MORRIS A. COHEN

Panasonic Professor of Manufacturing and Logistics Operations and Information Management Department The Wharton School, University of Pennsylvania Philadelphia, PA 19104 (215) 898-6431 (office) COHEN@WHARTON.UPENN.EDU (E-mail)

Web Page: http://opim.wharton.upenn.edu/~cohen/

PERSONAL: Age 65, Married - 3 children

DEGREES: B.A. Sc., Engineering Science, University of Toronto, 1970

M. Sc., Industrial Engineering and Management Sciences,

Northwestern University, 1971

Ph.D., Operations Research, Northwestern University, 1974

M.A. (Hon.), University of Pennsylvania, 1980

PROFESSIONAL EXPERIENCE

Visiting Professor, IIMB, Bangalore India, 2013

Visiting Professor, Shanghai Institute of Foreign Trade, China, 2013

Visiting Professor, Technion - Israel Institute of Technology, Faculty of Industrial Engineering and Management, Israel 2013

Visiting Professor, Kobe University, Japan, 2013

Panasonic Professor of Manufacturing and Logistics, Department of Operations and Information Management, Wharton School, University of Pennsylvania, 1985-

Co-Director, Fishman-Davidson Center for Service and Operations Management, 1995-

Chairman, MCA Solutions Inc., 2002 - 2012

Chief Executive Officer, MCA Solutions LLC, 2000 - 2002

Secondary Appointment as Professor of Electrical and Systems Engineering in the School of

Engineering and Applied Science, University of Pennsylvania, 1994-2009

Board of Directors, Vlasic Foods International Inc., 1998-2001

Visiting Professor, New Interdisciplinary University of Law, Management and Technology, Israel, 1995-1996

¹ Department was renamed in 1993 - previously Decision Sciences Department.

- Fellow, International Academy of Management, 1998-
- Visiting Scholar, Massachusetts Institute of Technology, 1997
- Chairman, Operations and Information Management Department, The Wharton School, University of Pennsylvania, 1992-1995
- Co-Director, Center for Manufacturing and Logistics Research, The Wharton School, University of Pennsylvania, 1991-1995
- Sloan Visiting Professor of Decision Sciences, Graduate School of Business and Department of Industrial Engineering, Stanford University, 1988-1989
- Coordinator Operations Research Program, The Wharton School, University of Pennsylvania, 1984-1985
- Associate Professor, Department of Decision Sciences, The Wharton School, University of Pennsylvania, 1980-1985
- Visiting Professor, Department of Industrial Management Engineering, Shanghai Jiao Tong University, 1982
- Assistant Professor, Department of Decision Sciences, The Wharton School, University of Pennsylvania, 1974-1980
- Senior Fellow, Leonard Davis Institute of Health Economics, The Wharton School, University of Pennsylvania, 1978-1993
- Policy Analyst, Planning Branch, Treasury Board Secretariat, Government of Canada, 1971-1972
- Systems Analyst, Institute for Quantitative Analysis of Social and Economic Policy, University of Toronto, 1970
- Bio-Medical Engineer, Department of Bio-Medical Engineering and Biophysics, Toronto General Hospital, 1968-1969

PRIZES AND AWARDS

- 2013 INFORMS Fellow Institute for Operations Research and the Management Sciences
- 2013 Plenary speaker, International Symposium, Japanese Operations Management and Strategy Association
- 2008 Plenary speaker, German Operations Research Society
- 2007 Tibbets Award (National Science Foundation –SBIR)
- 2007 Production and Operations Management Society (POMS) Inaugural International Distinguished Lecturer
- 2004 Senior Fellow, Manufacturing and Service Operations Management Society, INFORMS
- 2001 Institute of Industrial Engineers Award for best paper published in *IIE Transactions* in 1999

1991 Stan J. Hardy Award for the best paper published in Operations Management in 1990 Decision Sciences Institute

1989 Lauder Institute Prize for Advances in the Theory and Practice of International Management Science (best submitted paper)

1981 Edelman Prize for Best Practice in Management Science (runner-up)

CONSULTING ACTIVITIES

El Al 2013

- Evaluate current after-sales service support strategies for aircraft maintenance

PTC 2013

Develop strategies to integrate product design and service lifecycle management support systems

Servigistics 2012

- Senior consultant to provide strategic direction for product development

Sikorsky 2012

- Supply Chain management in the Aerospace and Defense industry – challenges and opportunities

Samsung 2010-2011

KPIs for Measuring Service Quality

Domino's Pizza 2010

School Lunch Program Supply Chain analysis

US Postal Service 2009

- Forever Stamp analysis

SAP 2007

Intermec 2006

Oracle 2006

Boeing 2006

MCA Solutions Inc. -2002 - 2012

(Supported implementations include Apple, Baker Hughes, Bombardier, Cymer, Dassaulti, Volkswagen, US Army, Cisco, KLA Tencor, DHL, Lockheed Martin, Rockwell Collins, US Navy, Boeing Corporation, Applied Material, Varian Medical)

KLA Tencor – 2001

Applied Materials - 1999, 2000, 2001

Electronics Components Case – Expert Witness on Material Management, 2000

Motorola Class Action – Expert Witness on Supply Chain Volatility, 2000

Defense Logistics Agency - 1999

Merck & Company, Inc. – 1993, 1998

- Distribution Strategy
- Clinical Trials Supply Chain

Digital Equipment Corporation (Compaq) – 1998

Intel Corporation – 1997 - 2000

TIP (Transport International Pool), GE Capital – 1997

US Navy ICP - 1996 - 1998

- Supplier-Distributor Relationship for Military Service Parts Logistics

Saturn Corporation - 1995 - 1999

- Long-Range Distribution Strategy
- Market Area Service Parts Logistics Strategy

Teradyne Corporation -1995 - 1999

- Service Parts Logistics – 1996

Campbell Soup Company -1995

- New Product Development
- Global Development Protocol

Campbell Soup Company - 1988, 1990, 1995, 1996

- Manufacturing Strategy, Manufacturing/Marketing Interface, European Supply Chain

International Business Machines -1982, 1983, 1984, 1993-1996, 1998

- Third Party Logistics Provider Assessment
- Service Part Inventory System Development
- Spare Logistics Benchmark Project (Phases 1 and 2)

Gemini Consulting -1993

- Faculty Associate; Logistics and Distribution Strategy

MBNA America Bank -1993, 1994

- Inventory Control System for Plastic Cards

Asbestos Industrial Class Action - 1993

- Expert Witness on Product Development

Andersen Consulting B 1989-1992

- Distribution, Logistics and Inventory Management

Airline Industry Class Action - 1991

- Expert Witness for Plaintiff Counsel

Trinova Corporation - 1987-1990

- Manufacturing Strategy, Executive Education

Booz-Allen and Hamilton - 1982-1988, 1993

- Manufacturing Strategy Support System Development
- Distribution Strategy

Triad Corporation – 1989

Inventory Management Systems

Apple Computer Company -1987, 1988

- Global Manufacturing/Distribution Policy

General Motors Corporation -1984-1987

- Parts Distribution System Evaluation and Strategy Development

Franklin Computer Corporation - 1982

Manufacturing System Evaluation

Reliance Steel Products - 1982

- Expert Witness Consultation for Producer/Supplier Litigation Case

North American Philips Consumer Electronics - 1981

- Production Scheduling Analysis

Canada Mortgage and Housing Corporation - 1980

- Simulation Models for Housing Policy Analysis

Magnavox Consumer Electronic Company - 1980

- Production Planning System Evaluation of Television Manufacturing Plant
- MRP Software Evaluation

Rush - Presbyterian St. Luke Blood Center - 1980

- Development of Microcomputer Based Blood Inventory Control System

Central Jersey Health Planning Council - 1979

- Regional Health System Resource Planning Methods

Coats and Clark, Inc. - 1978

- Inventory and Logistics Strategy Analysis for Small Wares Manufacturers, Distributors and Retailers

Philadelphia College of Physicians and the National Library of Medicine - 1975

- Analysis of the Regional Medical Library System

COURSES TAUGHT

- DS 20 <u>Operations Analysis Techniques</u>: Introduction to quantitative methods at the undergraduate level-linear programming, integer programming, decision analysis, dynamic programming.
- DS 21 <u>Operations Analysis in Production Systems</u>: Undergraduate course dealing with inventory, production, distribution, aggregate planning, and facility planning.
- BA 508 Operations Analysis in Health Systems: An advanced study project course for MBAs, clinical scholars and doctoral students on systems analysis and OR/MS methodology as applied to the health care system.
- OPIM 224 Service Operations Management: Undergraduate elective that focuses on the design, management and control of service operations. Topics include capacity planning, yield management, after-sales service, service product design and service strategy. Half semester version covers lectures and full semester version includes an extensive field project to evaluate a service process. Versions of this course have been taught at the Technion, Israel and Kobe University, Japan.
- OPIM 615 Managing the Productive Core of the Firm: Operations Strategy: This is a WEMBA elective course on Operations Management. It emphasizes supply chain management and strategic planning and provides tools for the matching of demand and managing risk in supply chains.

- OPIM 631 Operations Management: Quality and Productivity: This is the first part of the core course on Operations Management. It emphasizes processes analysis, performance measurement and improvement. It introduces queuing and process mapping tools.
- OPIM 632 Operations Management: Supply Chain Management: This is the second part of the core course on Operations Management. It emphasizes supply chain management and strategic planning and provides tools for the matching of demand and supply in various environments.
- BA 650 <u>Management Decision Analysis</u>: A quantitative methods course at the MBA level oriented around case studies involving resource allocation, decision analysis, simulation and planning languages.
- BA 655 Operations Management: Planning and Strategy: A strategy oriented survey of operations management. Topics include process analysis, inventory control, detailed and project scheduling, aggregate planning, capacity management and facilities planning, logistics and distribution system design, technology planning and operations policy.
- OPIM 656 Operations Management Analysis & Control: A comprehensive introduction to the fundamental decisions and tradeoffs associated with the control of a firm's operations function. The topics covered include inventory management, aggregate production planning, master scheduling, materials requirement planning and operations scheduling.
- OPIM 657 Operations Technology: Overview of the developments and principles of Technology Management in manufacturing and distribution from a managerial perspective.
- OPIM 658 Service Operations Management: Elective that focuses on the design, management and control of service operations. Topics include capacity planning, yield management, after-sales service, service product design and service strategy. Extensive coverage of underlying queuing models of service systems and a field project is included.
- OPIM 659 <u>Design, Manufacturing & Marketing Integration</u>: A project course in which students design and build prototype of new product and consider cross-functional management issues.
- BA 659 <u>Applied Dynamic Stochastic Systems</u>: A doctoral level course on the theory and applications of dynamic programming, Markov decision processes and stochastic control (also listed as OR 606).

OPIM 698 Value Networks: An MBA elective that explores software and strategies for integration, optimization and coordination in IT-enabled value chains. BA 807 Quantitative Methods II: An MBA core course which introduces the basic concepts and methods of Operations Research/Management Science. OPIM 890 Global Supply Chain Management in Japan: An MBA global modular course, cross listed as MGMT 890. The course focuses on global supply chains operated by Japanese and foreign multinationals operating in Japan. It is s field based, onsite course that includes extensive interactions with senior executives and site/plant visits with leading corporation to discuss their current global supply chain strategies. In 2013 it was offered in conjunction with the Wharton Asian Alumni conference in Tokyo. DS 920 Mathematical Programming: A doctoral level course on linear, integer and dynamic programming. DS 930 Stochastic Processes: A doctoral level introduction to stochastic processes and their applications. BA 369 Manufacturing Technology/Facility Strategy (Stanford): An overview of technology planning and facility/capacity planning. Emphasis is given to CIM and location models. DS 940 Operations Management Systems: A doctoral level course on the theory and principles of operations management-Industry and firm level analysis, survey of models, empirical studies. DS 942 <u>Distribution Systems</u>: A doctoral level seminar on multi-echelon inventory, logistics and distribution planning. DS 989 Operations Management Workshop: A Ph.D. seminar on recent developments in the theory and practice of the field.

UNIVERSITY ACTIVITIES:

Committee on Academic Freedom and Responsibility, (Alternate), 2009-10 Chair, Dean's Search Committee, School of Applied Science and Engineering, 1998-99. Academic Misconduct Committee, 1991

Computer Grants Review Committee, 1985

Planning Committee, Lauder Institute of International Management, 1983 - 1984. Dean's representative on Committee on Undergraduate Admissions and Financial

WHARTON SCHOOL ACTIVITIES

MBA & Undergraduate Curriculum Committee, 2011-2012

Chair, Finance Institutions Center Quingennial Review Committee, 2011-2012.

Personnel Committee, 2007-8, Chair, 2008-9

Wharton West 5 year Review Committee 2006

Chair, Mack Center 5 year Review Committee 2006

MBA Executive Committee 2004 - 2005

Chair, MBA Curriculum Committee, 2002-2003

MBA Curriculum Committee, 2001-2002

Executive Education Committee, 2000 - 2001

Personnel Committee, 1998 - 2000

Chair, Health Care Systems Department Quinquennial Review Committee, 1998

MBA Curriculum Committee, 1995

Organized Impact Conference, "United States-Japanese Manufacturing Alliances," 1993

Chairman, Review & Assessment Committee (New MBA Curriculum), 1991 - 1993

Doctoral Program Policy Committee, 1991

Personnel Committee, 1990

MBA Recruiting Committee, 1990

Lifelong and Continuing Education Committee, 1987

Director for Management; Management of Information Systems

Program, 1985 - 1988 (a \$2 million grant from IBM)

Graduate Standards Committee 1983, 1984, 1985

Executive Committee; Operations Research Program, 1983

Wharton Executive MBA (WEMBA) Committee, 1983

Policy Committee; Doctoral Program 1981, 1984

Undergraduate Admissions Committee, 1980

Chairman, Prizes and Awards Committee, 1979 - 1981

Lippincott Library Committee, 1976 - 1979

MBA Curriculum Committee, 1975 - 1976

DEPARTMENT ACTIVITIES

Chair, Personnel Committee for renewal of a Practice Professor 2014

Undergraduate Coordinator 2011-2012

Personnel Committees (Chair and Member) 2010-2011

Member, Recruiting Committee 2009 – 2010

MBA Coordinator, 2001-2003, 2004-2005

Member, Chair Search Committee, 2001, 2009

Member, Recruiting Committee, 1999 - 2000

MBA Coordinator, 1995
Department Chairman, 1992 - 1995
Coordinator, Ph.D. Program, 1980 - 1982 and 1991 - 1992
Faculty Recruiting Committee 1986 - 1988
Computer Committee, 1987
Member, Curriculum Policy Committee, 1978
Chairman, Undergraduate Curriculum Committee, 1977 - 1978
Chairman, MBA Curriculum Committee, 1975 - 1976

Ph.D. STUDENT SUPERVISION

- 1. Shiliang Cui, "Global Supply Chain Sourcing", in-progress, dissertation completed, 2014
- 2. Jose Guajardo, "Empirical Analysis of Performance Based Incentives in Supply Chains, Warranties and Service Quality", Dissertation completed 2012.
- 3. Sang-Hyun, Kim, "Performance Based Logistics: Incentives, Pricing and Supply Chain Policies", completed 2009. Awarded: 2006 International Society of Logistics Engineers & the Logistics Education Foundation Doctoral Dissertation Proposal Award, the 2006 Seth Bonder Scholarship for Applied Operations Research in Military Applications, Honorable Mention, MSOM Student Paper Competition, 2006 and Production and Operations Management Society Student Paper Competition Finalist, Dissertation completed 2008.
- 4. Justin Ren, "Sharing Forecast Information in a Supply Chain" Dissertation completed 2003.
- 5. Sergei Savin, "Strategic Analysis of Lease/Rental of Capital Equipment." Dissertation completed 2001.
- 6. Vinayak Deshpande, "Inter-Agency Coordination Strategy in High Technology Logistics Support." Dissertation completed 2000.
- 7. Shuren Zhang, "Benchmarking of Service Parts Supply Chain."
- 8. Yunzeng Wang, "Repairable Multi-Echelon Inventory." Dissertation completed 1998.
- 9. Vipul Agrawal, "Planning Models for Multi-Level Distribution Systems." Dissertation completed 1995.
- 10. Narendra Agrawal, "Supplier-Producer Material Management Interface." Dissertation completed 1994.
- 11. Teck-Hua Ho, "Product Design: Manufacturing-Marketing Interface." Dissertation completed 1993.
- 12. Arnd Huchzermeier, "Global Manufacturing Strategy Planning Under Exchange Rate Uncertainty." Dissertation completed 1991.
- 13. Sangwon Moon, "Manufacturing Systems Facility Design." Dissertation completed 1988.
- 14. David Pyke, "Production Distribution Systems." Dissertation completed 1987.
- 15. Ricardo Ernst, "Multi-Owner Distribution Systems." Dissertation completed 1987.
- 16. Manuel Baganha, "Multi-Echelon Inventory Systems." Dissertation completed 1987.
- 17. Arunahba Chatterjee, "Stochastic Models of Robot/Work Center Systems." Dissertation

- completed 1985
- 18. Hau Lee (Operations Research), "Multi-Institutional Services Utilization." Dissertation completed 1982.
- 19. Elliott Weiss (Operations Research), "A Semi-Markov Model for the Analysis of Capacity Tradeoffs in a Progressive Patient Care Hospital Facility." Dissertation completed 1980.

RESEARCH GRANTS/FUNDING

- "Optimal Managemeent or Repairables", El Al Airlines and the Technion Israel, \$20,000.
- "Overseas Scholar Grant", \$40,000, Shanghai Institute of Foreign Trade and Government of Shanghai, 2012 -2013
- "Empirical Analysis of Performance Based Logistics", \$150,000, 2008-9, US Air Force (joint with University of Tennessee), 2011
- "Performance Based Logistics", \$125,000, 2005 2008 various grants from; Lockheed Martin Aerospace Company, Boeing Corporation, Rolls Royce Corporation, CACI, SAP, Thomas Group, Bell Helicopter
- "Digital Transformation", McKinsey and Company, \$100,000, 2002.
- "Global Manufacturing Logistics," National Science Foundation Integrative Graduate and Research Training Program (IGERT), \$169,200, 2001.
- "Distributed and Collaborative Supply Chain Integration via Electronic Markets" National Science Foundation #538194, \$115,000, 2001 2005.
- "Distributed and Collaborative Enterprise Decision Making in the Electronic Supply Chain," National Science Foundation #0075391, \$100,000, 2000 2001.
- "Semiconductor Equipment Supply Chain," Intel Corporation, Scaleable Enterprise Grant, \$60,000 \$100,000, 1998 -
- "Lean Air Initiative," MIT Center for Technology Research, 1997.
- "Supply Chain Strategy," US Navy/Defense Logistics Agency, 1996.

Procter & Gamble, 1995.

The Fishman-Davidson Center for Services and Operations Management, The Wharton School. Partnership of about ten companies, 1994 -

Harry Freeman, "SERVNET: Service Sector Network Project," 1995.

- "United States-Japanese Manufacturing Alliance," Impact Conference, Japan Foundation Center for Global Partnership, 1993.
- "Redistribution Policy in the Paper and Plastics Industry," Redistributors of America Inc., 1991.
- "Global Manufacturing Strategy Analysis," National Science Foundation, #DDM 91-14568, 1991.
- "Modeling Issues in International Manufacturing Systems," Stanford Institute of Manufacturing Automation, 1988 1989.
- "Global Manufacturing and Distribution Network Analysis," National Science Foundation #SES-8812570, 1988 1989.
- "Strategic Analysis of Integrated Production Distribution Systems: Models and Methods," National Science Foundation #DMC86-09840, 1986 -1989.

- "Distribution Logistics Systems: Models and Methods," National Science Foundation #ECS84-06695, 1984, 1985.
- "Manufacturing Planning Support System," Booz-Allen and Hamilton, 1982, 1983.
- "Regional Allocation and Organization," National Health Care Management Center, The Leonard Davis Institute of Health Economics, University of Pennsylvania, 1977, 1978, 1981.
- "An Analysis of Regional Health Planning Methodologies," National Center for Health Services Research, HEW HS-03543, 1979.

RESEARCH INTERESTS

- Service-Product Strategy Design, Pricing and Incentives
- Manufacturing Sourcing and Global Supply Chain Strategy
- Servicization KPIs and Service Quality Metrics
- Service Supply Chain Logistics Strategy and Resource Planning Systems
- Performance Based Incentives in Supply Chain Management
- Buyer-Supplier Coordination in Capital Intensive Industries
- E-commerce & Value Chain Transformation
- Benchmarking of Manufacturing/Logistics Systems
- Manufacturing/Marketing Interfaces

INVITED AND CONTRIBUTED LECTURES (since 1995)

"Flexible Stocking and Repair Sourcing Policies in Multi-Echelon Service Support Environments", MSOM Insead July 2013

"Global Supply Chain Strategy: A Framework for Evaluating Tradeoffs, Risk and the Impact of Outsourcing, Re-shoring and Near-Shoring", joint Wharton, MIT Forum March 2013, joint Wharton, Jiao Tong, MIT Forum June 2013 in Shanghai, joint Wharton, IIMB, MIT Forum November 2013 in Bangalore, joint Wharton, Stanford, MIT Forum March 2014 in Stanford

"Global Supply Chain Strategy in China: The Impact of Outsourcing, Re-shoring and Near-Shoring", Shanghai Institute of Foreign Trade 2012

"Product-Service Systems aka Servicization: Are Products Obsolete?, Shanghai Institute of Foreign Trade 2012 and Faculty of Industrial Engineering and Management, Technion & Recanati School of Business, Tel Aviv University, 2013 and Masters Lecture at 2013 Wharton Global Forum, Tokyo

"Service Competition and Product Quality in the U.S. Automobile Industry", 2012 MSOM Conference, New York., Berkeley Marketing Department 2012, University of

North Carolina, 2013.

"Research Opportunities at the Marketing-Operations Interface", Panel Moderator Marketing Science Conference, Boston 2012 and Panelist 2012 MSOM Conference.

"Product Performance Based Business Models: A Service Based Perspective", HICSS – 45, Maui, 2012.

Servicization – aka Product-Service Systems: Implications for Manufacturing Industries, Supply Chain Thought Leaders Roundtable, Beijing, 2011.

Chair, Fishman Davidson Center Service Supply Chain Thought Leaders Forum, "Strategies to Meet the Needs of the New Service Economy", Wharton West, 2011

"Performance Based Logistics for Service Supply Chain Management", Wilfred Laurier University, 2011

"Does Performance Based Logistics for Product Support Work? Observations from Research and Practice", Wharton Aerospace Conference, 2011

"Impact of Performance Based Contracting on Product Reliability: An Empirical Analysis". MSOM Conference, MIT, Boston MA, 2009, Utah Winter Operations Conference, 2010, MSOM Conference, Technion, Haifa Israel, 2011, MSOM Conference, University of Michigan.

"Servicization: Managing Mission Critical Products as Services that Generate Customer Value", Supply Chain Roundtable, Costa Rica, 2009.

"Performance Based Logistics for Service Supply Chain Management", Canadian Operations Research Society, Toronto, 2009.

"Operations Research at the Crossroads: Opportunities and Challenges to Support the Global Enterprise", Plenary Session, Gesellschaft fur Operations Research (German Operations Research Society), Augsburg, Germany, 2008.

"PBL Strategy: A Framework for Success", Performance Based Logistics, IDGA, Alexandria VA, 2008.

"Service Supply Chain Customer Value Delivery: Optimization, Performance Incentives and Implementation", Society of Logistics Engineers, Dayton Chapter and Air Force Institute of Technology, Wright Patterson Air Force Base, 2008.

- "Customer Value Delivery in the Service Supply Chain", Informs Practice Meeting, Vancouver, 2007 and Keynote Speaker POMS International meeting, Rio de Janeiro, 2007 and POMS conference La Jolla 2008.
- "Service Supply Chain Performance Based Strategies for Customer Value Delivery: The Role of Incentives Lessons Learned from the US Aerospace & Defense Industries", The Inter-Disciplinary Center, Israel, 2007.
- "Service Supply Chain Customer Value Delivery: Optimization, Performance Contracting and Implementation", Columbia University, IEOR-DRO seminar, 2006, University of Toronto, 2006, Naval Post Graduate School, 2007.
- "Performance Based Logistics: Incentive Contracting in Service Support Supply Chains" Utah Operations Management Conference, 2006, POMS 2006, MSOM 2006
- "Supply Chain Performance Based Strategies for Customer Value Delivery", Operations Management in Services Conference, POMS/Columbia University, Manufacturing and Service Operations Senior Fellow lecture- Informs, Denver, Boeing Strategy Group, Novellus, 2004
- "Supply Chain Performance Based Strategies for Customer Value Delivery", Washington University Meir Rosenblatt Memorial Lecture, 2004.
- "Threshold Inventory Rationing Policy for Multiple Service Differentiated Demand Classes", MSOM, Eindhoven, 2004.
- "After-Sales Service Supply Chain Strategy: Historical Antecedents, Current Trends and Opportunities for Differentiation", ZLOG 2004, International Logistics Summit, Zaragoza, Spain, 2004.
- "Global Service Supply Chain Management: Balancing Flexibility and Efficiency", Interlog Winter Conference, Miami, 2004.
- "Next Generation Service Supply Chain Planning: Optimization and Integration in a Commercial Off-the-Shelf Software System", Defense Logistics Conference, Washington D.C., 2003.
- "After-Sales Service Supply Chain Management: Strategies, Opportunities and New Directions", Keynote Speaker, After Sales Advanced Planning Conference, Polytechnic of Milan, 2003.
- "Optimal After-Sales Service Supply Chain Planning: Strategy, Metrics and Models", Informs, Atlanta, 2003

- "Optimal After-Sales Service Supply Chain Planning: Historical Antecedents, Current Trends and Research Opportunities", UCLA, NYU, 2003.
- "The Impact of Forecast Information Sharing on Supplier Delivery Performance: Lessons Learned from the Semiconductor Business", Johnson School of Business, Cornell University, 2003.
- "Optimized After-Sales Service Supply Chain Planning & Control", Production and Operations Management Society (POMS) meeting, Savannah, 2003.
- "The Dynamics of Supplier Delivery Performance with Order Cancellation", Production and Operations Management Society (POMS) meeting, Savannah, 2003.
- "Founding a Service Supply Chain Enterprise", Supply Chain Thought Leaders Conference, Lake Como, Italy, 2002.
- "Supply Chain Research in the Age of eBusiness", Keynote Speaker, National Science Foundation Design and Research Conference, Vancouver, 2000.
- "Electronic Supply Chain Strategies for the Millennium," Industrial Systems Conference, Santiago, Chile, 1999.
- "Supply Chain Management: A Framework for Research," NSF Workshop on Scaleable Enterprise Systems, 1999.
- "Three Dimensional Concurrent Engineering," INFORMS, Cincinnati, 1999 "Rationing Policies for Multiple Demand Classes in a Military Supply Chain," INFORMS, Seattle, 1998.
- "Service Capacity Management Decisions for Rentals and Leasing, INFORMS, Seattle, 1998.
- "A Two-Echelon Service Parts Logistics System for Repairables with Two Classes of Customer Service," INFORMS, Seattle, 1998.
- "Supply Chain Stability: Conditions for the Propagation of the Bullwhip Effect," INFORMS, Montreal, 1998.
- "Intra Organizational Supply Chain Coordination for Service Parts Logistics Systems: A Military Systems Field Study," INFORMS, Montreal, 1998.
- "Capital Investment Decisions in the Management of Rental Equipment," INFORMS, Montreal, 1998.

"New Product Development Process Management: Empirical & Model Based Perspectives," Harvard University, 1994; MIT, 1997.

"Inventories and Supply Chain Stabilization: Conditions for Variance Reduction," MSOM Conference, Dartmouth College, 1996.

"After Sales Service Logistics Systems: The Saturn Strategy," Eindhoven University, Lean Air Initiative Conference, 1997; University of Montreal, University of Michigan, 1997; MIT, University of Cincinnati, University of California, Los Angeles, Lehigh University, Jao Tong University, Taiwan, 1996; and New York University, 1995.

EXECUTIVE EDUCATION

Sikorsky Corporation, "Supply Chain Management in the Aerospace and Defense Industry: Issues, Challenges and Opportunities", 2012.

Wharton Rongsheng and Glorious Global Leaders Program 2011

Wharton Samsung Program 2010

IDC – Mellanox Program 2010

Wharton American Wholesale Marketers Association, 2008

Wharton Global Supply Chain Program, 2007

Oracle Corporation, 2006

Intermec Corporation, 2006

Wharton IDC Program, 2004, 2005

Wharton West Executive MBA, 2004

Supply Chain Management - Thought Leadership (MIT), 2003

Solving the CRM Challenge (Wharton), 2002

Textron Global Leadership Forum (Wharton), 2002

Wharton Forum on e-Business, 2002

Wharton Electronic Commerce Strategy Program, 2000, 2001 US Navy Supply Chain Program, 1999, 2000

Wharton Supply Chain and Jiangsu Programs, 1998

Systems Management Group, 1997

Wharton Corporate Programs
Samsung, 1995, 1996
Mallinkrodt, 1996
European Executive Program, 1996

Wharton CEO Circle, Taipei, 1996.

Wharton Executive Development Program, 1993 - 1996

Wharton International Forum (Core Faculty) (Philadelphia, Bruges, Kyoto) 1990 - 1992.

Wharton Advanced Management Program "Manufacturing Strategy," 1990 - 1992.

Wharton Executive Education Seminar "Doing Business in Uncertain Times," 1991.

Campbell Soup Company, "Overview of Competitive Manufacturing Strategies," 1989.

Trinova Corporation, "Competing Through Integrated Manufacturing," 1987 - 1989.

Tel Aviv University and Tadiran Corporation, "Manufacturing Strategy," 1987.

General Motors Corporation, "Manufacturing Strategy," 1986.

Society of Manufacturing Engineers, "Manufacturing Strategy for Competitive Advantage," 1986, 1987.

Tel Aviv University and Israel Aircraft Industries, "Multi-Level Inventory Systems," 1986.

HARSCO Corporation, President's Meeting: "Technology Management," 1985.

Wharton Seminar for Business Writers, "Just-In-Time Inventory Control: The Japanese Method," 1984.

Operations Research Society of America, "Recent Advances in Operations Management," Practitioner Workshop Series, San Francisco, 1984.

Institute for International Research, "Production Planning and Inventory Management," Hong

Kong, Singapore, 1981, Sidney, Melbourne, Hong Kong, Djakarta, 1983.

Wharton School Seminar, "Effective Production Planning and Inventory Management," 1979 - 1982. Over 40 seminars in U.S., Canada, and England.

Penton Inc. Seminar, "Production Planning, Scheduling and Inventory Control," University of Colorado, 1976, University of Minnesota, 1977, Canadian School of Management, 1979.

Free Library of Philadelphia - Coordinator and Speaker in Management Lecture Series, 1976.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Engineering Advisory Committee, National Science Foundation, 1999 – 2001.

Senior Editor and Co-Editor, Special Issue on "Operations Marketing Interface," *Manufacturing* and Service Operations Management, 1996 - 2002

Editorial Advisory Board, Supply Chain Management Review, 1996 - 2001

Co-Editor, Special Issue on "New Directions in Operations Management," *Operations Research*, Vol. 44, No. 1, Jan-Feb 1996.

Area Editor, Manufacturing, Operations and Scheduling, *Operations Research*, 1990 - 1995.

Editorial Board, Journal of Operations Management, 1989 -

Advisory Board, American Society for Quality Control, 1987 - 1988.

Editorial Board, Journal of Manufacturing and Operations Management, 1989 - 1992.

Department Editor, Health Care & Service Sector Industries, *Operations Research*, 1983 – 1988.

Associate Editor, Naval Research Logistics Quarterly, 1984 - 1988.

Institute for Operations Research and Management Science (INFORMS), 1996 -

Operations Research Society of America (Member)

Chairman, Student Affairs Committee, 1982.

Publications Committee, 1981.

Student Affairs Committee, 1976 - 1979.

The Institute of Management Sciences (Member)

Executive Committee, Special Interest Group on Manufacturing

Session Chairman at joint ORSA-TIMS Meetings, Milwaukee, 1979; Toronto, 1981; San Francisco, 1984; Boston, 1985 (Cluster Chairman); Vancouver 1989, Boston, 1994 (Cluster Chairman).

Member of Text Specification Panel for Operations Management, American Assembly of Collegiate Schools of Business, 1983.

Society of Manufacturing Engineers

American Production and Inventory Control Society

International Society for Inventory Research

Association for Health Services Research

Operations Management Association

Production and Operations Management Association

TEXTBOOK

Manufacturing Automation (with U. Apte), McGraw-Hill Companies, Inc., 1997.

RESEARCH PUBLICATIONS

- 1. "Manufacturing Sourcing in a Global Supply Chain: A Life Cycle Analysis", (with S. Cui), OPIM-Wharton Working Paper, 2014.
- 2. "Sourcing and Stocking Policies in a Two-echelon, Multiple Location, Repairable Parts Supply Chain", (with I. Cohen), OPIM-Wharton Working Paper, 2014.
- 3. "Product Quality or Service Quality? The Impact of Customer Heterogeneity", (with Guajardo, J. A.), OPIM Wharton Working Paper, under review, 2014.
- 4. "Service Competition and Product Quality in the U.S. Automobile Industry", (with Guajardo, J.A.and S. Netessine), OPIM-Wharton Working Paper, under review, 2014.
- 5. "Joint Stocking and Sourcing Policy for Single Depot, Single Base, Two-Echelon Environments with Repairables: The Role of Flexibility",", (with I. Cohen), OPIM-Wharton Working Paper, under review, 2014.
- 6. "The Parking Time Dilemma and Chinese Postman's Revenue", (with M. Dror and N. Suakkaphong), OPIM-Wharton Working Paper, under review, 2013.
- 7. "Product Performance Based Business Models: A Service Based Perspective", **Proceedings HICCS-45**, Jan. 2012.
- 8. "Impact of Performance Based Contracting on Product Reliability: An Empirical Analysis", (with J. Guajardo, S. Kim and S. Netessine), *Management Science*, Volume 58, No. 5, May. 2012.
- 9. "Reliability or Inventory? Analysis of Product Support Contracts in the Defense Industry", (with S. Kim and S. Netessine), Working Paper, OPIM Department, Wharton School, 2010.
- 10. "Contracting for Infrequent Restoration and Recovery of Mission Critical Systems", (with S. Kim, S. Netessine and S. Veeraraghavan), *Management Science*, Vol. 56, No. 9, September 2010.
- 11. "Performance Contracting in After-Sales Service Supply Chains", (with S. Kim and S.

- Netessine), *Management Science*, Volume 53, No. 12, December, 2007.
- 12. "Operations Risk Management: Overview of Paul Kleindorfer's Contributions", (with H. Kunreuther), *POMS Journal*, Volume 16, No. 5, Sept. Oct. 2007.
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