MAHESH CHANDER GUPTA

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EDUCATION

1990 **Ph.D.**
Major: Industrial Engineering, University of Louisville, Louisville, KY, US
Dissertation Title: An Evaluation of Operations Planning and Control Problems in Advanced Manufacturing Systems

1986 **Master of Science**
Major: Operations Management, School of Business, University of Manitoba, Canada
Thesis Title: Determination of Optimal Sequence and Schedule for a Single Machine Job Shop: A Goal Programming Approach

1982 **Master of Commerce**, University of Jammu, Jammu & Kashmir State, India

1980 **Bachelor of Commerce**, University of Jammu, Jammu & Kashmir State, India

EXPERIENCE

Visiting Professor (sabbatical year), Commerce Department, University of Jammu, India (6/03 to 9/03)

Professor of Operations Management, School of Business, University of Louisville, (8/02 to present)

Visiting Professor (sabbatical year), Systems Engineering and Engineering Management Department, Chinese University of Hong Kong, Hong Kong, (8/97 to 6/98)

Associate Professor of Operations Management, School of Business, University of Louisville (8/96 to present)

Assistant Professor of Operations Management, School of Business, University of Louisville (8/90 to 7/96)

Deputy Director of the Center for Environmental Management in the Institute for Environment and Sustainable Development, University of Louisville (8/94 to 8/95).

Graduate Research Assistant in the Department of Industrial Engineering at the University of Louisville while in the Doctoral Program (8/88 to 6/90)

Instructor of Management Science, Department of Management Science, University of Manitoba, Manitoba, Canada while in the Doctoral Program (8/87 to 6/88)

Graduate Teaching Assistant in the Department of Management Science, University of Manitoba, Canada while in Graduate Program (8/83 to 7/87)

ACHIEVEMENTS

- "**Guest edited a Special Issue of *International Journal of Production Research* on "**Constraints Management: Recent Advances and Applications", 2001-2002 (to appear in 2003)
- "**Certificate of Merit"** Management Accounting Association **,** 1997.
  Paper title: Application of Theory of constraints and Activity-Based Management in a small printing company
- "**School of Business Outstanding Scholarship Award",** 1995-96
- "**Department of Management Overall Excellence Award**", 1994

- "**College of Business and Public Administration Graduate Teaching Award** ", 1994-95
- "**President's Young Researcher Award** ", U of L, 1993
- "**Corporate Faculty Award**", College of Business & Public Administration, 1992
- "**Outstanding Research Award**", Department of Management, 1991
- "**Honorable Mention for President's Young Researcher Award** ", U of L, 1991
- "**John Richard Binform Memorial Award"**, Excellence in doctoral Program, 1991
- "**First Prize for Best Exhibit**", Engineers Day, Department of Industrial Engineering, University of Louisville, February, 1989; Exhibit Title: Development of a Software to Assign the Optimal Number of Machines to a Worker in a Production System
- "**Honorable Mention for paper**", Administrative Sciences Association of Canada, May 1987
  Paper Title: Optimal Sequence of Jobs about a Common Due Date on a Single Machine

RESEARCH

Publications (*samples of work-in-progress*)

1. **Gupta and Andersen**, Local theory of constraints-based measures for effective supply chain collaboration, being prepared for *Supply Chain Management Journal or International Journal of Production Research.*
2. **Gupta and Madhira**, Improving multi-project environment: A TOC-based framework and an application

Publications (revised for resubmission and *under review*)

1. **Groop, Ketokivi and Holmstrom,** Theory of Constraints as Design Science: The Case of Improving Home Care, (2nd revision, *Journal of Operations Management)*
2. **Kaur and Lonial,** Intelligence Management Process: Its Interface and Effects on Entrepreneurial Orientation-Performance (*Journal of Business Research)* (COB SRIG 2015 funded and be presented in Indian Subcontinent Decision Science Institute Annual Meeting)

Publications (*Accepted for publications and Published*)

1. **Kaur, Gupta and Patel,** A Measure of Throughput Orientation: Scale Development and Nomological Validation, *Decision Sciences Journal)*
2. **Kaur, Gupta and Lonial,** Impact of Market Orientation on Business Performance through value creation, (2nd revision) *Journal of Strategic Marketing*
3. **Fernando, Almeida, Baptista, Gupta** The Toyota Way and the Theory of Constraints: Two sides of the same coin?, *International Journal of Services and Operations Management*
4. **Hilmola and Gupta,** EVA-based performance evaluation of Initial Public Offerings: Analysis and some TOC-based insights, *Journal of Cost Management*
5. **Gupta,** Towards a Balanced Scorecard: Development and Application of a TOC/ABC-Based Synergistic Framework (Part II), (2nd revision) *Journal of Cost Management*
6. **Gupta**, Towards a Balanced Scorecard: A TOC/ABC-Based Synergistic Framework (Part I), *Journal of Cost Management, (to appear* and also presented in Indian Subcontinent Decision Science Institute Annual Meeting).
7. **Hilmola and Gupta** Throughput Accounting and Performance of a Manufacturing Company under Stochastic Demand and Scrap Rates, *Expert Systems with Applications*, 42(22), 8423-8431, 2015.
8. **Gupta, Bridgman and Kaur**, Application of TOC-based framework to improve market orientation in a non-profit organization, *Journal of Strategic Marketing*, 23 (7), 2015.
9. **Manikas, Gupta and Boyd,** Experiential exercises with four production planning and control systems, *International Journal of Production Research*, 53(14), 4206-4217, 2015.
10. **Gupta and Kerric,** Evaporating Cloud: A systematic conflict resolution tool for project managers, *Journal of International Technology and Information Management*, 23(3-4), 61-75, 2014
11. **Vijaykar, Gupta and Metri**, Information Technology Enabled Services: Pricing Models and Strategic Implications, *Journal of Cost Management*, Vol. 28, (6), 29-39. (also presented in Indian Subcontinent Decision Science Institute Annual Meeting)
12. **Gupta, Kaur, and Chahal,** Improving Market Orientation: A TOC-Based framework, *Journal of Strategic Marketing*, 21 (4), 2013, 305-322.

13. **Anderson, Gupta and Gupta**, A Managerial Decision-Making Webapp: Goldratt's Evaporating Cloud, *International Journal of Production Research*, 51 (8), 2013, 2505-2517.
14. **Gupta, Kaur, Sharma, Lonial,** Revisiting Internal Market Orientation: A Note, *Journal of Services* Marketing, 2013, 27 (5), 385-403.
15. **Gupta, M. and Cox, J.**, TOC Distribution/replenishment system: Building a decisive competitive edge at Libert Shoes, India, American Production and Inventory Control Society's Performance Advantage, 22 (4), 2012, 28-31.
16. **Gupta,** Improving Organizational Performance: A TOC/BSC-based Synergistic Decision-Making Framework, Journal of Cost Management, 26 (4), 2012, 32-47.
17. **Gupta. M. and Anderson, S.** Revisiting local TOC measures in an internal supply chain, International Journal of Production Research, 50 (19), 2012, 5363-5371.
18. **Gupta, M. and Boyd, L.** An Excel-Based Goldratt's Dice Game: An Integrative Learning Activity in Operations Management, International Journal of Operations and Production Management, Vol. 31 (6), 2011, 608-630.
19. **Gupta, M., Boyd, L., and Kuzmits, F.,** Evaporating a Cloud: A Managerial Tool for Resolving Workplace Conflicts, International Journal of Conflict Management, Vol. 22(4), 2011, 394-412.
20. **Gupta, M.** The Enabling role of E-Business Technologies in Strategic Operations Management, *Journal of* International Technology and Information Management, Vol. 19, April 2010.
21. **Kohli, A. and Gupta, M**., Improving Operations Strategy: Application of TOC Principles in a Small Business, Journal of Business and Economics Research, Vol. 8(4), 2010.
22. **Kaur, G. and Gupta**, M. A perusal of extant literature on market orientation-concern for its implementation, The Marketing Review, Vol. 10 (1), 2010.
23. **Gupta, M., Chahal, H., Kaur, G., and Sharma, R**. Improving the Weakest Link: A Theory of Constraint Based Framework**,** Total Quality Management and Business Excellence, Vol. 21(7/8), 2010.
24. **Kohli, Gupta and Alexander,** Experimental Assessment of Collaboration in Automotive Supply Chain, International Journal of Decision Science & Information Technology, Vol.1(1) Pages 40-53, 2009.
25. **Mahesh Gupta and Doug Snyder**, Comparing TOC with JIT and MRP: A Literature Review, International Journal of Production Research, Vol. 47 (13), 3705-3730, 2009.
26. **Mahesh Gupta and Lynn Boyd,** Constraints Management: A Theory in Operations Management, International Journal of Operations and Production Management, Vol 28(10), 2008, 991-1012.
27. **Mahesh Gupta and Sid Baxendale,** "Enabling Role of ABCM Systems in Operations Management, Journal of Cost Management, Vol. 22 (5), 2008, 5-17.
28. **Amarpreet S. Kohli, Suraj Alexander and Mahesh Gupta**, A dynamic simulation study to assess the impact of collaboration on the performance of a supply chain subject to a variety of demand environments, Journal of Management and Engineering Integration, Vol. 1(10), 2008, 73-87.
29. **Mahesh Gupta and Jospeh Kline**, Application of the Theory of Constraints to A Community Mental Health Agency, Total Quality Management and Business Excellence, Vol. 19 (4), March-April 2008, pp. 281-294.
30. **Art Adam, Mahesh Gupta and Lou Raho**, Perceptions of Management Philosophies. Journal of Quality & Participation, *30*(2): 34-40. (2007).
31. **Jim Fiet, Robert Nixon and Mahesh Gupta**, Entrepreneurial Discovery by the Working Poor, Journal of Developmental Entrepreneurship Vol. 11, No. 3, 2006, 255-273.
32. **Sid Baxendale, P.S. Raju and Mahesh Gupta,** The Selection of Actionable Cost Objects for an Activity-Based Costing System, Management Accounting Quarterly. Spring 2006. Vol. 7, Iss. 3; p. 9
33. **Sid Baxendale, Lynn Boyd and Mahesh Gupta**, The Absorption Costing - Inventory Conundrum: A Theory of constraints approach, Journal of Cost Management, 2006, .
34. **Mahesh Gupta and Amarpreet Kohli**, Enterprise Resource Planning Systems and Its Implications for Operations Function, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship May/Jun 2006. Vol. 26, Iss. 5, 6; p. 687.
35. **Bih-Ru Lea, Mahesh Gupta and Wen-Bin Yu**, A multi-agent ERP system: An integrated architecture and application, TECHNOVATION: The International Journal of Technological Innovation & Entrepreneurship, Vol. 25 (4), April 2005, Pages 433-441
36. **Sid Baxendale, Mahesh Gupta and P.S. Raju**, Profit enhancement of a retirement and assisted living community using an activity-based costing model, Management Accounting Quarterly. Winter 2005. Vol. 6, Iss. 2; p. 11.
37. **Mahesh Gupta, Lynn Boyd and Lyle Sussman**, Improving Imperfect Maps: A TOC Primer for Strategic Planning Business Horizon (A shorter version was accepted for publication and presentation in Decision Sciences Institute Meeting

in November, 2001) Vol. 47 (2), 15-26, 2004.

38. **Lynn Boyd and Mahesh Gupta**, Constraints Management: Is it a Theory?, International Journal of Operations and Production Management (A shorter version was accepted for publication and presentation in Decision Sciences Institute Meeting in November, 2000), Vol. (24(4), 350-371, 2004.
39. **Hardeep Chahal, Ramji Sharma and Mahesh Gupta**, Patient Satisfaction in Government Outpatient Services in India, The Journal of Health Management, Vol. 6 (1), 23-44, 2004.
40. **Mahesh Gupta and Tim Piero**, Environmental Management is good Business, Industrial Management, Vol. 45 (5), Sept./Oct., 2003, pp. 14-19.
41. **Mahesh Gupta**, Constraints Management: Recent Advances and Practices, International Journal of Production Research, Vol. 41 (4), 647-659, 2003.
42. **Mahesh Gupta, Art Adam and Lou Raho**, Perceptions of Management Philosophies as a Function of Professional Status - An Empirical Study, Quality Management Journal, Volume 10 (2), 2003, 25-37. (A shorter version was accepted for publication and presentation in Decision Sciences Institute Meeting in November, 2002)
43. **Mahesh Gupta and Karen Galloway**, Activity-Based Costing/Management and Its Implications for Operations Management, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship 2003 Vol. 23, No.2, 131-138.
44. **Mahesh Gupta**, Necessary But Not Sufficient: A Theory of Constraints Business Novel (by E. M. Goldratt, E. Schragenheim, and C. A. Ptak (A Book Review), International Journal of Production Research, Vol. 40 (13), 3219-3222, 2002.
45. **Mahesh Gupta, Sid Baxendale and PS Raju**, Integrating ABM/TOC Approaches for Performance Improvement: A Framework and Application, International Journal of Production Research Vol. 40 (14), 3225-3251, 2002
46. **Mahesh Gupta, Hyun-Jeung Ko and Hokey Min**, TOC-Based Operational Measures and Decision-making in Job-Shop Manufacturing Environment, International Journal of Production Research, Vol. 40 (4), 907-930, 2002 (A shorter version was accepted for publication and presentation in Decision Sciences Institute Meeting in November, 2000)
47. **Mahesh Gupta, R. D. Sharma, and Gurjeet Kour**, New Technology in American Banking Industry, Amity Business Review, Vol. 2, No. 1&2, 2001, 18-31. (Joint Research Initiative, University of Jammu, J and K State, India)
48. **Ramji D. Sharma and Mahesh Gupta**, Consumerism and Consumer Protection in India, Journal of Environment and Management, Vol. 10 (6), 2001, 1-11. (Joint Research Initiative, University of Jammu, J and K State, India)
49. **Sid Baxendale, P.S. Raju and Mahesh Gupta**, Overcoming Functional Silos: Using Activity-Based Costing and The Theory of Constraints/Thinking Processes to Integrate Operations, Management Accounting, and Marketing in an MBA Module, accepted in Academy of Educational Leadership Journal, Vol. 5(1), 33-52, 2001
50. **Sharma, Ramji, Gupta, Mahesh and Kaur, Gurjeet**, Measurement of Marketing Orientation in Rural Banks Through A Customer Judgement Multi-Item Scale: A Case Study of Jammu Rural Bank, PRAJNAN: Journal of Social and Management Sciences Vol. 30 (1), 18-31, April-June 2001 (Joint Research Initiative, University of Jammu, J and K State, India)
51. **Lynn Boyd, Mahesh Gupta and Lyle Sussman**, Theory of Constraints: A New Approach to Strategy Formulation: Opening the Black Box, Journal of Management Education, Vol. 76 (6), 338-344, July/August 2001
52. **Mahesh Gupta, Michael Czernik and Ramji Sharma**, Operations Strategies of Banks - Using New Technologies for Competitive Advantage, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship, Vol. 21, 775-782, 2001 (Joint Research Initiative, University of Jammu, J and K State, India)
53. **Mahesh Gupta**, Activity-Based Throughput Management in a Manufacturing Company, International Journal of Production Research, Vol. 39 (6), 1163-1182, 2001
54. **Mahesh Gupta, Heather Holladay, and Mark Mahoney,** The Human Factor in JIT Implementation: A Case Study of Ambrake Corporation, submitted to Production and Inventory Management Journal Vol. 41 (4), 29-33, 2000
55. **Sharma, R.D., Bandhu, Desh, Gupta, Mahesh C.,** Promotion Mix Optimality in Distance Education-A Case Study, Journal of Social Sciences, Vol. 16 (5), 2000, 1-16 (Joint Research Initiative, University of Jammu, J and K State, India)
56. **Mahesh Gupta,** Implications of Expert Systems for the Operations of Financial Institutions, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship, Vol. 20, 2000, 509-516.
57. **Roybal, H., Baxendale, S. J., and Gupta, M.C.,** Using Activity-Based Costing and Theory of Constraints to guide Continuous Improvement in Managed Care, Managed Care Quarterly, Vol. 7 (1), Winter 1999, 1-10.

58. **Gupta, M.C.**, Strategic Implications of Technology on Operations of Banking Industry, Production and Inventory Management Journal, 39(2), Second Quarter 1998, pp.1-5
59. **Baxendale, S. J., and Gupta, M.C.,** Aligning TOC and ABC in a small printing company, Management Accounting, April 1998, Vol. LXXIX (10), 39-44 (awarded the Certificate of Merit)
60. **Gupta, M.C., Baxendale, S. J., and McNamara, K**., Integrating TOC and ABCM in a Health Care Company, Journal of Cost Management, July/August 1997, Vol. 11(4), 23-33
61. **Mahesh Gupta,** Operations Effectiveness for a successful Implementation of CIM, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship, 16(10), 1996, 589-594
62. **Gupta, M.C. and Sharma, K.,** Environmental Operations Management: A Strategic Opportunity, Production and Inventory Management Journal, Third Quater, 1996, 40-46 (Joint Research Initiative, University of Jammu, J and K State, India)
63. **Levitan, A. and Gupta, M.C.**, Using Genetic Algorithms to Optimize the Selection of Cost-drivers in Activity-Based Costing, International Journal of Intelligent Systems in Accounting, Finance and Management, Vol.5, 129-145, 1996
64. **Gupta, M.C. and Cawthon, G.**, Managerial Implications of Flexible Manufacturing for Small/Medium Sized Enterprises, TECHNOVATION: The International Journal of Technological Innovation and Entrepreneurship, Vol.16, No.2, 1996, pp. 77- 83
65. **Gupta, Y. P., Gupta, M.C., Sundaram, C. and Kumar, A.,** Genetic Algorithm-Based Approach to Cell Composition and Layout Design Problems, International Journal Production Research, Vol. 34(2), pp. 447-482, 1996.
66. **Miller, L., Gupta, M.C., Fielding, L. and Pitts, B.,** Maintaining A Competitive Advantage in the 1990s: A Case Study of Hillerich and Bradsby Company, Inc., International Journal of Sports Management, Vol. 9, No. 3, Sept. 1995, 249-262
67. **Gupta, M.C. and Campbell, V.**, The Cost of Quality, Production and Inventory Management Journal, Third Quarter, 1995, 43-50
68. **Gupta, M.C.,** Environmental Management and Its Implications for Operations Function, International Journal of Operations and Production Management, Vol.15, No.8, 1995, 34-51
69. **Gupta, Y. P., Gupta, M.C., Sundaram, C. and Kumar, A.,** Minimizing Total Inter-cell and Intra-cell Moves in Cellular Manufacturing: A Genetic Algorithm Approach, International Journal of Computer-integrated Manufacturing, Vol.8, No.2, 92-101, 1995
70. **Gupta, M.C. and Zender, D.,** Outsourcing and Its Impact on Operations Strategy, Production and Inventory Management Journal, Third Quarter, 1994, 70-76
71. **Gupta, M. C., Gupta, Y.P., and Kumar, A.,** Minimizing Flow Time Variance in a Single Machine System Using Genetic Algorithms, European Journal of Operational Research, Vol. 70, 289-303, 1993
72. **Gupta, M.C., Gupta, Y. P. and Evans, G. W.**, Operations Planning and Scheduling Problems in Advanced Manufacturing Systems, International Journal of Production Research, vol. 31, No. 4, 869-900, 1993
73. **Gupta, Y.P., Gupta, M.C., and Keung, Y.,** Comparative Analysis of Lot-Sizing Methods for Multistage Systems: A Simulation Study, International Journal of Production Research, Vol.30 (4), 1992, 695-716
74. **Gupta, M.C., Gupta, Y.P. and Evans, G. W.**, A Review of Multi-criterion Approaches to FMS Scheduling Problems, Engineering Costs and Production Economics, 1991, Vol. 22, 1991, 157-167
75. **Gupta, Y. P. and Gupta, M.C.,** Flexible Manufacturing Systems Flexibility and Availability: An Information Theory approach, Computers In Industry, Vol. 17, 1991, 391-406
76. **Bector, C.R., Gupta, Y. P., and Gupta, M.C**., Optimal Scheduling of Jobs about a Common Due Date on a Single Machine" International Journal of Systems Science, Vol. 22(12), 1991, 2541-2552
77. **Bector, C.R., Gupta, Y. P., and Gupta, M.C.**, Optimal schedule on a Single Machine Using Various Due Date Determination Methods, Computers In Industry , Vol. 15, 1990, 240-249
78. **Gupta, Y. P. and Gupta, M.C.**, A Process Model to Study the Impact of Role Variables on Turnover Intentions of Information Systems Personnel, Computers In Industry, Vol.15, 1990, 211-238
79. **Gupta, M.C. and Gupta, Y.P.**, Minimizing The Completion Time Variance in Single Machine Scheduling Problem, Journal of Operational Research Society, Vol. 41 (8), 1990, 767-779
80. **Cheng, T.C.E. and Gupta, M.C.**, Survey of Scheduling Research Involving Due Date Determination Decisions, European Journal of Operational Research, Vol.38, January 1989, 156-166
81. **Gupta, Y. P. and Gupta, M.C.,** A System Dynamics Model for a Multistage Multi-Line Dual Card JIT-KANBAN System, International Journal of Production Research, Vol. 27, No. 2, 1989, 309-352
82. **Gupta, M.C., Judt, C. Gupta, Y.P. and Balakrishnan, S.**, Expert Scheduling System for a Prototype Flexible Manufacturing Cell: A Framework, Computers and Operations Research, Vol.16, No. 4,1989, 363-378

83. **Gupta, Y. P. and Gupta, M.C**., A Computer Simulation Model of a JIT-KANBAN System, Engineering Costs and Production Economics, (with Y. P. Gupta) Vol.18
84. **Bector, C.R., Gupta, Y.P. and Gupta, M.C.,** V-Shape Property of Optimal Sequence of Jobs About a Common Due Date on a Single Machine, Computers and Operations Research, Vol. 16, No. 6, 1989, 583-588
85. **Gupta, M.C., Gupta, Y. P. and Bector, C.R.**, A Review of Scheduling Rules in Flexible Manufacturing Systems, International Journal of Computer Integrated Manufacturing, Vol. 2, No. 6, 1989, 356-377
86. **Bector, C.R., Gupta, Y.P. and Gupta, M.C.,** Determination of an Optimal Common Due Date and Optimal Sequence in a Single Machine Job Shop, International Journal of Production Research, Vol. 26, No. 4, March 1988, 613-628

Book Chapters

1. **Mahesh Gupta and Lou Raho**, Theory of Constraints: An Application to a Family Internal Medicine Practice, MBA Handbook for Healthcare Professionals (Joseph Sanfilippo, Thomas Nolan, Bates Whiteside. Eds.) The Parthenon Publishing Group (International Publishers in Medicine, Science and Technology, A CRC Press Company, New York, NY, 2002, 75-91
2. **Sharma, Ramji D., Kour, Gurjeet, Gupta, Mahesh C.,** Rural Development Oriented Bank Marketing Strategy, in Emerging Issues in Financial Sector (Editor, Subash Garg), Arihant Publishing House, Jaipur, India, 2001, 287-308 (Joint Research Initiative, University of Jammu, J and K State, India)
3. **Sharma, Keshav and Mahesh Gupta**, Corporate Environmentalism and Organizational Dynamics, in Higher Education in India: Problems and Prospects, Academic Staff College, University of Kashmir, Srinagar, Crown Printing Press, Batmaloo, Srinagar, 1998, 199-212 (Joint Research Initiative, University of Jammu, J and K State, India)
4. **Jerry Evans and Mahesh Gupta**, Decision Support Systems for Computer-Integrated Manufacturing: An Overview, in Design of Work and Development of Personnel in Advanced Manufacturing, (G. Salvendy and W. Karwowski, eds.), 1992, John Wiley & Sons, Inc., New York, NY

Publications (Refereed Proceedings)

1. **Mahesh Gupta, Art Adams, and Lou Raho**, ASQ members' perceptions of management philosophies, Proceedings of Decision Sciences Institute 2002 Annual Conference, San Diego, LA (2002) (A comprehensive version was accepted for publication in Quality Magazine)
2. **Mahesh Gupta**, TOC-Based Supply Chain Management: Simulation Game and a Few Scenarios, Decision Sciences Institute 2001 Annual Conference, November 18-21, San Fransisco, LA.
3. **Mahesh Gupta, Lynn Boyd and Lyle Sussman**, Improving Imperfect Maps: A TOC Primer for Strategic Planning, Decision Sciences Institute 2001 Annual Conference, November 18-21, San Fransisco, LA.
4. **Mahesh Gupta, Hyun-Jeung Ko and Hokey Min**, An integrated Framework to Implement TOC based Manufacturing System, Decision Sciences Institute 2000 Annual Conference, November 18-21, Orlando, FL. (A comprehensive version was accepted for publication in International Journal of Production Research)
5. **Mahesh Gupta and Lynn Boyd**, Constraints Theory: A Theory in Operations Management, Decision Sciences Institute 2000 Annual Conference, November 18-21, Orlando, FL. (A comprehensive version was accepted for publication in International Journal of Operations and Production Management)
6. **Anup Kumar, Mahesh Gupta and Yash Gupta**, Genetic Algorithm Application in a Machine Scheduling Problem, Proc. of ACM Computer Science Conference, Feb 16-18, 1993
7. **Anup Kumar, Mahesh Gupta and Yash Gupta** Genetic Algorithm Based Approach for Designing Computer Network Topology, Proc. of ACM Computer Science Conference, Feb 16-18, 1993
8. **Mahesh Gupta**, Quality Costs: What and How, Kentuckiana Quality Conference, Oct. 21-22, 1992
9. **C.R. Bector, Yash Gupta, Mahesh Gupta**, Optimal Sequence of Jobs About A Common Due Date on a Single Machine, Proc. Of Administrative Sciences Association of Canada, 1987

Presentations (Selected Conferences)

1. **Mahesh Gupta and Lynn Boyd**, Theory of Constraint: An Integrating Theory in Operations Management, Decision Sciences Institute, Annual Meeting, San Antonio, TX, Nov. 2006.
2. **James O. Fiet, Mahesh Gupta, and Jozef Zurada**, Evaluating The Wealth Creating Potential Of Venture Ideas, Frontiers of Entrepreneurship Research (abstract) 2003
3. **Jim Fiet, Robert Nixon and Mahesh Gupta**, Entrepreneurial Discovery by the Working Poor, Frontiers of Entrepreneurship Research (abstract) 2002.

4. **Mahesh Gupta**, Minimizing Mean Absolute and Squared Deviations of Completion Times in Sequence Dependent Setup Environment: A Genetic Algorithms Based Approach", presented at the International Conference on Operations and Quantitative Management, Jaipur, India, January 5-7, 1997.
5. **Mahesh Gupta**, Variance Minimization Problem using Random Processing times" presented at Operational Research Society of India, Delhi, December 27-29, 1995.
6. **Keshav Sharma and Mahesh Gupta**, Corporate Environmentalism and Organizational Dynamics" presented at XLIX All India Commerce Conference, University of Rajasthan, India, Oct. 14-16, 1995 (This paper was also accepted as a book chapter)
7. **Mahesh Gupta, Yash Gupta, Anup Kumar, and Chitra Sundram**, Machine Cell-Part Grouping to Minimizing Total Intercell and Intracell Moves in Cellular Manufacturing: A Genetic Algorithm Approach, Nov. 1992, Decision Sciences Institute Conference. (A comprehensive version was accepted for publication in International Journal of Production Research)
8. **Mahesh Gupta, Yash Gupta, and Jerry Evans**, Operations Planning and Scheduling Problems in Advanced Manufacturing Systems, POMS Meeting, New York, November 1991(A comprehensive version was accepted for publication in International Journal of Production Research in 1993)
9. **Mahesh Gupta and Yash Gupta**, Minimizing The Completion Time Variance in Single Machine Scheduling Problem, TIMS/ORSA Meeting, Las Vegas, May 1990 (A comprehensive version was accepted for publication in Journal of Operational Research Society in 1990)
10. **Mahesh Gupta, Yash Gupta, and Jerry Evans**, A Review of Multi-Criterion Approaches to FMS Scheduling Problems, TIMS/ORSA Meeting, Las Vegas, May 1990 (A comprehensive version was accepted for publication in International Journal of Production Economics in 1991)
11. **Yash Gupta and Mahesh Gupta**, Applications of Cognitive Mapping for the Analysis of IS Personnel Work Attitudes, ORSA/TIMS Meeting, New Orleans, May 1987 (A comprehensive version was published in Computers In Industry in 1990)

Research Grant Proposals

"Environmental Orientation and Environmental Performance: A Supply Chain Perspective" $4,144.90 requested from Logistics and Distribution Institute (LoDI) (University of Louisville) under Multidisciplinary Research Grant (MRG) for 2003, coinvestigators: Gerald W. Evans, **funded**

"A Study of the impact of CPFR on Supply Chain performance" $10,000 requested from Logistics and Distribution Institute (LoDI) (University of Louisville) under Multidisciplinary Research Grant (MRG) for 2003, co-investigators: Suraj Alexander and Amarpreet Singh Kohli, **funded**

"Perceptions of Management Philosophies as a Function of Professional Status", $3980.30 requested from Intramural Research Incentive Grants (University of Louisville) under *Research Initiation Grant* for 2000, co-Investigators Art Adams and Lou Raho, **funded**.

"Perceptions of Management Philosophies as a Function of Professional Status", $2,400 requested from Intramural Research Incentive Grants (University of Louisville) under *Undergraduate Research Grant* for 2000, co-Investigators Art Adams and Lou Raho, **funded**.

"Introducing Environmental Consciousness into the Management of Technological Innovation" $298,088 requested from *National Science Foundation* for 1996, co-principal investigators M.R. Wilhelm, M. Fleischman, S.J. Baxendale, and H.R. Parsaei, not funded

"Business Responses to the Threats and Opportunities Resulting from Growing Concerns for the Environment", $7559.15 requested from the *Center for Environmental Management* of the Institute for the Environment and Sustainable Development (IESD) for 1995,co-principal investigator Peter Meyer, **funded.**

"Quick Response and Service Call Rate Reduction in the GEA Manufacturing Facility", $35,895 requested from *General Electrics* for 1994, co-principal investigator S. M. Alexander, **funded.**

"Design and Analysis of Telecommunication Networks for Computer-Integrated-Manufacturing Systems", $11,600 requested from *Telecommunication Research Center* for 1992, **funded.**

"The development of Analytical, Simulation and Artificial Intelligence Approaches in the Study of Manufacturing Flexibility: A Decision Support System Perspective", $312,438 requested from *NSF/EPSCoR* for 1992-1994, co-principal investigator with Y. Gupta, A. Elmaghraby, G. Evans, J. Bernardo, C. Chung, **not funded**.

"Experimental Design and Optimization Methodologies for Multiple-Response Computer Simulation", $256,017 requested from *National Science Foundation* for 1992-1994, co-principal investigator with W. E. Biles and G. W. Evans, not funded

"Design and Analysis of Communication-Integrated Manufacturing Systems", $53,288 requested from *National Science Foundation* for 1992-1993, not funded

"Minimization of Flow Time Variance in a Single Machine System Using Neural Networks" $2,936 requested from the *Graduate Research Council* for 1992, co-principal investigator with S. Srinivasan, not funded

"Production Planning and Scheduling Problems in Advanced Manufacturing Systems", $2,050 requested from the *Graduate Research Council* for 1991, **funded**

TEACHING: Courses Developed and Taught

Integrative Operations Strategy (IMBA (680)
The objective of this 9 hrs. module is to present a comprehensive, integrative treatment of the fields of operations management, cost management and marketing management. The primary focus of this module is to use a systems perspective to accomplish organizational goals and objectives. Specifically, the students will learn how to develop activity based throughput management systems to optimally allocate scarce resources, identify process improvement opportunities, and develop effective marketing strategies. A highlight of this module is a team project which provides an entrepreneurial challenge where students are encouraged to focus on small real world companies and address their operational, accounting, and marketing problems using the tools and concepts of ABCM and TOC/TP.

Operations Management (MGMT 610)

The objective of this course is to present in an organized manner, a comprehensive, integrated treatment of the field of operations management. More specifically, the purpose of this course is (i) to introduce standard terminology, basic models, and new concepts to describe manufacturing and service delivery systems. A broad range of operations management issues are emphasized in lieu of great depth in a few areas and therefore, enhance student's understanding of operations management function, (ii) to enhance student's skills at structuring and analyzing practical problems, identifying information needs and sources, defining operations goal and performance measures, identifying and using quantitative and qualitative decision variables, *securing and allocating resources*, analyzing and improving operations by arriving at a decision, and selling one's recommendations to peers, clients and superiors, (iii) to provide opportunities in class to improve communication skills and work with others in groups, and therefore, *enhance the student's ability to communicate, lead, follow and work well others.*

Health Care Operations and Quality Management (Mgmt 680)
This course provides systems thinking based tools to identify and improve the true leverage point of a health care system. Specifically, it provides the knowledge and skills based on Total Quality Management and Theory of Constraints philosophies providing opportunities to improve the operations and quality. The students analyze real-world applications and apply concepts to a significant work related entrepreneurial opportunity.

Operations Management (Mgmt 401)
This course covers the general functions of operations management as applied to the transformation process. It presents operations management concepts and analytical methods of handling problems in manufacturing and service operations.

Constraints Management (Mgmt 477)

The goal of this course is to significantly enhance students' ability to analyze and solve problems encountered in business and in their personal lives. This goal will be achieved by (i) presenting a comprehensive introduction to the paradigms of the Theory of Constraints, (ii) providing examples of the application of TOC principles to the major functional areas of a business, including finance/accounting, marketing, operations, and to managing people, and examples of how TOC can be used to integrate these functional areas, and (iii) providing opportunities for students to apply TOC principles to real problems encountered in business and their personal lives.

Total Quality Management (Mgmt 403)
This course focuses on continuous improvement. Improvement implies change. The real issue then becomes: What to change? Clearly there are many options. Students learn which ONE THING should be changed to cause the most systematic improvement. Next is: What to change to? It is easy to complain and point out flaws but more difficult to present a better solution. Students learn how to develop solid, common sense solutions that make major impact without causing devastating side effects. Last, How to cause the change? It is extremely frustrating to know the answer and not to know how to implement it. Students learn the step by step process of how to cause reality to change in the direction they desire.

SERVICE

Department

- Serve on search committee to fill entrepreneurship chair position.
- Mentor Management majors on regular basis in developing their Management Outcome Portfolios.

College

- Participated actively in the Integrative MBA program, led by Dr. Van Clouse, by volunteering to serve on various task forces e.g., (i) Public relations task force to increase the pool of potential applicants for IMBA program, (ii) to identify the role of IMBA program in supporting ICIC initiative undertaken by the College, and (iii) to identify initiatives to improve IMBA program (1993 to present).
- Participated actively in the Executive Healthcare MBA program development process, let by Dr. Lyle Sussman, by volunteering to attend various brain storming sessions and develop potential course outline (1999 to present)
- Participated in the development of Health Care Concentration in Regular MBA program, led by Dr. Steve Gohman, by volunteering to develop a new course, Health Care Operations and Quality Management and participated in a team-taught course (1993-1994)
- Served as a chair of student grievance committee (1998-1999)
- Served as a faculty senator to represent the college (1994-1996)
- Served as a member of the Planning Committee of the Labor Management Center, let by Dr. Carrie Donald, to develop various symposiums (1994-1996)

University:

- Participate in the Intramural Research Incentive Grant (IRIG) program, initiated from the Office of the V. P. of Research, by volunteering to review 3-4 grant proposals twice in an academic year and to develop recommendations for funding to V. P. of Research (1993 to present).
- Serve on M. Sc. and Ph.D. thesis committees in the Department of Industrial Engineering, led by Dr. Suraj Alexander, in the capacity of an external examiner by reviewing thesis and attending Oral presentations (1994 to present).
- Participated in the University Awards and Designation Committee, led by Dr. William Morrison, by reviewing requests for designations of various offices/buildings, and mounting plaques on the walls across the schools.
- Served on Graduate Research Advisory Council, led by the V. P. of Research, to review research and technology programs and initiatives such as University Research Fellows Program and Patent Policy of U of L (1993-1996).

Community

- Serving on the ICIC initiative to represent the University as well as College
- Served on Manufacturing Technology Committee of Louisville Advanced Technology Council to explore opportunities for technology transfer within the Greater Louisville region (1992-1996)
- Served on the Kentuckiana Quality Conference Steering Committee and participated as a presenter in the conference (1992 to 1994)
- Volunteered to serve as a resource for the Business Solution Center hosted by the Louisville Chamber of Commerce

(1991-1995)

Profession:

- Active member of professional organizations such as Academy of Management, Production and Operations Management Society; and Decision Sciences Institute.
- Review articles for possible publication in refereed journals such as Production and Operations Management, European Journal of Operational Research, Computers and Industrial Engineering, Computers and Operations Research, International Journal of Production Research, Production and Inventory Management Journal, Long Range Planning, Technovation.
- Serving on numerous MS and Ph. D. Dissertation committees in the Department of Industrial Engineering on regular basis every year.

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