

Name	Madhukar Nagare	
Qualification	B.E. (Production Engineering) M. Tech. (Machine Tools) Ph.D. (Operations Research)	
Designation	Associate Professor Former, Head of Production Engineering Department	
Contact No.	Mo.9594741055, Office:022 -24198238	
E-mail:	mrnagare@pe.vjti.ac.in, enagare@gmail.com	
Date of Birth	15.05.1966	
Academic Experience	33 years	
Principal Fields of Interest	Metal Forming, Press Tools, Inventory control, Operations Research, Supply Chain Management	

Educational Qualification:

Qualification	School /College /University	Month &Year	% Marks or Grade	Passing Class
B.E.(Production Engineering)	VJTI, Mumbai, University of Bombay.	July 1987	64%	First-class with honours
M. Tech. (Machine Tools)	IIT Madras, Chennai.	January 1989	8.00/10	Distinction
Ph.D. (Operations Research)	IIT Bombay, Mumbai.	January 2018	8.23/10	Distinction

Thesis Submitted

M. Tech. Dissertation :	Correlation of forces and temperature with cutting parameters in surface grinding
Ph.D. Thesis :	A study on inventory modeling of short-lifecycle products

Principal Fields of Interest

- Jigs and fixture Tool Design
- Press Tools/ Sheet Metal Working
- Metal Forming Technology and Analysis
- Metal Casting
- Operations Research
- Operations Management
- Supply Chain Management
- Inventory Control and Management
- Digital Manufacturing

Academic Experience: Total 32 Years

	Designation	Institute	Period
1	Lecturer and Assistant Professor	K.J. Somaiya College of Engineering, Vidayavihar (E), Mumbai.	2.5.1992 to 18.6.1998 (6 years)
2	Assistant /Associate Professor	V.J.T.I. Matunga (E), Mumbai.	19.6.1998 to till the date (27 years)

Current Professional Organization Membership

Institution	Membership No.	
Indian Institution of Industrial Engineering (IIIE)	LM 9406	Lifetime Membership, Mumbai Chapter
Indian Society of Technical Education (ISTE)	LM23485	Lifetime Membership

Courses Taught Courses taught to Undergraduate (UG) and Post-Graduate students over 33 years

- Metal Forming Technology and Analysis
- Metal Casting and Welding

- Machining Science and Technology
- Manufacturing Technology – I and II
- Solid Mechanics
- Managerial Economics, Finance, and Accounting
- Production and Operations Management
- Operations Research
- MIS (Management Information System) ERP
- Entrepreneurship Development
- Public Administration
- Material Handling and Storage
- Supply Chain Management
- Project Management

Foreign Universities Visited

1. Singapore and Australia as a delegate and visited prominent universities from February 20 to March 14, 2009.
 - University of New South Wales (UNSW), Sydney
 - Royal Melbourne Institute of Technology (RMIT), Melbourne;
 - Victoria University, Melbourne;
 - Deakin University, Melbourne;
 - University of Adelaide; Adelaide
 - University of Tasmania; Hobart, Tasmania
 - University of West Australia, Perth
2. Atlanta (Georgia State, USA) to present a research paper at the 2014 POMS Annual Conference, May 9 - 12, 2014, and visited Georgia Tech University

Research and Publications:

Papers Published in International Journals	: 28
Papers Published in International Conferences	: 09
Book Chapter	: 03
Sessions Conducted in FDP/STTP	: 03

Publications - International Journals:

1. Palsodkar, M.A., Pansare, R., Nagare, M.R. and Narwane, V. (2024), "Repurposing product development after COVID-19 by integrating Industry 4.0 and agile new product development practices in emerging economies", *Journal of Engineering, Design and Technology*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEDT-12-2023-0559> (Emerald Publishing).
2. Palsodkar, M.A., Nagare, M.R., Pansare, R.B. and Narwane, V.S. (2024), "An adoption framework for agile new product development using hybrid RBWM-ISM-Fuzzy MICMAC approach", *Journal of Modelling in Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JM2-11-2023-0262> (Emerald Publishing).
3. Palsodkar, M.A., Nagare, M.R., Pansare, R.B. et al. (2024) A Framework for Adoption of Circular Economy Practices for Performance Improvement of Agile New Product Development. *Circ.Econ.Sust.* 4, 1315–1338 (2024). <https://doi.org/10.1007/s43615-023-00326-6> (Springer Nature).
4. Rajesh Pansare, Madhukar Nagare, and Vaibhav Narawane (2023): Exploring the significant factors of reconfigurable manufacturing system adoption in manufacturing industries, *Journal of Modelling in Management*, DOI 10.1108/JM2-12-2022-0286 (Emerald Publishing).
5. Manoj Palsodkar, Gunjan Yadav, and Madhukar Nagare (2023): An agile new product development-based sustainable supply chain framework to improve environmental quality performance: emerging economies perspective, *Management of Environmental Quality: An International Journal*, DOI 10.1108/MEQ-04-2022-0119 (Emerald Publishing).
6. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare (2023): Assessment of sustainable development goals through Industry 4.0 and reconfigurable manufacturing system practices, *Journal of Manufacturing Technology Management*, DOI 10.1108/JMTM-05-2022-0206 (Emerald Publishing).
7. Manoj Palsodkar, Gunjan Yadav, and Madhukar Nagare (2023): Integrating Industry 4.0 and agile new product development practices to evaluate the penetration of sustainable

- development goals in manufacturing industries, *Journal of Engineering, Design, and Technology*, DOI [10.1108/JEDT-02-2022-0101](https://doi.org/10.1108/JEDT-02-2022-0101) (Emerald Publishing).
8. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare (2022): A hybrid framework to prioritize the performance metrics of reconfigurable manufacturing system (RMS) using fuzzy AHP–TOPSIS method, *The International Journal of Advanced Manufacturing Technology*, <https://doi.org/10.1007/s00170-022-10440-8> (Springer Publishing).
 9. Manoj Palsodkar, Gunjan Yadav, and Madhukar Nagare (2022): Recent trends in agile new product development: a systematic review and agenda for future research, *Benchmarking: an International Journal*, DOI [10.1108/JEDT-02-2022-0101](https://doi.org/10.1108/JEDT-02-2022-0101) (Emerald Insight Publishing).
 10. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare (2022): Integrating operational excellence strategies with Industry 4.0 technologies through reconfigurable manufacturing system practices, *The TQM Journal*, <https://doi.org/10.1108/TQM-06-2022-0184> (Emerald Insight Publishing).
 11. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare (2021): Development of a structural framework to improve reconfigurable manufacturing system adoption in the manufacturing industry, *International Journal of Computer Integrated Manufacturing*, <https://doi.org/10.1080/0951192X.2022.2090604> (Taylor and Francis Publishing).
 12. Rajesh Pansare, Gunjan Yadav, Madhukar Nagare, and Suketu Jani (2022): Mapping the competencies of a reconfigurable manufacturing system with the requirements of industry 4.0. *Journal of Remanufacturing*, <https://doi.org/10.1007/s13243-022-00116-7> (Springer Publishing).
 13. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare,(2021): Reconfigurable manufacturing system: a systematic bibliometric analysis and future research agenda. *Journal of Manufacturing Technology Management*, <https://doi.org/10.1108/JMTM-04-2021-0137> (Emerald Publishing).
 14. Rajesh Pansare, Gunjan Yadav, and Madhukar Nagare (2021) Reconfigurable manufacturing system: a systematic review, meta-analysis, and future research directions. *Journal of Engineering, Design, and Technology*, <https://doi.org/10.1108/JEDT-05-2021-0231> (Emerald Publishing).

15. Madhukar Nagare, P. Dutta and N. Cheikhrouhou (2021): Extended distribution-free models with demand updates using experts' judgment *International Transactions in Operational Research*, Vol.21, No.6, pp. 3536-3576. **(Wiley Publishing)**
16. Madhukar Nagare and P. Dutta (2018): Single-period ordering and pricing policies with markdown, multivariate demand and customer price sensitivity. *Computers and Industrial Engineering*, Vol.125, pp.451-466. **(Elsevier).**
17. Madhukar Nagare, P. Dutta and P. Suryawanshi (2017): Optimal procurement and discount pricing for single-period non-instantaneous deteriorating products with promotional efforts. *Operational Research*, Vol.20, pp.89 -117. **(Springer).**
18. Madhukar Nagare, P. Dutta and N. Cheikhrouhou (2016): Optimal ordering policy for newsvendor models with bidirectional demand changes using expert judgment. *Opsearch*, Vol. 53, No.3, pp. 620-647. **(Springer).**
19. Madhukar Nagare, P. Dutta and Amey Kambli (2013). Retail inventory management for perishable products with two bins strategy, *International Journal of Industrial and Manufacturing Engineering*, Vol.7, No.4, pp.541-546.
20. Madhukar Nagare and P. Dutta (2012): On solving single-period inventory model under hybrid uncertainty, *International Journal of Mathematical and Computational Sciences*, Vol.6, No.4, pp.447-452.
21. Ganesh Kalkutaki and Madhukar Nagare (2016): Improving process capability through Inline Measurement in the automobile Industry, *International Research Journal of Engineering and Technology*, Vol.3, No.6, pp. 1-5.
22. Sankul Raundal, Rahul Badgujar, Madhukar Nagare (2016): Capacity planning model for manufacturing organization using AHP, *International Journal of Engineering Research and Technology*, Vol.3, No.7, pp.137-140.
23. Surajkumar Gujar, Madhukar Nagare (2016): Problems faced in Automation, *International Journal of Recent Research in Interdisciplinary Sciences*, Vol.3, No.2, pp. 29-33.
24. Ankesh Khona, Ashish Jaysingpure and Madhukar Nagare (2016): Reduction of delays in infrastructure projects, *International Journal of Advanced Research in Management, Architecture, Technology and Engineering*, Vol.2, No.7, pp.10-13.
25. Ameya Deshmukh and Madhukar Nagare (2014): Experimental Study of Pulsed Current Gas Tungsten Arc Welding & Development of Parameters for Fillet Welding of DP28W

Tubes Using Slope Equation Function, *International Journal for Scientific Research and Development*, Vol.2, No.4 pp.548-550.

26. Pratap Shahane and Madhukar Nagare (2014): Implementation of value analysis technique for cost reduction, *International Journal for Scientific Research and Development*, Vol.2, No.4, pp.607-610.
27. Mahendra Joshi and Madhukar Nagare (2014): Implementing Manufacturing Execution Systems through Lean Manufacturing Approach, *International Journal for Scientific Research and Development*, Vol.2, No.4 pp.337-340.
28. Prashant Sagar and Madhukar Nagare (2012): integration of CAD and CAE in SMEs for product development, *International Journal of Instrumentation, Control, and Automation Journal for Scientific Research and Development*, Vol.3 -4, pp.5-8.

International Conferences:

1. Rajesh Pansare, Manoj Palsodkar, and Madhukar Nagare (2021): Analyzing risk factors of Reconfigurable Manufacturing System (RMS) In the context of Industry 4.0 Using ISM-MICMAC Analysis, *Proceedings of 2nd International Conference on Recent Advances in Manufacturing (RAM 2021)*, SVNIT Surat, June 10-12,2021.
2. Manoj Palsodkar, Rajesh Pansare and Madhukar Nagare (2021): An ISM Framework for Agile New Product Development Process Risk Elements: Industry 4.0 Perspective, *Proceedings of 2nd International Conference on Recent Advances in Manufacturing (RAM 2021)*, SVNIT Surat, June 10-12,2021.
3. Manoj Palsodkar and Madhukar Nagare (2021): A bibliometric analysis of the Agile New Product Development keywords using VOS viewer, *Proceedings of National Convention on Role of Industrial Engineering: Tools and Techniques to mitigate Global Effect of Covid 19 Pandemic*, Indian Institution of Industrial Engineering (IIIE), **Mumbai**, January 29-30, 2021
4. Rajesh Pansare and Madhukar Nagare (2021): A bibliometric analysis on Reconfigurable Manufacturing System (RMS): A co-occurrence analysis of keywords using VOS viewer, *Proceedings of National Convention on Role of Industrial Engineering: Tools and Techniques to mitigate Global Effect of Covid 19 Pandemic*, Indian Institution of Industrial Engineering (IIIE), **Mumbai**, January 29-30,2021

5. Madhukar Nagare and Suresh Kant (2019), Structural Hierarchical Model to Improve sustainable lean six sigma adoption, *Proceedings of 5th International Conference on Industrial Engineering (ICIE 2019)* during December 12-14, 2019, SVNIT **Surat**.
6. Madhukar Nagare and P. Dutta (2014). Study of consumer response to stock-out and its implication to inventory management, *Proceedings of POMS Annual Conference, Atlanta, USA*. <https://www.pomsmeetings.org/confpapers/051/051-0513.pdf>
7. Pankaj Dutta and Madhukar Nagare. A fuzzy-stochastic inventory model without backorder under uncertainty in customer demand, *Proceedings of 2nd International Conference on Operations Research and Enterprise Systems (ICORES 2013, pp. 307-312. Barcelona, Spain. February 16-18, 2013.*
8. Madhukar Nagare and Pankaj Dutta. Continuous Review Model for Perishable Products with Inventory Dependent Demand, *Proceedings of International Multi-Conference of Engineers and Computer scientists 2012, Vol.2 IMECS, March 14-16, Hong Kong.*
9. Madhukar Nagare and Pankaj Dutta (2012): Consumer response to stock-out and its impact on product assortment, *International Conference on Operations Research for Sustainable Development in Globalized Environment, Kolkata, January 6-8, 2012.*

Book Chapters:

1. Rajesh Pansare, Manoj Palsodkar, and Madhukar Nagare (2022). Analyzing Risk Factors of Reconfigurable Manufacturing System in Context of Industry 4.0 Using ISM-MICMAC Analysis. In: Kumar, S., Ramkumar, J., Kyratsis, P. (eds) *Recent Advances in Manufacturing Modelling and Optimization. Lecture Notes in Mechanical Engineering*. Springer, Singapore. https://doi.org/10.1007/978-981-16-9952-8_40
2. Manoj Palsodkar, Rajesh Pansare and Madhukar Nagare (2022). An ISM Framework for Agile New Product Development Process Risk Elements: Industry 4.0 Perspective. In: Kumar, S., Ramkumar, J., Kyratsis, P. (eds) *Recent Advances in Manufacturing Modelling and Optimization. Lecture Notes in Mechanical Engineering. Springer, Singapore.* https://doi.org/10.1007/978-981-16-9952-8_63
3. Madhukar Nagare and Pankaj Dutta. Continuous Review Model for Perishable Products with Inventory Dependent Demand, *Lecture Notes in Engineering and Computer Science, Newswood Limited, Hong Kong, 2012, pp 1513-1517.*

FDP/SDP/MDP (1-2 Weeks) Programs Attended:

1. Emerging Trends in Project Management, Production Engineering, VJTI, October 21 -25, 2013.
2. FDP on Advanced Engineering Optimization Through Intelligent Techniques, SVNIT Surat, January 7-11,2013.
3. SDP on “Industrial Engineering Tools and Techniques”, Production Engineering, VJTI Mumbai, March 12 -16, 2012.
4. Advances in Manufacturing and Micromachining, Production Engineering, VJTI Mumbai, November 14 -18, 2011.
5. Symposium on “Value Engineering for Competitive Advantage”, Production Engineering, VJTI Mumbai, December 29-31, 2008.
6. E-Governance in Technical Education, NITTTR Chandigarh, February 25-29, 2008.
7. Two-day workshop under TEQIP Patenting In India and abroad, at DKTE’s Textile and Engineering Institute, Ichalkarnji. August 22 – 23, 2008
8. MDP Programme on Delivering Logistics Solutions, Indian Institute of Management, Ahmedabad (IIMA). September 21-27, 2008.
9. MDP on Leadership skills for excellence, MDI Gurgaon, February 27-March 4, 2006.
10. FDP on World-class manufacturing, BITS Pilani, December 8-28, 2003.

Doctoral Theses Supervised and completed:

Registration Year	Student Name	Title of Thesis
February 2024	Rajesh Pansare	Development of frameworks for adoption and performance of reconfigurable manufacturing system
December 2023	Manoj Palsodkar	Modeling the factors of agile new product development using MCDM.

B. Tech Projects and M. Tech. Dissertations Guided:

Activity	Number of students guided	Project Location
M. Tech Dissertations	90	In-house and reputed industries like TATA, Volkswagen, SIEMENS, L&T, Godrej, HPCL, etc.
B. Tech In-plant training and Project work of 6 months duration	300	Godrej, L&T, Volkswagen, SIEMENS, HPCL, Thermax Industries, etc.

Service - Committee Membership and Other Academic Activities:

- Member, Board of Governance (**BOG**), VJTI from October 2018 onwards
- **Twice Head of Department** from July 1, 2005, to July 8, 2008, and again from August 27, 2018, to August 31, 2020.
- Member and In-charge Chairman, PGAPEC (PG Academic Program Evaluation Committee) 2008-11.
- TEQIP Institute Networking Coordinator 2006 -2008
- In-charge Chairman, University Degree Examination 2006
- Departmental NBA Coordinator for program 2007
- Co-Coordinator, Admission Committee for B. Tech Admissions for the Year 2015
- Coordinator M. Tech. Admissions for the Year 2016
- Team Member for getting Ramkrishna Bajaj National Quality Awards 2009.