

Merwan Mehta, Ph.D., ASQ-CSSBB, CMfgE

Associate Professor, EAST CAROLINA UNIVERSITY, Greenville, NC 27858

Cell Phone: (252) 412-3748
Home Phone: (252) 758-9380

Email: MehtaM@ecu.edu
Work Phone: (252) 328-9721

EDUCATION & CERTIFICATION

Ph.D., Engineering Management, 1994, University of Missouri – Rolla, MO.

Dissertation: *Creation and Exploratory Evaluation of Strategic Assessment for Small Manufacturing Companies.*

M.S. Thesis: *Implementation of a CIM Strategy for Automated Manufacturing and Assembly.*

B. E., Production Engineering, 1981, University of Mumbai, India. Rank: 2nd out of 40.

Certified Manufacturing Engineer, Society of Manufacturing Engineering, 1993

Examiner, Missouri Quality Award (based on Baldrige Quality Award Criteria) for 3 years

ASQ Certified Six Sigma Black Belt, 2004

PROFESSIONAL EXPERIENCE

East Carolina University, Greenville, NC 27858 August 2004 to Present

Associate Professor

- Teach courses in Lean Manufacturing and Six-Sigma, at the Green Belt and Black Belt Level. Teach statistics and design of Experiments (DOE) at the basic, intermediate and graduate level.
- Conduct research in implementation lean and six-sigma in industry and the service sector, with special consideration to product/service offering design.
- Courses taught:** IENG 3300: Plant Layout and Material Handling, ITEC 3800: Cost and Capital Project Analysis, IENG 4020: Manufacturing System Planning, IENG 4023: Advanced Manufacturing Systems, IENG 4200: Work Methods and Ergonomic Analysis, ITEC 6001: Process Analysis and Change Initiatives, ITEC 6002: Lean Manufacturing, ITEC 6003: Advanced Lean Techniques, ITEC 6112: Statistical Analysis for Quality, ITEC 6200: Technology Project Management, ITEC 6406: Capital Project and Cost Analysis for Technology.

Other Professional Involvements:

- Committee member of the Lean Solutions Conference sponsored by the Institute of Industrial Engineers since 2001.
- Member of the Society of Manufacturing Engineers (SME) team to develop the body of knowledge for the SME lean certification.
- Conducted five post-conference sessions in Value Stream Mapping for since 2001 for Lean Solutions Conferences hosted by the Institute of Industrial Engineers (IIE) at various companies all over the US.

Publications & Special Presentations:

- Mehta, Merwan and Richard Monroe, 2007. "Utilization of Virtual Cells in the

Reduction of Lead Time for Non-Manufacturing Based Processes for the Agile Enterprise of Tomorrow.” International Journal of Advanced Manufacturing Systems.” Volume 10, Issue 1, Pages 91-94.

- ❑ Mehta, Merwan and Paul Kauffmann, 2006. “Committing to a Lean Six-Sigma Roadmap.” International Journal of Advanced Manufacturing. Volume 9, Issue 2, December 2006, Pages 91-99.
- ❑ Mehta, Merwan and Paul Kauffmann, 2006. “Improve Gage R&R Results.” ASQ Six Sigma Forum Magazine: From the Basics to the Boardroom. Volume 5, Number 4, August 2006, Pages 35-39.
- ❑ Mehta, Merwan, and Kumar Rampura, December 2006. “Squeezing Out Extra Value: Florida’s Natural Growers Charts a Plan for Improvement Through Process Value Mapping.” Industrial Engineer.
- ❑ Cudney, Elizabeth, Merwan Mehta, and Richard Monroe. 2006. “Combining Lean and Six-sigma for Optimal Results.” Society of Manufacturing Engineers (SME) Technical Paper #TP06PUB123.
- ❑ Monroe, Richard, Merwan Mehta, and Paul Kauffmann. 2005. “Diffusion of Lean Thinking: An Update Ten Years After.” International Journal of Advanced Manufacturing Systems, Special Issue on Lean.” Volume 8, Issue 1, pages 28-35.
- ❑ Mehta, Merwan, and Richard Monroe. 2005. “Enterprise-Wide Implementation of Lean/Six-sigma Through a Prioritized Roadmap.” Selected Conference Papers: National Association of Industrial Technology.
- ❑ Mehta, Merwan, and Robert Sickler. 2005. “Strategic Planning For Small Manufacturing Business Reengineering.” Conference paper, National Association of Industrial Technology (NAIT).
- ❑ Mehta, Merwan, and Richard Monroe. 2005. “Enterprise-Wide Implementation of Lean/Six-sigma Through a Prioritized Roadmap.” Conference paper, National Association of Industrial Technology (NAIT).
- ❑ Mehta, Merwan, and Vern Spaulding. 2005. “Value Stream Mapping for Continuous Batch Stream Processes.” Conference paper, Institute of Industrial Engineers’ (IIE) Lean Solutions Conference.
- ❑ Mehta, Merwan, and Richard Monroe. 2005. “Committing to a Lean/Six-Sigma Roadmap.” Conference paper, Institute of Industrial Engineers’ (IIE) Lean Solutions Conference.
- ❑ Mehta, Merwan. 2004. “Designing Quick-Check Attribute Gages for Six-sigma Process Control.” Conference paper, Institute of Industrial Engineers’ (IIE) Lean Solutions Conference.
- ❑ Mehta, Merwan, and Robert Sickler. 2005. “Process Value Mapping – Wring More Waste Out of Business Processes.” Electronic Magazine, Institute of Industrial Engineers (IIE).
- ❑ Mehta, Merwan, and John Fargher. 2005. “Goodwill Mapping: Benevolence

gets a boost from a lean management mainstay.” Industrial Engineer.

- Mehta, Merwan. 2005. “Design Competitively: Member Forum.” Industrial Engineer.

MISSOURI ENTERPRISE, Rolla, MO 65401 February 2000 to July 2004

Senior Project Director

- Business and manufacturing consultant. Developed and presented courses to industry in: Value Stream Mapping (VSM), Total Productive Maintenance (TPM), Set-up Reduction and Quick Changeover, Lean Supply Chain Management Simulation, Geometric Dimensioning and Tolerancing (GD&T), Design of Experiments, Project Management, and Jig and Fixture design. Delivered courses in Lean Manufacturing and 5-S (Factory Organization) developed by the NIST MEP University. Other functions included evaluation of new products for inventors, development of product prototypes and client account management.

- Completed Industrial Projects:**

- Conducting a feasibility study for Mid-America Soy Producers.
- Waste assessment based on Lean Manufacturing principles for six companies
- Creation of a six-sigma black belt course for Missouri Enterprise.
- Implementation of lean principles for Marine Electric Products, Inc.
- Conducting Lean Manufacturing, Value Stream Mapping, and Supply Chain Workshop for Solutia, Inc. in Saint Louis, MO.
- Ameriwood Industries, Inc. – Lean Manufacturing, VSM, and conducting kaizens for TPM at two facilities in USA and one facility in Canada.
- Metaltech Products Inc. – Lean Manufacturing Simulation & implementation.
- Fasco Industries Inc. – TPM and Setup Reduction training & implementation.
- Detroit Tool & Engineering – Lean Manufacturing Simulation, and VSM training.
- Argosy Consoles Inc. – Lean Manufacturing Simulation, VSM & Plant Layout.
- Emerson Electric, Inc. – VSM and 5S kaizen implementation. Application for the Missouri Quality Award (Based on the Malcolm Baldrige National Quality Criteria)
- International Aquaculture Education and Training Center – Business Feasibility
- Transcon Agricultural Processing Cooperative – Business Feasibility Study.
- Community Hospices of America, Inc. – Business Plan.
- N&S Farmers LLC – Business Feasibility Study.
- Commodity Enhancement Cooperative – Market Feasibility Study.
- Missouri Food and Fiber Cooperative – Business Feasibility and Market Feasibility Study.
- Conducting statewide study on “Consumer Preferences for Beef & Pork” for the State of Missouri.
- Creating the final reports for the Missouri Industries of the Future Program. (Reports are available at: <http://campus.umar.edu/iac/iof/roadmap/index.htm>)
- Ozark Development Corporation – Development of Marketing Strategy.
- Missouri Northern Pecan Growers LLC – Business Plan & USDA Grant Application.
- Central Missouri Poultry Producers Cooperative – Feasibility Study.
- Oregon County Packing Plant Cooperative – Market Feasibility and Business Plan.
- Fibrex, Inc. – Marketing Plan.

UNIVERSITY OF MISSOURI - ROLLA, MO, August 1998 to July 2001

Adjunct Associate Professor

- Taught courses in Engineering Economy and Project Management for the Engineering Management Department for their off-campus satellite program at the Fort Leonard Wood Army base to officers in the US Army for four semesters.
- Taught Project Management at the main university campus for one semester.

FINALE INTERNATIONAL TOOL, INC., Rosebud, MO..... May 1993 to July 1999

Vice President

- Repositioned company from a custom job shop to become a manufacturer of standardized press-tooling products. Created business plan and refinanced the company along with a partner.
- Main functions included manufacturing management, new product design, capital equipment procurement, pricing and quoting, CAD/CAM design and CNC programming, creation of catalogs and sales literature, and coordination with sales representatives.

UNIVERSITY OF MISSOURI - ROLLA, MO, January 1988 to May 1989; August 1992 to May 1993

Technical Specialist - MAMTC / Graduate Research Assistant

- Undertook manufacturing projects at the Center for Technology Transfer. Developed and implemented a "Strategic Assessment Tool" for small manufacturing companies. Tested tool with various companies as part of Ph. D. dissertation before adoption by the Mid-America Manufacturing Technology Center (MAMTC) as one of their offerings.
- Consulted with small businesses as a technical specialist.
- Developed and taught courses in Jig and Fixture Design, and Geometric Dimensioning & Tolerancing (GD&T).
- Conducted a partial-factorial Taguchi design of experiment at Coinco Machines, Inc. in their plastic molding department to identify critical variables for injection molding.

SNOW/TAFT-PEIRCE MANUFACTURING COMPANY, Bellwood, IL, November 1989 to July 1992

Engineer

- Conceptualized and designed drilling & tapping machines, and palletized automated systems for machine loading/unloading. Streamlined machine tool product line through standardization.
- Redesigned and enhanced the drilling and tapping machine-head line incorporating superior features, which was the company's flagship product line.
- Developed machine sequence and logic for PLC programming, designed and trouble-shot pneumatic and hydraulic circuits, compiled instruction manuals, and conducted process capability studies for machine acceptance by customers.

COLLEGE OF ENGINEERING, AHMEDNAGAR, India July 1985 to August 1987

Head of Production Engineering Department

- Taught courses in machine tool design, production processes and engineering drawing.
- Planned and commissioned the Production Engineering Department.

MK ENGINEERS, India..... August 1984 to July 1987

Partner

- Co-founded company; grew into a profitable precision machine shop.

- Managed sales, engineering & operations. Sold interests in 1987 to partner. Executed the entire project from start-up to production, including the preparation of the business plan and raising of finance.

CROMPTON GREAVES, LTD., India August 1981 to June 1984

Tool Room Engineer

- Supervisor for overseeing production of precision tool room jigs, fixtures and tooling for electrical motor manufacturing.
- Set-up an aluminum die-casting cell for motor parts.

MAHINDRA & MAHINDRA, India..... 1980 to 1981 (7 ½ months)

Apprentice

- Designed jigs and fixtures for tractor manufacturing.
- Conducted dimensional checks in the metrology laboratory on gages, fixtures, tooling components, and jigs.
- Designed and implemented a system to predict retirement point of gages.

ASSOCIATIONS & AWARDS

- Member of National Association for Industrial Technology (NAIT)
- Member of the American Society for Quality (ASQ)
- Senior Member of the Society of Manufacturing Engineering (SME)
- Senior Member of the Institute of Industrial Engineers (IIE)
- Member of the Mid-America Manufacturing Technical Center (MAMTC) Advisory Board until February 2000.
- Nominated for the Innovator Award at the National Manufacturing Extension Partnership Conference held in Cincinnati in 2001 by Missouri Enterprise.