

DONALD BARRY ROSENFELD  
Born July 24, 1947, Boston, MA, USA

5 Malt Lane  
Lexington, Massachusetts 02421

Home: (781) 862-2356  
Business: (617) 253-1064  
Cell (617)-905-7236

**Professional Interests**

Operations Management, with particular emphasis on supply chain management and operations strategy.

**Education**

STANFORD UNIVERSITY

Ph.D. in Operations Research, June 1974  
Honors: Sigma Xi  
Thesis Area: Reliability Theory

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

B.S. in Mathematics  
M.S. in Operations Research  
Electrical Engineer, February 1971  
Honors: Phi Beta Kappa, NSF Fellowship, Undergraduate Scholarship

**Experience**

1987-Present      MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
1980-1986      Sloan School of Management, Cambridge, MA 02139

2014-present	Senior Lecturer
1990-2014	Senior Lecturer
	Director, Leaders for Global Operations Program
1988-1990	Senior Lecturer
	Program Manager, Leaders for Manufacturing Program
1987-1988	Visiting Senior Lecturer
1985-1986	Lecturer
1984-1985	Visiting Associate Professor
1980-1984	Lecturer

Developed and conducted graduate courses in Operations Management and Decision Sciences. Conducted research and projects in Operations Management applications. Program Manager of unique Industry-M.I.T. education and research program in manufacturing, Leaders for Manufacturing Program. Appointed Director of Dual-Degree Program in 1990 while maintaining teaching and research program.

1976-1988      ARTHUR D. LITTLE, INC.  
Cambridge, MA

(on leave 1984-85, 1986-87)

**Senior Consultant:** Consulted on and supervised numerous client cases in Operations Management. Case studies included manufacturing strategy, logistics strategy, and production and inventory planning. I directed most of the work in these areas and directed practices in logistics and manufacturing strategy. In 1987, I was appointed Deputy Section Manager of the Operations Management Section.

- 1986-1987      HARVARD UNIVERSITY  
 Graduate School of Business Administration  
 Boston, MA
- Lecturer:** Conducted MBA course in Production and Operations Management. Conducted research and casewriting in Operations Management applications.
- 1978            BOSTON UNIVERSITY  
 School of Management  
 Boston, MA
- Adjunct Assistant Professor**
- 1974-1976      STATE UNIVERSITY OF NEW YORK  
 College of Urban and Policy Sciences  
 Stony Brook, NY
- Assistant Professor:** Developed and taught courses in Quantitative Methods and Operations Research. Conducted research in Applied Probability and public systems Applications of Operations Research.
- 1971            LINCOLN LABORATORY  
 Massachusetts Institute of Technology  
 Lexington, MA
- Technical Staff Member:** Developed computerized prediction models for defense applications.

**Affiliations and Other Activities**

INSTITUTE FOR OPERATIONS RESEARCH AND THE MANAGEMENT SCIENCE (INFORMS)

Practice Conference Committee, 2001, 2002  
 National Meetings Committee, 1994 - 2000  
 General Chairman, 1994 TIMS/ORSA National Conference  
 Publicity Chairman - 1985 TIMS/ORSA National Conference  
 Associate Editor, *Operations Research*, 1981 - 1990  
 Chairman, Boston Chapter, 1983 - 1984

PRODUCTION AND OPERATIONS MANAGEMENT SOCIETY (POMS)

Director, Healthgate Data Corporation, 1994 – 1995  
 Science Board of Advisors – Invistics Corporation, 2002 – present

**Teaching Experience**

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
 Sloan School of Management

Operations Strategy (Masters level course; cases)

Operations Laboratory (Masters level course; cases, lectures and projects)

International Logistics (Masters level engineering course; cases and lectures)

Operations Management (Masters level Operations Management course; cases and lectures)

Service Operations (Executive masters course, cases and lectures)

Decision Models for Management (Masters level Operations Research course; cases and lectures)

The Operating Manager (Masters level course; cases)

Industrial Project Evaluation (Masters level course; cases and lectures)

Theory of Operations Management (Doctoral seminar)

Practice of Operations Management (Masters level course; cases, lectures and projects)

**HARVARD UNIVERSITY**  
Graduate School of Business Administration

Production and Operations Management (First Year required Masters level course, mostly cases)

**STATE UNIVERSITY OF NEW YORK**  
College of Urban and Policy Sciences

Quantitative Methods I-IV (Masters level sequence in Operations Research and Probability and Statistics for Policy Science students)

Introductory Operations Research (Undergraduate course for Applied Mathematics students)

Introduction to Stochastic Processes (Doctoral level Applied Mathematics course)

Introductory Statistics (Undergraduate course for Applied Mathematics students)

Linear Programming (Undergraduate course for Applied Mathematics students)

**BOSTON UNIVERSITY**  
School of Management

Quantitative Models for Management (Masters level course for Business students)

**Personal:**      Born July 24, 1947  
                         Married, three children

### Patents

US Patent 7499766 - Associated systems and methods for improving planning, scheduling, and supply chain management, with Thomas knight, Steven Graves, Otis Jennings, John Bishop, Sichong Guan, Brian Sulka, Leon McGinnis, and Patrick McDonnell

### Publications and Presentations

#### **BOOKS:**

*Operations Leadership, Competing in the 21<sup>st</sup> Century*, co-authored with Sara Beckman, McGraw-Hill Irwin, May 4, 2007

*Modern Logistics Management: Integrating Marketing, Manufacturing and Physical Distribution*, co-authored with John Magee and William Copacino, John Wiley, 1985.

#### **JOURNAL AND BOOK ARTICLES:**

"Innovation and Onshoring: The Case for Product Variety", *Production in the Innovative Economy*, R. Locke and R. Wellhausen, ed. MIT Press, 2014.

Optimal Planning Quantities for Product Transition", *Production and Operations Management*, 19, No. 2, pp. 142-155. 2010 (with Hongmin Li and Stephen Graves).

"Schedule Evaluation in Unstable Manufacturing Environments" *International Journal of Production Economics*, 121, No. 1, pp. 183-194, 2009 (with Santiago Lopez de Haro and Stanley Gershwin).

"When to Refinance a Mortgage: A Dynamic Programming Approach", *European Journal of Operational Research*, 166, no. 1, pp. 266-277, 2005. (with Pei-Ting Lee)

"Challenges and Trends in Discrete manufacturing" *ABB Review* 2002, No. 2, pp. 6-10 (with Mika Kuhmonen, Rafael de Jesus, and William Hanson).

"An Integrative Approach to Process Parameter Selection" (with Francis MacDonald, Jr., David Staelin, and Keith Knauss), *Production and Operations Management*, 7, No. 1, Spring 1998.

"Industry and Universities: New Partners on the Endless Frontier." *Reinventing the University*, S. Johnson, J. Kidwell (ed.), John Wiley, 1996 (with William Hanson and Thomas Magnanti).

"Global and Variable Cost Manufacturing Systems", *European Journal of Operational Research*, 95, No. 2, pp.325-343, December 1996.

"Operations Research and Statistics in Manufacturing - An Educational Model", *Education in a Research University*, K.J. Arrow, R.W. Cottle, B.C. Eaves and I. Olkin (ed), Stanford University Press, 1996.

"The New Dynamics of International Manufacturing Site Location", *Sloan Management Review*, Summer 1994, pp. 69-80 (with Alan MacCormack and L. James Newman). Translated in Spanish in *Deusto Business Review*, Sept. - Oct., 1995, vol. 68, pp. 86-99. Reprinted in *Strategic Management in a Global Economy*, H. Vernon-Wortzel and Lawrence Wortzel (eds.) third edition, Wiley 1997.

Commentary on "Plant Location Puzzle", *Harvard Business Review*, 72, no. 2, pp. 30-32, March-April, 1994, (with Alan MacCormack and L. James Newman).

- “Demand Forecasting,” *Logistics Handbook*, J. Robeson and W. Copacino (ed.), Free Press, New York, 1994.
- “An Application of Sizing Service Territories,” *European Journal of Operational Research*, 63, 1992, pp. 164-172 (with Isreal Engelstein and David Feigenbaum).
- “Optimality of Myopic Policies in Disposing Excess Inventory (note),” *Operations Research*, 40, No. 4, 1992, pp. 800-803.
- “Storefront Distribution for Industrial Products,” *Harvard Business Review*, 67, No. 4, pp. 44-48, July - August, 1989.
- “Disposal of Excess Inventory,” *Operations Research*, 37, No. 3, pp. 404-409, 1989.
- “Methods for Logistics Systems Analysis,” *International Journal of Physical Distribution and Materials Management*, 17, No. 7, pp. 38-59, 1987 (with William Copacino).
- “The Retailer Facility Location Problem: A Case Study,” *Journal of Business Logistics*, 8, No. 2, pp. 95-114, 1987.
- “A Model for Predicting Frequencies of Random Events,” *Management Science*, 33, No. 8, pp. 947-954, 1987.
- “Optimal Management of Tax-Sheltered Employee Reimbursement Programs,” *Interfaces*, 16, No. 3, pp. 68-72, 1986.
- “Analytic Tools for Strategic Planning,” *International Journal of Physical Distribution and Materials Management*, 15, No. 3, pp. 47-61, 1985 (with William Copacino).
- “Implications of Cost-Service Tradeoffs on Industry Logistics Structures,” *Interfaces*, 15, No. 6, pp. 47-59, 1985 (with Roy Shapiro and Roger Bohn).
- “Logistics Planning and Evaluation Using What-If Simulation,” *Journal of Business Logistics*, 6, No. 2, pp. 89-109, 1985 (with William Copacino and Edmund Payne).
- “Risks of Catastrophic Derailments Involving the Release of Hazardous Materials,” *Management Science*, 30, No. 4, pp. 503-511, 1984 (with Ted Glickman).
- “Optimal Strategies for Selling an Asset,” *Management Science*, 29, No. 9, pp. 1051-1061, 1983 (with Roy Shapiro and David Butler).
- “National Risk Assessment for Carbon Fibers Released from Aircraft Fires,” *Interfaces*, 12, No. 2 pp. 64-73, 1982 (with Joseph Fiksel).
- “Probabilistic Models for Risk Assessment,” *Risk Analysis*, 2, No. 1, pp. 1-8, 1982 (with Joseph Fiksel).
- “Optimal Adaptive Price Search,” *Journal of Economic Theory*, 25, No. 1, pp. 1-20, 1981 (with Roy Shapiro).
- “Scheduling and Estimation Techniques for Transportation Planning,” *Computers and Operations Research*, 8, No. 1, pp. 25-38, 1981 (with Lawrence Bodin and Andy Kydes).
- “The Effects of Warehouse Configuration Design on Inventory Levels and Holding Costs,” *Sloan Management Review*, 21, No. 4, pp. 21-33, 1980 (with Mark Pendrock).

“UCOST: A Micro Approach to a Transportation Planning Problem,” *Journal of Urban Analysis*, 5, pp. 47-69, 1978 (with Lawrence Bodin and Andy Kydes).

“Markovian Deterioration with Uncertain Information - A More General Model,” *Naval Research Logistics Quarterly*, 23, No. 3, pp. 389-405, 1976.

“Markovian Deterioration with Uncertain Information,” *Operations Research*, 24, No. 1, pp. 141-155, 1976.

#### **MIT AND HARVARD BUSINESS SCHOOL CASE STUDIES:**

“Boeing Commercial Airplanes’ 787 Dreamliner” (MIT Sloan School, with Cate Reavis)

“Dell inc.: Improving the Flexibility of the Desktop PC Supply Chain” (MIT Sloan School, with Johnson Wu, Charles Fine, and David Simchi-Levi)

“The Tesla Roadster: Accelerated Supply Chain Learning” (MIT Sloan School, with Milo Werner, Braden Ball, Jeff Stein, Charles Fine, and Loredana Padurean)

“Baker Precision Instruments, Inc.,” 687-052 (Harvard Business School, with Ramchandran Jaikumar, Roy Shapiro and Kathryn Stecke).

“Metro Welding Supply, Inc.,” 687-105 (Harvard Business School).

#### **PRESENTATIONS AND PROCEEDINGS**

“MIT Leaders for Global Operations”, Keynote address, INFORMS National Meeting, November 10, 2014, UPS George Smith Award talk (with Georgia Perakis)

“MIT Leaders for Global Operations”, George Smith UPS award reprise, Boston INFORMS Analytics Meeting, April 1, 2014 (with Georgia Perakis)

Panel Discussion Topic Dinner “The Competitive Edge: Strengthening Operational Excellence”, hosted by Toyota, Clinton Global Initiative, June 12, 2013.

Rosenfield, D. (2012), "Sourcing strategies", in Van Mieghem, J.A. (ed.), *Operations Strategy: The Marketing & Management Collection*, Henry Stewart Talks Ltd, London (online at <http://hstalks.com/?t=MM1623293-Rosenfield>)

“Developing a Global Manufacturing Strategy”, 2006 MIT Manufacturing Conference: The Impact of Globalization on New Product Development and Manufacturing: Imperatives for Success, MIT Industrial Liaison Program, December 6-7, 2006

“Outsourcing pros and cons” (moderator), Sloan CFO summit, Nov 19, 2004.

“Globalization and Strategy”, ILP conference on manufacturing, Nov. 18, 2003.

“Strategic Supply Chain Design” MIT e-business conference, April 18, 2002.

“Operations Strategy in the New Economy”, invited keynote address Fourth International Workshop of IFIP WG5.7 International Working Conference on Strategic Manufacturing, August 2001, Aalborg, Denmark (with Sara Beckman).

“MS in Engineering or MBA—Why Not Both?”, Society of Women Engineers Annual Meeting, Denver, CO, June 26, 2001.

“Operations Strategy in the Internet”, Invited tutorial, XXIII Systems Engineering Conference, Santiago, Chile, July 19, 2000.

“Supply Chain Management in a Global Environment”, Keynote talk, International Congress on Logistics, sponsored by Sintec consulting, Mexico City, May 17, 2000.

“Beyond the Borders of Retail Techniques of Managing an Inter-enterprise Supply Chain”, Speech and panel Discussion, National Research Federation Annual Meeting, New York, NY, January 18, 2000.

“The MIT Leaders for Manufacturing Program”, invited panel discussion, Philadelphia INFORMS Meeting, November, 1999 (with Stephen Graves).

“Strategic Planning for Global Supply Chains”, 99 Conference on Innovative Technologies in Warehousing and Distribution, DBM Association, Orlando, June 8, 1999.

“Modeling Global Supply Chains”, Cincinnati INFORMS Meeting, May 1999 (invited, with Martin Haugh).

“Strategies for Global Supply Chains” Keynote Faculty Address, MIT Center for Transportation Studies Day, Caterpillar, Peoria, IL, Sept. 1, 1998.

“Strategic Planning for Global Supply Chains”, Council of Logistics Management Annual Meeting, Anaheim, CA, Oct. 12-13, 1998, (invited).

“Topics in Global Operations”, panel discussion, MIT summer camp, June 17, 1997.

“The Leaders for Manufacturing Program” invited plenary session, MACOM annual manufacturing conference, June 4, 1997.

Plenary session and panel on industry-university partnerships and on integrating research and practice, Production and Operations Management Annual Meeting, April 14, 1997.

“Dynamics of Global Supply Chains”, keynote address, MIT Center for Transportation studies conference, Dec. 16, 1996.

“The Revolution in Inventory Management and Logistics” MIT Center for Real Estate Development Semi-annual meeting, Nov. 22, 1996.

“Why Saline Implants Deflate: The important role of Valvular Malfunction as a Cause of Implant Deflation.” Accepted for Annual meeting of American Society of Plastic and Reconstructive Surgeons, Dallas, November 9-13, 1996 (with Sumner Slavin and Robert Goldwyn).

“Models and Strategies for Global Manufacturing” Optimization Days, 1996, Montreal, May 1996 (invited).

“The Leaders for Manufacturing Program: A Model for Manufacturing Education”, International Conference on Education in Manufacturing, Society of Manufacturing Engineers, March 1996, San Diego (invited). Reviewed paper published in proceedings, *Preparing World Class Manufacturing Professionals*.

“Manufacturing Competitiveness and Leaders for Manufacturing”, keynote address, INPRO 1996 Forum (industry meeting sponsored by Norwegian University of Science and Technology), Trondheim, Norway, January 1996.

“An Application of Global Location and Coordination”, INFORMS Meeting, New Orleans, October 1995 (invited, with Peter Spinney, Brian Milam, and Brad Householder).

“Specialized Degree Programs for Industry Consortia”, Annual Meeting, American Assembly of Collegiate Schools of Business, May 1995, Minneapolis (invited).

“Global Manufacturing and Facilities Strategies”, EURO XIII/Operational Research Society joint meeting, Glasgow, July, 1994 (invited).

“Global Manufacturing Strategies” Boston TIMS/ORSA meeting, 1994 (invited).

“An Integrated Marketing-Manufacturing Approach to the Optimal Product Dilemma”, Boston TIMS/ORSA meeting, 1994 (invited, with Franklin Quan).

“ A Framework for Post-sales Logistics Support”, faculty address at MIT Center for Transportation Affiliates day, Akron, Ohio, June 24, 1993.

“Redefining the University-Industry Relationship for Manufacturing Excellence” presented at the Fourth Annual Pittsburgh Manufacturing Systems Engineering Conference, 30 September 1993, Pittsburgh, PA (with Thomas W. Eager, William C. Hanson, and Thomas L. Magnanti) published in *Proceedings*.

“Leaders for Manufacturing” Symposium on Industry - University Consortia, Production and Operations Management Society, Annual Meeting, October 1992, Orlando (invited).

“ Measures to Drive Flexibility & Reliability Improvements”, *Manufacturing Measurements - 21<sup>st</sup> Century Metrics Conference Proceedings*, pp. 88-98, Lehigh University, Bethlehem, PA, 1992, (with Thomas Knight and Mark Kramer).

“ Comparative Analysis of Best Practice in the Manufacture of Hard-Die Tooling for Automotive Body Parts,” TIMS/ORSA meeting, Nashville, 1991 (with Franz Drees, invited).

“Global and Variable Cost Manufacturing Systems,” MIT/LFM Summer Camp, June 1991.

“A System for Planning a Network of Processing and Service Facilities”, TIMS/ORSA meeting, Las Vegas 1990 (with David Feigenbaum, invited).

“The Leaders for Manufacturing Program: A New Type of Industry/University Consortium.” Panel Discussion on Industry/University Consortia, IEEE International Electronics Manufacturing Technology Symposium, September 1989 (invited), published in *Proceedings*.

“A Model for Predicting Frequencies of Random Events,” St. Louis ORSA/TIMS meeting, October 1987 (invited).

“Disposal of Excess, Slow-Moving, or Obsolete Inventory,” Miami ORSA/TIMS meeting, October 1986 (invited, with Kevin O'Laughlin).

“Design and Control of Multi-Location Manufacturing and Distribution Systems,” National Council of Physical Distribution Management Annual Meeting, October 1985 (invited), published in *Annual Conference Proceedings*.

“Facility Location Problems with a Small Number of Sites,” Boston ORSA/TIMS meeting, April 1985 (invited).

“Analytic Tools for Strategic Planning,” National Council of Physical Distribution Management Annual Meeting, September 1984 (invited, with William Copacino), published in *Annual Conference Proceedings*.

“Effects of Cost-Service Tradeoffs on Industry Logistics Structures,” San Francisco ORSA/TIMS meeting, May 1984 (invited, with Roy Shapiro and Roger Bohn).



“Interactive Modelling in Distribution and Logistics,” National Council of Physical Distribution Management Annual Meeting, New Orleans, October 1983 (invited), published in *Annual Conference Proceedings*.

“Estimating Multi-Echelon Inventory Levels for a Warehouse Location Study,” Colorado Springs ORSA/TIMS meeting, November 1980 (invited, with Mark Pendrock).

“Assessment of Risks Due to the Use of Carbon Fiber Composites in Commercial and General Aviation,” NASA Industry/Government Briefing, Hampton, VA, December 4-5, 1979 (with Joseph Fiksel and Ashok Kalelkar), published in *Assessment of Carbon Fiber Electrical Effects*, NASA Conference Publication 2119.

“Safety and Reliability of Liquefied Natural Gas Operations,” New Orleans ORSA/TIMS Meeting, May 1978 (invited).

“Dynamic Capital Budgeting with an Uncertain Future,” New York ORSA/TIMS Meeting, May 1978 (invited, with Roy Shapiro).

“Optimal Action Lines in Inspection Problems,” San Francisco ORSA/TIMS Meeting, May 1977 (invited).

“Searching for the Lowest Price with Uncertain Information,” San Francisco ORSA/TIMS Meeting, May 1977 (invited, with Roy Shapiro).

“Operating Cost Model for Transit Based on Direct Systems Characteristics,” Transportation Research Board Annual Meeting, January 25, 1977 (with Lawrence Bodin, Andy Kydes and Adelbert Roark) published in *Transportation Research Record*, (Abridgement), 654, pp. 28-30, National Research Council, Washington, D.C.

“The Interaction Between the Scheduling of Vehicles and the Estimation of Crew Requirements for Mass Transportation Systems,” ORSA/TIMS National Meeting, November 1976 (invited, with Lawrence Bodin and Andy Kydes).

“Estimation of Operating Costs for Mass Transportation Systems,” Summer Computer Simulation Conference, Washington, D.C., July 1976 (invited, with Lawrence Bodin and Andy Kydes), papers published in *Proceedings*.

“Optimal Repair and Inspection Policies When the Operating State is Uncertain,” Las Vegas, Nevada, ORSA/TIMS Meeting, November 1975 (invited).

“Estimation of Manpower Requirements for Mass Transit Systems,” Las Vegas, Nevada, ORSA/TIMS Meeting, November 1975 (invited, with Lawrence Bodin and Andy Kydes).

“Approximation Techniques for Automated Manpower Scheduling,” Workshop on Automated Techniques for the Scheduling of Vehicle Operators for Urban Public Transportation Service, sponsored by ORSA/Transportation Science Subsection, U.S. Department of Transportation and Urban Mass Transportation Administration, Chicago, IL, April 1975, published in *Preprints* (invited, with Lawrence Bodin and Andy Kydes).

“Deteriorating Markov Models Under Uncertainty,” San Juan, PR, ORSA/TIMS Meeting, October 1974.

#### **TECHNICAL REPORTS OF NOTE**

“Deteriorating Markov Processes Under Uncertainty,” Technical report No. 162, Department of Operations Research and Department of Statistics, Stanford University, May 1974.

“Effects of Refractoriness in Auditory Nerve Statistics,” *Quarterly Progress Report*, No. 103, October 15, 1971, M.I.T. Research Laboratory of Electronics.