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**MORRIS A. COHEN**

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Operations, Information and Decisions Department  
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**PERSONAL:** Age 72, 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, Graduate School of Business, Stanford University, 2020  
Founder and CEO, D3 Analytics, 2017 -  
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, Operations, Information and Decisions  
Department,<sup>1</sup> 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

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<sup>1</sup> Department was named the Decision Sciences Department (1974 – 1993), the  
Operations, Information Management Department (1993 -2016) and the Operations, Information  
and Decisions Department (2016 -)

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  
Visiting Scholar, Massachusetts Institute of Technology, 1997  
Chairman, Operations and Information Management Department, Wharton School, University of Pennsylvania, 1992-1995  
Co-Director, Center for Manufacturing and Logistics Research, 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, Wharton School, University of Pennsylvania, 1984-1985  
Associate Professor, Department of Decision Sciences, 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, Wharton School, University of Pennsylvania, 1974-1980  
Senior Fellow, Leonard Davis Institute of Health Economics, 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**

2017 Advisory Board, Center for Transportation & Logistics, Massachusetts Institute of Technology

2015 The Wharton School, Teaching Commitment and Curricular Innovation Award

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 MSOM Senior Fellow, Manufacturing and Service Operations Management Society

2001 Institute of Industrial Engineers Award for best paper published in *IIE Transactions* in 1999

1998 Fellow, International Academy of Management

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)

1989 Edelman Prize for Best Practice in Management Science (runner-up)

## **CONSULTING ACTIVITIES**

D3 Analytics – 2019 –

- (semiconductor equipment service support, consumer electronics retail supply chain planning)

Consumer Electronics Supply Chain Sourcing Class Action – 2019

- Expert witness for defense

Facebook 2019 – 2020

- Develop decision support system applying machine learning to Sales and Operations Planning (S&OP) for consumer electronics product line

Applied Material 2018- 2020

- Develop decision support system based on machine learning and big data concepts for planning and control of service parts inventory management

Atlas- Copco 2017

- Develop global supply chain strategy for after-sales service support for industrial and mining equipment manufacturer

EI Al 2013-2014

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

PTC 2012-2014

- Develop strategies to integrate product design, service lifecycle management support systems, smart products and servicization

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 supply chain analysis

SAP 2007

Intermec 2006

Oracle 2006

Boeing 2006

MCA Solutions Inc. – 2002 – 2012

(Supported implementations include Apple, Baker Hughes, Bombardier, Cymer, Dassault, 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, 2017

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      Operations Analysis Techniques: Introduction to quantitative methods at the undergraduate level-linear programming, integer programming, decision analysis, dynamic programming.
- DS 21      Operations Analysis in Production Systems: Undergraduate course dealing with inventory, production, distribution, aggregate planning, and facility planning.
- OIDD 220    Introduction to Operations Management: This undergraduate course introduces concepts of operations management and their application to solve business problems in order to enhance a firm's competitive advantage or to improve the performance of an organization. The course examines both the theoretical foundations of operations management and how its principles and methods are employed in practice to support both tactical and strategic decision making. Real world examples are drawn from the automobile industry, fashion retailers, health care services, semiconductor, and high-tech industries, among others. These examples illustrate how companies use operations management principles to gain competitive advantage.
- OIDD 224    Analytics for Service Operations: Undergraduate elective that focuses on the design, management and control of service operations. Topics include capacity planning, revenue management, after-sales service, service product design, service quality management 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.
- BA 369      Manufacturing Technology/Facility Strategy (Stanford): An overview of technology planning and facility/capacity planning. Emphasis is given to CIM and location models.
- OIDD 380    Operations Strategy Practicum: an undergraduate experience-based elective that focuses on global supply chain strategy at various locations (Israel). It includes site/plant/DC tours and visits with senior managers in leading corporations and at startups. The objective is to discuss and evaluate current company operations, trends and supply chain strategies through direct observation and interaction.
- OPIM 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 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.
- OPIM 650 Management Decision Analysis: A quantitative methods course at the MBA level oriented around case studies involving resource allocation, decision analysis, simulation and planning languages.
- OPIM 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 facility 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 Design, Manufacturing & Marketing Integration: A project course in which students design and build prototype of new product and consider cross-functional management issues.

- OPIM 659 Applied Dynamic Stochastic Systems: A doctoral level course on the theory and applications of dynamic programming, Markov decision processes and stochastic control (also listed as OR 606).
- OIDD 680 Operations Strategy Practicum: an MBA experience-based elective that focuses on global supply chain strategy at various locations (US, Mexico, Germany, Japan). It includes site/plant/DC tours and visits with senior managers in leading corporations. The objective is to discuss and evaluate current company operations, trends and supply chain strategies through direct observation and interaction.
- 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 a field based, on-site course that includes extensive interactions with senior executives and site/plant visits with leading corporations 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.
- 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 Distribution Systems: 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 Aid, 1980

## **WHARTON SCHOOL ACTIVITIES**

Chair, Finance Department 5-year Review Committee 2016-2018  
Curriculum Innovation and Review Committee 2015-2016  
Advisory Committee on Global Initiatives 2014- 2015  
MBA & Undergraduate Curriculum Committee, 2011-2012  
Chair, Finance Institutions Center Quinquennial 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

Member, Personnel Committees for promotion with tenure 2019, 2020  
Chair Personnel Committees for promotion and hiring of senior faculty 2015, 2016, 2017  
Doctoral Admissions Committee 2014-2015  
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. Fei Gao, “Performance, Reliability or Time-to-Market”, Dissertation completed, 2017
2. Shiliang Cui, “Global Supply Chain Sourcing”, Dissertation completed, 2014
3. Jose Guajardo, “Empirical Analysis of Performance Based Incentives in Supply Chains, Warranties and Service Quality”, Dissertation completed 2012.
4. 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.
5. Justin Ren, “Sharing Forecast Information in a Supply Chain” Dissertation completed 2003.
6. Sergei Savin, “Strategic Analysis of Lease/Rental of Capital Equipment.” Dissertation completed 2001.
7. Vinayak Deshpande, “Inter-Agency Coordination Strategy in High Technology Logistics Support.” Dissertation completed 2000.
8. Shuren Zhang, “Benchmarking of Service Parts Supply Chain.”
9. Yunzeng Wang, “Repairable Multi-Echelon Inventory.” Dissertation completed 1998.

10. Vipul Agrawal, "Planning Models for Multi-Level Distribution Systems." Dissertation completed 1995.
11. Narendra Agrawal, "Supplier-Producer Material Management Interface." Dissertation completed 1994.
12. Teck-Hua Ho, "Product Design: Manufacturing-Marketing Interface." Dissertation completed 1993.
13. Arnd Huchzermeier, "Global Manufacturing Strategy Planning Under Exchange Rate Uncertainty." Dissertation completed 1991.
14. Sangwon Moon, "Manufacturing Systems Facility Design." Dissertation completed 1988.
15. David Pyke, "Production - Distribution Systems." Dissertation completed 1987.
16. Ricardo Ernst, "Multi-Owner Distribution Systems." Dissertation completed 1987.
17. Manuel Baganha, "Multi-Echelon Inventory Systems." Dissertation completed 1987.
18. Arunahba Chatterjee, "Stochastic Models of Robot/Work Center Systems", Dissertation completed 1985
19. Hau Lee (Operations Research), "Multi-Institutional Services Utilization." Dissertation completed 1982.
20. 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 Management of Repairables", El Al Airlines and the Technion Israel, \$20,000, 2013 – 2015.
- "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**

- Resilience and Agility – Supply Chain Strategy
- Machine Learning and Big Data Applications to Supply Chain Planning
- Service Supply Chain Logistics – Strategy and Resource Planning Systems
- Service-Product Strategy – Design, Pricing and Incentives
- Manufacturing Sourcing and Global Supply Chain Strategy
- Servicization – KPIs and Service Quality Metrics
- 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)**

“Putting Supply Chain Resilience Theory into Practice”, Boeing Center Industry  
 Conference – “Pandemic Shocks and Global Supply Chains”, Washington University,

2020.

“Designing Customer-Supplier Inventory Coordination”, Rotman School, University of Toronto, 2020, Wharton School, 2020.

“Optimization for the Delivery of Service Differentiation Through Operating Segments: Design and Control Challenges”, MIT, John Hopkins, Euro 2019 – Dublin, 2019

“Industry 4.0”, Supply Chain Thought Leaders Conference, Porto, Portugal, 2018.

“A Framework for Delivering Service Differentiation Through Operating Segments: Research Opportunities and Implementation Challenges”, NY Stern, INFORMS International Conference on Service Science, 2018.

“Performance, Reliability or Time-to-Market?” POMS Israel 2017, Georgetown University 2018.

“Global Supply Chain Sourcing Strategy: Analysis Based on Benchmark Surveys and a Life Cycle Model”, University of Chile, Penn State, University of Michigan, University of Toronto, MIT, POMS, MSOM, 2015 – 2017.

"Manufacturing Sourcing in a Global Supply Chain: A Life Cycle Analysis", EURO 2015, Glasgow.

“Global Operations Sourcing Strategy: A Chinese Perspective”, MSOM, Toronto, June 2015

“Flexible Stocking and Repair Sourcing Policies in Multi-Echelon Service Support Environments”, MSOM INSEAD July 2013, POMS 2014.

“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”, 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**

Wharton Hero MotoCorp Ltd. Program 2016

Inter-Disciplinary Center (IDC) – Executive MBA Course 2014

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

Inter-Disciplinary Center (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

    Mallinckrodt, 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

Advisory Editorial Board, *The Journal of Japanese Operations Management and Strategy*, 2015 –

Department Editor (Services), *Manufacturing and Service Operations Management*, 2016 – 2020

Co-Editor, Special Issue on “Innovations in Supply Chain Interfaces and Structure,”  
*Manufacturing and Service Operations Management*, 2015-2016.

Editorial Board, *Service Science*, 2014 – 2018

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 - 1993

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.

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2. “Revisit of AAA Excellence of Global Supply Chains: Robustness, Resilience and Realignment”, (with P. Kouvelis), forthcoming *Production and Operations Management*, 2020.
3. “Putting Supply Chain Resilience Theory into Practice”, (with S. Cui, S. Doetsch, R. Ernst, A. Huchzermeier, P. Kouvelis, H. Lee, H. Matsuo and A. Tsay), forthcoming *Management and Business Review*, 2020.
4. “Designing the Right Global Supply Chain Network”, (with H. Lee), *Manufacturing and Service Operations Management*, Articles in Advance, vol. 22, 15-24, 2020.
5. “Joint Optimization of Spare Parts Inventory and Service Engineers Staffing with Full Backlogging”, (with I. Vliegen, S. Rahimi-Ghahroodi, A. Al Hanbali), *International Journal of Production Economics*, vol.212, 39-50, 2019.
6. “The Effect of Government Support on Green Product Design and Environmental Impact”, (with F. Gao and S. Cui), OIDD-Wharton Working Paper, 2018.
7. “Service Differentiation and Operating Segments: Research Opportunities and Implementation Challenges”, (with J. Guajardo), chapter in *Advances in Service Science - Proceedings of the 2018 INFORMS International Conference on Service Science*, edited by H. Yang and R. Qiu, 43-52, 2019.

8. “How Managers Think Strategically About Global Manufacturing Location and Reshoring Decisions”, (with Y. Chen, S. Cui, M. Dong, R. Ernst, A. Huchzermeier, P. Kouvelis, H. Lee, A. Tsay, S. Liu, H. Matsuo, D. Simchi-Levi, and M. Steuber), OIDD-Wharton Working Paper, 2018
9. “OM Forum - Benchmarking Global Production Sourcing Decisions: Where and Why Firms Off- and Reshore”, (with S. Cui, R. Ernst, A. Huchzermeier, P. Kouvelis, H. Lee, H. Matsuo, M. Steuber and A. Tsay), *Manufacturing and Service Operations Management*, volume 20(3):389-402, 2018.
10. “Performance, Reliability or Time-to-Market? Innovative Product Development and the Impact of Government Regulation”, (with F. Gao and S. Cui), forthcoming, **Production and Operations Management**, 2020.
11. “Joint Repair Sourcing and Stocking Policies for Repairables Using Elang-A and Elang-B Queueing Models”, (with S. Bitton and I. Cohen), **IIE Transactions**, volume 51, No. 10, 2019.
12. "Manufacturing Sourcing in a Global Supply Chain: A Life Cycle Analysis", (with S. Cui), OIDD-Wharton Working Paper, 2016.
13. "On Sourcing and Stocking Policies in a Two-echelon, Multiple Location, Repairable Parts Supply Chain", (with I. Cohen and E. Landau), *Journal of the Operational Research Society*, vol. 68, 617-629, 2017.
14. “Service Differentiation and Operating Segments: A Framework and Application to After-Sales Services”, (with J. Guajardo), *Manufacturing and Service Operations Management*, volume 20(3):440-454, 2018.
15. “Service Competition and Product Quality in the U.S. Automobile Industry”, (with J. Guajardo and S. Netessine), *Management Science*, Vol. 62, No. 7, July 2016.
16. “City Streets Parking Enforcement Inspection Decisions: The Chinese Postman's Perspective”, (with M. Dror and N. Summerfield), *European Journal of Operational Research*, Volume 24, 149-160, 2015.
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23. “Winning in the Aftermarket”, (with N. Agrawal, V. Agrawal), *Harvard Business Review*, May 2006.
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72. "Resource Deployment Analysis of Global Manufacturing and Distribution Networks" (with H. Lee). *Journal of Manufacturing and Operations Management*, 2, 1989, pp. 81-104.
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79. "Material Management in Integrated Production - Distribution Systems" (with H. Lee). *Proceedings 1987 NSF Systems Conference on Production Research and Technology*, Ann Arbor, MI, October 1987, pp. 141-145.

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142. "What's Wrong with Current OR Curricula: Round 2" (with S. Nahmias and M. Magazine). *Interfaces*, Vol. 9, No. 1, November 1978, p. 87.
143. "Regional Resource Allocation and Organization" (with W. Hamilton, J. Bly, J. Durback, R. Rosenman and S. Warren). Technical Report prepared for the Research Issues Conference, National Health Care Management Center, Leonard Davis Institute of Health Economics, University of Pennsylvania, May 24, 1977.
144. "Marshall, P. W., et al, Operations Management: Text and Cases," Review in *The Journal of Business*, Vol. 51, No. 1, January 1976, pp. 138-140. "MCSSAP II: (Monte Carlo Simulation of Student Assistance Plans)." Confidential Report to the Planning Branch, Treasury Board Secretariat, Government of Canada, 1973.
145. "Microsimulation System Manual" (with L. Cseh). Institute for Policy Analysis, University of Toronto, 1973.
146. "Monte Carlo Simulation of Government Programs: The Deterministic Model," Quantitative Course Report, Institute for Policy Analysis, University of Toronto, 1973.
147. "MCSSAP (Monte Carlo Simulation of Student Assistance Plans): A User's Manual," Institute for Policy Analysis, University of Toronto, 1971.

## EDUCATIONAL MATERIALS

### Software:

- |  |                                    |
|--|------------------------------------|
| "Master Scheduling Game"                       | February 1987                      |
| "Production Scheduling Game"                   | February 1987                      |
| "General Appliance Corporation Case Simulator" | September 1987, revised 1993, 1996 |

### Cases:

- Revenue Management at Harrah's Entertainment Inc., (with Noah Gans and N. Agrawal), Vol 9, No. 3, May 2009, *Inform Transactions on Education*.
- General Appliance Corporation, 1993, revised 1998  
 Adopted at Harvard, MIT, Michigan, Dartmouth, Georgetown, Stanford  
 Published in *Global Operations and Logistics*, by J. P. Dornier, et al., Wiley, 1998.
- Ingersoll Rand - B Case, 1994. *Technology and Operations Review*, 1997.

### Teaching Notes:

- Tradeoff Analysis and Portfolio Management in New Product Development  
 (with T. Ho) 1993. *Technology and Operations Review*, 1997.
- Cyclone Grinder - Ingersoll Rand Case Teaching Note (with T. Flaherty) 1996.
- "Repairable Service Parts Inventory Management", (with V. Deshpande, N. Rudi), 2004.



## WORK IN PROGRESS - RESEARCH PROJECTS

1. “Customer- Supplier Inventory Management Coordination”, (with S. Chen, H. Lee, T. Moench)
2. “Transition from Products to Services: The Need for Integrating Industrial Ecology and Service Operations Perspectives”, (with Vered Blass and Tzruya Chebach, Tel Aviv University)
3. “Service Supply Chain Inventory Management: Models, Systems and State-of-the-Art” (with V. Agrawal and V. Deshpande), forthcoming chapter in *Technology, Information & Operations Management*.