S.**, Jhaveri, R.H. and Raut, R.D. (2021), "To determine the critical factors for the adoption of cloud computing in the educational sector in developing countries a fuzzy DEMATEL approach", Kybernetes, 10.1108/K-12-2020-0864. (Scopus Indexed; Impact Factor: 1.765; h-index 40; Publisher: Elsevier; DOI: <a href="https://doi.org/10.1108/k-12-2020-0864">https://doi.org/10.1108/k-12-2020-0864</a>)
- 19. Thavi, R.R., Jhaveri, R.H., **Narwane, V.S.**, Gardas, B. B., and Navimipour, N. J. (2021), "Role of cloud computing technology in the education sector", Journal of Engineering, Design and Technology, (*Scopus Indexed; Impact Factor: 1.765; hindex 40*; *Publisher: Elsevier; DOI:* <a href="https://doi.org/10.1108/JEDT-08-2021-0417">https://doi.org/10.1108/JEDT-08-2021-0417</a>)
- 20. Maroli A. A., **Narwane, V. S.**, Raut, R. D., & Narkhede, B. E. (2020), "Framework for the implementation of an IoT based water distribution and management system", Clean Technologies and Environmental Policy, 23(1), 271-283 (Scopus Indexed; Impact Factor: 2.429;h-index 55; Publisher: Springer; DOI: <a href="https://doi.org/10.1007/s10098-020-01975-z">https://doi.org/10.1007/s10098-020-01975-z</a>)
- 21. Raut, R. D., Mangla, S. K., **Narwane, V. S.**, Dora, M., & Liu, M. (2021), "Big Data Analytics as a mediator in Lean, Agile, Resilient, and Green (LARG) practices effects on sustainable supply chains", Transportation Research Part E: Logistics and Transportation Review, 145, 102170 (*Scopus Indexed; ABDC indexed Journal: 'A\*'*

- Category; Impact Factor: 4.69; h-index 110; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.tre.2020.102170).
- 22. Kumar, S., Raut, R. D., **Narwane, V. S.**, Narkhede, B. E., & Muduli, K. (2021). "Implementation barriers of smart technology in Indian sustainable warehouse by using a Delphi-ISM-ANP approach", International Journal of Productivity and Performance Management. (Scopus Indexed; ABDC indexed Journal: 'B' Category; Impact Factor: 2.77; h-index 61; Publisher: Emerald; DOI: https://doi.org/10.1108/ijppm-10-2020-0511)
- 23. Shah, H. M., Gardas, B. B., **Narwane, V. S.**, & Mehta, H. S. (2021). The contemporary state of big data analytics and artificial intelligence towards intelligent supply chain risk management: a comprehensive review. Kybernetes (*Scopus Indexed; Impact Factor: 1.765; h-index 40; Publisher: Elsevier*, DOI: <a href="https://doi.org/10.1108/K-05-2021-0423">https://doi.org/10.1108/K-05-2021-0423</a>)
- 24. Gabani P., Gala U., **Narwane, V. S.**, Raut, R. D., Narkhede, B. E., and Govindarajan, U. (2021) "A Viability Study Using Conceptual Models for Last Mile Drone Logistics Operations in Populated Urban Cities of India", IET Collaborative Intelligent Manufacturing. (Scopus Indexed; Impact Factor: 0.355; Publisher: Wiley; DOI: https://doi.org/10.1049/cim2.12006)
- 25. Raut, R. D., Yadav, V. S., Cheikhrouhou, N., Narwane, V. S., & Narkhede, B. E. (2021) "Big data analytics: Implementation challenges in Indian manufacturing supply chains", Computers in Industry, 125, 103368 (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 7.635; h-index 100; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.compind.2020.103368).
- 26. Nayal, K., Raut, R. D., Priyadarshinee, P., Narkhede, B.E., Kazancoglu, Y., and Narwane, V. S. (2021). "Exploring the role of artificial intelligence in managing agricultural supply chain risk to counter the impacts of COVID-19 pandemic", International Journal of Logistics Management. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 5.212; h-index 77; Publisher: Emerald; DOI: https://doi.org/10.1108/ijlm-12-2020-0493)
- 27. Gedam, V. G., Raut, R. D., Inamdar, Z.Z., Narkhede, B.E., Dharaskar, S., and Narwane, V. S. (2021). "COVID-19 critical success factors in Indian Healthcare sector- a DEMATEL Approach", Journal of Multi-Criteria Decision Analysis. (Scopus Indexed; Impact Factor: 0.355; h-index 62; Publisher: Wiley; DOI: https://doi.org/10.1002/mcda.1763)

- 28. Narwane, V. S., Raut, R. D., Mangla, S. K., Gardas, B. B., Narkhede, B. E., Awasthi, A., & Priyadarshinee, P. (2020), "Mediating role of cloud of things in improving performance of small and medium enterprises in the Indian context", Annals of Operations Research, 1-30. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor: 4.854; h-index 96; Publisher: Springer; DOI: https://link.springer.com/article/10.1007/s10479-019-03502-w).
- 29. **Narwane, V. S.**, Raut, R. D., Yadav, V. S., & Singh, A. R. (2020), "Barriers in sustainable industry 4.0: a case study of the footwear industry", International Journal of Sustainable Engineering, 1-15. (*Scopus Indexed; Impact Factor: 2.3; Publisher: Taylor and Francis Online; DOI: https://doi.org/10.1080/19397038.2020.1836065*).
- 30. Inamdar, Z.Z., Raut, R.D., **Narwane, V.S.**, Gardas, B. B., Narkhede, B.E, & Sagnak, M. (2020), "A systematic literature review with bibliometric analysis of big data analytics adoption from period 2014 to 2018", Journal of Enterprise Information

- Management. (Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor 5.839; h-index 61; Publisher: Emerald Publishing Limited; DOI: https://doi.org/10.1108/JEIM-09-2019-0267).
- 31. Mangla, S.K., Raut, R., **Narwane, V.S.**, Zhang, Z. & Priyadarshinee, P. (2020), "Mediating effect of big data analytics on project performance of small and medium enterprises", Journal of Enterprise Information Management (*Scopus Indexed; ABDC indexed Journal: 'A' Category; Impact Factor 5.839; h-index 61; Publisher: Emerald Publishing Limited; DOI: <a href="https://doi.org/10.1108/jeim-12-2019-0394">https://doi.org/10.1108/jeim-12-2019-0394</a>).*
- 32. Kumar, M. S., Raut, R. D., **Narwane, V. S.**, & Narkhede, B. E. (2020). "Applications of industry 4.0 to overcome the COVID-19 operational challenges", Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14, 1283-1289 (*Scopus Indexed; CiteScore:* 4.9; h-index 40; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.dsx.2020.07.010).
- 33. Narkhede, B.E., Raut, R.D., **Narwane, V.S.**, & Gardas, B.B. (2020) "Cloud Computing in healthcare- A vision, challenges and future directions", International Journal of Business Information Systems, 34(1), 1-39 (*Scopus Indexed; ABDC indexed Journal:* 'C' Category; *Impact Factor:* 0.95; h-index 26 Publisher: Inderscience Enterprise Ltd, DOI: https://doi.org/10.1504/IJBIS.2020.106799).

- 34. Narwane, V. S., Raut, R. D., Gardas, B. B., Kavre, M. S., & Narkhede, B. E. (2019), "Factors affecting the adoption of cloud of things", Journal of Systems and Information Technology, 21(4), 397-418 (Scopus Indexed; ABDC indexed Journal: 'C' Category; CiteScore:1.79; Publisher: Emerald Publishing Limited; DOI: <a href="https://doi.org/10.1108/JSIT-10-2018-0137">https://doi.org/10.1108/JSIT-10-2018-0137</a>).
- 35. Narwane, V. S., Narkhede, B.E., Raut, R.D., Gardas B. B., Priyadarshinee P. and Kavare, M. S. (2019) "To identify the determinants of the CloudIoT technologies adoption in the Indian MSMEs: structural equation modelling approach", International Journal of Business Information Systems, 31(3), 322-353 (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Factor: 0.95; h-index 26; Publisher: Inderscience Enterprise Ltd; DOI: https://doi.org/10.1504/IJBIS.2019.101110).
- 36. Narwane, V.S., Narkhede, B.E., Gardas, B.B. & Raut, R.D. (2019) "Cloud manufacturing issues and its adoption: past, present, and future", International Journal of Management Concepts and Philosophy, 12(2), 168-199 (Scopus indexed; Impact Factor: 0.05; h-index 3; Publisher: Inderscience Enterprise Ltd; DOI:https://doi.org/10.1504/IJMCP.2019.099319).
- 37. Shashikumar S., Raut, R.D., **Narwane, V.S.**, Gardas, B.B., Narkhede, B.E., & Awasthi A. (2019) "A Novel Approach to determine Cell Formation using Hybrid Technique", OPSEARCH, 56(3), 628-656 (Scopus Indexed; ABDC indexed Journal: 'C' Category; Impact Factor 1.60; h-index 20; Publisher: Springer International Publishing; DOI: https://doi.org/10.1007/s12597-019-00381-4).
- 38. Raut, R.D., Narkhede, B.E., **Narwane, V.S.**, & Gardas, B.B., (2019) "Improvement in the Food Losses in Fruits and Vegetable Supply Chain A Perspective of Cold Third-Party Logistics Approach", Operations Research Perspectives, 6, 100-117 (Scopus Indexed; Impact Factor 0.29; h-index 16; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.orp.2019.100117).
- 39. Raut, R.D., Mangla S.K., **Narwane, V.S.**, Gardas, B.B., Priyadarshinee P., & Narkhede, B.E. (2019) "Linking Big Data Analytics and Operational Sustainability

- Practices for Sustainable Business Management", Journal of Cleaner Production, 224, 10-24 (Scopus Indexed; SCI Expanded; ABDC indexed Journal: 'A' Category; Impact Factor 9.289; h-index 200; Publisher: Elsevier; DOI: https://doi.org/10.1016/j.jclepro.2019.03.181).
- 40. Raut, R.D., Gardas, B.B., Narkhede, B.E., & Narwane, V.S. (2019) "To Investigate the Determinants of Cloud Computing Adoption in the Manufacturing Micro, Small & Medium Enterprises: A DEMATEL Based Approach", Benchmarking: an International Journal, 26 (3), 990-1019 (Scopus Indexed; ABDC indexed Journal: 'B' Category; Impact Factor 2.6; h-index 61; Publisher: Emerald Publishing Limited; DOI: https://doi.org/10.1108/BIJ-03-2018-0060).

# **Book Chapter Articles (Scopus Indexed)**

- 41. **Narwane, V. S.**, Siddavatam, I., & Raut, R. D. (2022). Cloud-Based Manufacturing Service Selection Using Simulation Approaches. Smart Manufacturing Technologies for Industry 4.0: Integration, Benefits, and Operational Activities, 49. CRC Press (DOI: https://doi.org/10.1201/9781003186670-6)
- 42. **Narwane, V. S.**, Raut, R. D., & Narkhede, B. E. (2021) Roadmap to Smart Manufacturing for Developing Countries. In Sustainability in Industry 4.0 (pp. 221-232). CRC Press. (*DOI*: https://doi.org/10.1201/9781003102304)
- 43. Suroshe, M. S., **Narwane, V. S.**, & Raut, R. D. (2021) Machine Learning Perspective in Additive Manufacturing. In Sustainability in Industry 4.0 (pp. 161-178). CRC Press. (*DOI*: <a href="https://doi.org/10.1201/9781003102304">https://doi.org/10.1201/9781003102304</a>)
- 44. Gardas, B. B., **Narwane, V. S.**, & Ghongade, N. P. (2021). Analyzing the Obstacles to Sustainable Packaging in the Context of Developing Economies: A DEMATEL Approach. In Sustainable Packaging (pp. 71-83). Springer, Singapore. (*DOI:* https://doi.org/10.1007/978-981-16-4609-6)

## **Journal Articles (International/National- Non-Scopus)**

- 45. **Narwane, V.S.**, Gunasekaran, A., and Gardas, B. B. (2022), "Unlocking adoption challenges of IoT in Indian Agricultural and Food Supply Chain", *Smart Agricultural Technology*, 2, 100035, (Directory of Open Access Journals (DOAJ) DOI: <a href="https://doi.org/10.1016/j.atech.2022.100035">https://doi.org/10.1016/j.atech.2022.100035</a>)
- 46. Mehta D.K., **Narwane, V. S.**, Karadge N. R. & Raut, R.D. (2022) "Dynamic Cell Formation With Machine Reliability: Genetic Algorithm Approach", Industrial Engineering Journal, Vol. XV & Issue No. 3 March 2022
- 47. **Narwane, V. S.**, Narkhede, B. E., Bhosale V. V., & Jain P.(2020), "Comparative analysis of PID and fuzzy logic controller: A case of furnace temperature control", Journal of Current Science and Technology, 10(2), 109-120
- 48. Menon, C. B., & **Narwane, V. S.** (2020) "Relevance of Database and Information Retrieval System in Mechanical Engineering Program: A Case Study", Journal of Engineering Education Transformations, 33, 447-450.
- 49. Kotian, L., Chheda, A., **Narwane, V.S.**, and Raut, R.D. (2019) "Unmanned Aerial Vehicle for Road Monitoring: Fully Convolutional Networks Approach", Industrial Engineering Journal, Vol. XII & Issue No. 6 June 2019
- 50. Inamdar Z.Z., **Narwane, V. S.**, Raut, R.D., and Narkhede, B.E. "Literature Review on Value Stream Mapping Using Bibliometric Tool", Industrial Engineering Journal, Vol. 12 & Issue No. 3 March—2019

- 51. Bhattacharjee, R., Kulkarni, K., & **Narwane**, V. S. (2019) "Re-configurable Manufacturing Systems: Research Trends", Aweshkar, 28(1) 63-76.
- 52. **Narwane, V. S.**, Narkhede, B.E., Raut, R.D., Siddavatam I.A., and Ravishankar B. "A Perspective of Smart Manufacturing: A Case Study" Industrial Engineering Journal, Vol. XI & Issue No. 7 July 2018
- 53. **Narwane, V.S.**, Samant, A.N. & Siddavatam, I.A. (2017) "Cloud Technology Assessment in Manufacturing Field" Industrial Engineering Journal, Vol. X & Issue No. 3 March 2017
- 54. Raut, R.D., Shruti S, **Narwane, V.S.** & Jha, M.S. (2017) "Optimization Model of Medical, Nuclear Supply Chain By Using Genetic Algorithm", Industrial Engineering Journal, Vol. X & Issue No. 2 February 2017
- 55. Shruti S., **Narwane, V.S.** & Gilke, N.R. (2016) "Study and comparison of the various methods to solve problems in cellular manufacturing", Industrial Engineering Journal, Vol. IX, No. 5, pp. 12-18, May 2016.
- 56. V. B. Bhamare, V. S. Narwane and K. R. Pagar (2015) "Intelligent Alternator Controller: Prototype and Testing" International Journal of Innovative and Emerging Research in Engineering Vol. 2, pp 68-73.
- 57. Oak, S., & **Narwane**, V. S. (2014) "Design, analysis and fabrication of quadruped robot with four bar chain leg mechanism", International Journal of Innovative Science, Engineering & Technology, 1(6), 340-345.
- 58. Shilpa Bhambure, K.Jayarajan and **V.S.Narwane** (2014) "Kinematic and Finite Element Analysis of A Master Slave Manipulator Gripper" International Journal of Recent Development in Engineering and Technology (ISSN 2347-6435(Online) Volume 2, Issue 2, February 2014)
- 59. Smita, A. G., **Narwane, V. S.**, & Deole, U. (2013) "Kinematic Modeling of Quardruped Robot", International Journal on Theoretical and Applied Research in Mechanical Engineering (IJTARME), 2(4), 21-26.
- 60. Husain, A. M., Sohail, S. M., & Narwane, V. S. (2012) "Path planning of material handling robot using Ant Colony Optimization (ACO) technique", International Journal Engineering Research Application, 2, 1698-1701.

## **International Conference (Abroad)**

- 61. Doctor, A., Khirani, D., Raut, R. D., & **Narwane, V. S**. (2019) "Literature Review on Employment of Unmanned Aerial Vehicles for Disaster Management", Proceedings of the International Conference on Industrial Engineering and Operations Management, Pilsen, Czech Republic, July 23-26, 2019
- 62. Khirani, D., Doctor, A., **Narwane, V. S.**, Raut, R. D., & Narkhede, B. E. (2019) 'To understand the applications of cloud computing adoption in various sectors', Proceedings of the International Conference on Industrial Engineering and Operations Management, Pilsen, Czech Republic, July 23-26, 2019
- 63. Narkhede, B.E., **Narwane, V.S.** & Raut, R.D., (2018) "Assessing the Determinants of Cloud Computing Adoption for Education Sector", Proceedings of the International Conference on Industrial Engineering and Operations Management Paris, France, July 26-27, 2018
- 64. Narkhede, B.E., Raut, R.D., **Narwane, V.S.**, Bhandarkar B. M. & Pundir, A.K. (2018) "Adoption of Cloud Computing in Manufacturing: SWOT Analysis", Proceedings of the International Conference on Industrial Engineering and Operations Management Paris, France, July 26-27, 2018
- 65. Narwane V. S., Narkhede, B.E., Raut, R.D. & Bhandarkar B. M. (2017) "Cloud Based Manufacturing Systems- Issues, Challenges and Applications", Proceedings of

the Asia Pacific Industrial Engineering & Management Systems Conference 2017, Yogyakarta, Indonesia, December 3-6, 2017

## **International Conference (India)**

- 66. Ganjare, S. A., Satao, S. M., & Narwane, V. S. (2023) "Role of Machine Learning for Inventory Management: A Proposed Framework" in *1st International Conference on Recent Trends in Multidisciplinary Research and Innovation (ICRMIR-23)* at Lokmanya Tilak College of Engineering, Navi Mumbai on 17 & 18 March 2023. ISBN No: 978-81-951319-8-3 Published By: SYBGEN Learning India Pvt. Ltd.
- 67. Pathak, M. M., & Narwane, V. S. (2022) "Internet of Things for Agriculture and Food Supply Chain" in *International Conference on Embracing Industry 4.0 Technologies for Sustainable Growth (ICEI 4.0 2022)* at RGIT, Mumbai
- 68. Darwajawala, L., & **Narwane, V. S.** (2022) "We-Moove: The world's first open-sourced 3D printed wheelchair-mounted robotic arm" in SRISHTI 2022 (ISBN- 978-93-5680-852-2)
- 69. Thakkar, P., Balaji, A., & Narwane, V. S. (2019) "Intelligent Unmanned Aerial Vehicles", In Proceedings of International Conference on Intelligent Manufacturing and Automation (pp. 485-494). Springer, Singapore.
- 70. Kulkarni, K., Bhattacharjee, R., & **Narwane, V. S.** (2019) "Barriers to Industry 4.0 Adoption: Indian Scenario", In International Conference on Artificial Intelligence in Manufacturing & Renewable Energy (ICAIMRE) February, 2019.
- 71. **Narwane, V. S.**, Narkhede, B.E., & Raut, R.D. (2018) "Cloud Computing Adoption in Multifarious Applications", International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm (ICIEIND- 2018), Bhubaneswar, India, September 27-30,2018.
- 72. Narwane, V. S., Raut, R.D., Kavare, M. S. & Bhosale V.V. (2017) "CloudIoT: Applications, Issues and Challenges", International Conference On Manufacturing And Industrial Engineering (ICMIE-2017), Aurangabad, India, September 14-16,2017
- 73. Kavare, M. S., **Narwane, V. S.** & Raut, R.D. (2017) "Cloud Adoption in Various Domains and Factors Influencing Its Adoption", International Conference On Emanations in Modern Technology and Engineering (ICEMTE- 2017), Thane, India, March 4-5, 2017
- 74. Bhosale V.V., Gilke, N.R. & Narwane, V. S. (2017) "Cloud Computing for Unmanned Aerial Vehicles", International Conference On Manufacturing And Industrial Engineering (ICMIE-2017), Aurangabad, India, September 14-16,2017
- 75. Samant, A.N., **Narwane, V. S.** & Siddavatam, I.A. (2017) "The Critical Assessment of Cloud Manufacturing Technology and Future Trends", International Conference On Emanations in Modern Technology and Engineering (ICEMTE- 2017), Thane, India, March 4-5, 2017
- 76. Shaikh A., **Narwane, V. S.**, Gilke, N.R. & Bhosale V.V. (2017) "Mamdani Verses Sugeno Fuzzy Inference Approach for Adaptive Cruise Control", 4th International Conference of Industrial Engineering (ICIE), Surat, India, September 21-23, 2017
- 77. Mehta D.K., Karadge N. R. & **Narwane**, **V. S.** (2017) "A Mathematical Model to Solve the problem of Dynamic Cell Formation and Plant Layout considering Machine Reliability", 4th International Conference of Industrial Engineering (ICIE), Surat, India, September 21-23, 2017
- 78. Kavre, M. S., **Narwane, V. S.**, & Raut, R. D. (2017) "Cloud Adoption in Various Domains and Factors Influencing Its Adoption", In International Conference On Emanations in Modern Technology and Engineering (ICEMTE-2017) (Vol. 5, No. 3, pp. 335-338).

79. Narwane, V. S., Narkhede, B.E. & Raut, R.D. (2015) "Cloud Computing in Manufacturing", Proceedings of the 4th International Conference on Business Intelligence, Analytics and Knowledge Management (BIAKM-2015), FST & Department of Operations & IT, IBS Hyderabad, IFHE University, India, 17th -18th December, 2015

## **National Conference**

- 80. Narwane, V. S., Raut, R.D., Narkhede, B.E. & Borkar V.(2018) "Critical success factors in implementation of Cloud of Things for manufacturing" in National Conference on Industrial Engineering & Technology Management 'Reimagining Industrial Engineering and Technology Management for Value Creation' 30 Nov 01 December, 2018 at NITIE Mumbai.
- 81. Mehta D.K., Narwane, V. S., Karadge N. R. & Raut, R.D. (2018) "Dynamic Cell Formation and Plant Layout with Machine Reliability: Mathematical Model and Simulation" in National Conference on Industrial Engineering & Technology Management 'Reimagining Industrial Engineering and Technology Management for Value Creation' 30 Nov 01 December, 2018 at NITIE Mumbai.
- 82. **Narwane, V. S.**, Narkhede, B.E. & Raut, R.D. (2016) "Literature Review of Cloud Computing Adoption Theories and Frameworks" in Karuna Jain, L. Ganapathy, Ashok K. Pundir, Padmanav Acharya, Ruchita Gupta, eds., Enhancing National Competitiveness: Role of Industrial Engineering and Technology Management, Mumbai, Excel India Publishers, pp. 625-640

## EDITORIAL BOARD MEMBER

Name of the Journal	Publisher
Digital Manufacturing Technology	Universal Wiser
Journal of Management Science & Engineering Research	Bilingual Publishing Co.

## REVIEWER AND READER OF THE FOLLOWING JOURNALS

Name of the Journal	Publisher
Energy Conversion and Management: X	Elsevier
Heliyon	Elsevier
Journal of Cleaner Production	Elsevier
Materials Today: Proceedings	Elsevier
Renewable and Sustainable Energy Reviews	Elsevier
Sustainable Computing: Informatics and Systems	Elsevier
Sustainable Energy Technologies and Assessments	Elsevier
Technology in Society	Elsevier
Transportation Research Part E	Elsevier
Kybernetes	Emerald Insight
Journal of Modelling in Management	Emerald Insight
Journal of Engineering, Design and Technology	Emerald Insight
RAUSP Management Journal	Emerald Insight
IEEE Transactions on Engineering Management	IEEE
Industrial Engineering Journal	IIIE
Applied Sciences	MDPI
Electronics	MDPI

Journal of Open Innovation: Technology, Market, and	MDPI
Complexity	
Mathematics	MDPI
Sensors	MDPI
SAGE Open	SAGE
Annals of Operations Research	Springer
Information Systems and e-Business Management	Springer
OPSEARCH	Springer
International Journal of Human-Computer Interaction	Taylor & Francis
Production Planning & Control	Taylor & Francis
Business, Strategy and the Environment	Wiley
International Social Science Journal	Wiley
Journal of Multi-criteria Decision Analysis	Wiley
International Journal of Information Technology &	World Scientific
Decision Making	
International Journal of Innovation and Technology	World Scientific
Management	

## **CAREER HIGHLIGHTS**

- ♣ Organizing Committee member for 63<sup>rd</sup> National Convention of Indian Institution of Industrial Engineering (IIIE) at Vadodara
- ♣ Organizing Secretary for 62<sup>nd</sup> National Convention of Indian Institution of Industrial Engineering (IIIE) at Mumbai
- ♣ Session Chair for International Conference on "Industry 4.0 Nascent Technologies and Sustainability for 'Make in India' Initiative (SPICON 2022) at SPCE Mumbai
- ♣ Session Chair for International Conference on "Embracing Industry 4.0 Technologies for Sustainable Growth (ICEI 4.0 2022) at RGIT, Mumbai
- ♣ Coordinator for Minor degree program of Robotics and Artificial Intelligence from 2020- Till date
- ♣ Coordinator for proposed integrated MBA program from 2022- Till date
- ♣ Treasurer of KJSCE Co-operative Society, Mumbai from 2019- Till date
- ♣ Secretary, Indian Institution of Industrial Engineering, Mumbai Chapter from 2016-2022
- ♣ Worked as Examination In-charge at KJSCE (May/June- 2023 Examination)
- ♣ Member at the college Examination Committee from 2018- Till date
- ♣ Member at the college Result Moderation Committee 2018- Till date
- ₩ Worked as Centre Superintendent for KJSCE- NEET (UG)- 2021, 2022, and 2023
- ♣ Member of Woman Development Cell of KJSCE- 2013 to 2020) and Somaiya Vidyavihar University (SVU), Mumbai from 2022- Till date
- ♣ Member at the college Special Cell from 2012 Till date
- Coordinator of Department Examination Committee from 2017-2022
- ♣ Worked as Coordinator for Application Receiving Center (ARC-53 at KJSCE) from 2010 to 2013
- ♣ Worked as Associate HOD of Mechanical Department of the college from 2014 to 2015
- **♣** Coordinator for short term training Program (STTP) on Industry-4.0(Offline Dec.2019-Jan.2020)

- ♣ Conducted ten CNC training programs at KJSCE as Coordinator (Ace CNC Lathe Programming: August 2012, April 2013, August 2014, May 2015, and January 2016) and trainer (CNC Programming: December 2012, January 2014, February 2014, June 2014, and August 2016) Total 38 Days with more than 200 participants and generated revenue of more than 3.00 Lacs
- ♣ Conducted FDP on "Systematic Literature Review and Meta-Analysis" at IIMS, Pune (03 June, 2023)

# **KEY EVENTS PARTICIPATED (Last 03 years)**

- ♣ IDEA MANTHAN- 2022 organized by ACIC RISE Association, Chandigarh Engineering College, Mohali during 23<sup>rd</sup> -24<sup>th</sup> August, 2022
- ♣ "Integrated Approaches on Sustainable Agriculture" organized by Somaiya Institute for Research and Consultancy (SIRAC), Mumbai during 26<sup>th</sup> -28<sup>th</sup> April, 2022
- ♣ "Mitsubishi Training for Robotics" organized by Mitsubishi Electric India, Pune during 14<sup>th</sup> -15<sup>th</sup> March, 2022
- ♣ "Design Thinking for Educators in the New Normal" organized by Sardar Patel College of Engineering, Mumbai on 28<sup>th</sup> -30<sup>th</sup> September, 2020
- ♣ "Smart Manufacturing" organized by IIT, Delhi on 21<sup>st</sup> August, 28<sup>th</sup> August, 16<sup>th</sup> September, 25<sup>th</sup> September, and 14<sup>th</sup> October 2020 (05 Days)
- ♣ Workshop on "Design Thinking for Educators in the New Normal "organized by SPCE, Mumbai, during 28-30 September, 2020
- ♣ Workshop on "Industrial Automation Training In Drive, Motion, Control & Robotics" organized by Delta Electronics India, during 13-17 February, 2020
- → FDP on "Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post Covid-19 Situation" organized by Terna College of Engineering, Navi Mumbai, during 25 to 29<sup>th</sup> May 2020
- FDP on "Research Methodology and Tools" Organized by the Department of Computer Engineering, Sandip Foundation's SITRC, Nashik, during 11-15 May, 2020
- **4** "Examination Reforms" organized by AICTE during 22-25 April, 2020

## **CERTIFICATIONS**

- ♣ Summer School organized by Systems and Control Engineering, IIT Bombay, Mumbai during 05-07 July, 2023
- <sup>♣</sup> "Big Data and Trust: Experiences, Challenges, Techniques and Applications" organized by GIAN, Ministry of Human Resources Development, Government of India at VJTI, Mumbai on 26<sup>th</sup> 31<sup>st</sup> December, 2016 with BB Grade
- ♣ Diploma in Carrier System Design course for Package Air Conditioning Equipment conducted by Carrier Mumbai in 2008. Secured IInd position in the batch with 87 percentile.
- ♣ Practical Air Conditioning comprising of Practical Pumps and Piping, Air Handling Units, Electricals and Controls and Cooling Coils conducted by ISHRAE, Mumbai in 2008.
- ♣ Certificate course in AUTO CAD MEP & REVIT MEP by AUTODESK, Mumbai in 2008
- ♣ Certificate Course in Pro-Engineering from Central Institute of Tool Design (CITD), Hyderabad, in 2002.
- Pro-Engineer Wild Fire Training at Rolta India Limited, Mumbai, in 2003.

## **WORK EXPERIENCE**

- **K.J. Somaiya College of Engineering**, Mumbai (Aug 2009 Till Date): Associate Professor
- **♣ Nikhil Comforts** (August 2008 July 2009): HVAC Design Manager
- **♣ K.J. Somaiya College of Engg**, Mumbai (July 2004 Aug 2008): Lecturer
- **♣ S.S Jondhale College of Engg**, Thane (Feb 2003 June 2004): Lecturer
- **Aditya College of Engineering**, Beed (July 2002 Feb 2003) : Lecturer

#### **REFERENCES**

Angappa Gunasekaran, Ph.D. Director and Professor, School of Business Administration Penn State Harrisburg 777 West Harrisburg Pike, Middletown, PA 17057-4898 aqg6076@psu.edu

Nima Jafari Navimipour, Ph.D. Associate Professor National Yunlin University of Science and Technology, Taiwan. +98 914 402 1694 JNNima@yuntech.edu.tw

Director and Professor Somaiya School of Design, SUV, Mumbai, India. +91 983 348 4317 irfansiddayatam@somaiya.edu

Irfan Siddavatam, Ph.D.