VITA - BRUCE C. HARTMAN Ph.D.

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EDUCATION

PhD, MIS and Supply Chain Management, University of Arizona, Tucson, AZ, Management Information Systems Department (3rd ranked nationally in its field), Dissertation Advisor: Moshe Dror, Dissertation Title: Cooperative Games and Inventory Cost Allocation, Minor: Economics.

MSEd, Mathematics and Secondary Education, University of Pennsylvania, Philadelphia, PA

AB, Mathematics, magna cum laude, Princeton University, Princeton, NJ, Thesis Topic: Differential Operators, Thesis advisor: William Feller, Examiners: Elias M. Stein, Robert P. Langlands.

UNIVERSITY TEACHING EXPERIENCE

Professor, Department of Business Administration, California State University Maritime, Vallejo, CA, 94590. (Retired, and current)

Undergraduate courses in International Business and Logistics major, online and in class. Logistics, Supply Chain Management, International Business, Information Systems.

Professor, Logistics and Management, University of St. Francis, Joliet IL 60435, USA (Retired, and current)

Graduate and Undergrad courses in Logistics and Transportation, Computer Science, Information Systems, and Entrepreneurship. Founding Researcher at USF Intermodal Logistics Center. Developed programs in Logistics and Computer Information Systems. Member of Academic Technology Advisory Committee. Developed several online courses in Logistics and Business Intelligence, and classroom courses in SAP ERP fundamentals and Information Systems Entrepreneurship. Institute Research includes publications on Soybean supply chain issues, Infrastructure in Chicago, and Intermodal Chassis Availability.

Visiting Professor, Information Technology, Kogod School of Business, American University, Washington, DC 20016 USA.

Undergraduate and Graduate courses in Operations and Supply Management and Statistics.

Past Interim Chair, Department of Business Administration, California State University Maritime, Vallejo, CA, 94590. Member of Maritime Policy and Management Department, ABS School of Maritime Policy and Management. Retired.

Past Chair of Curriculum Committee (3 years), Member of Cost Allocation Committee (6 years); Past Member, Academic Master Plan Committee, Website Redesign Committee

Undergraduate courses in Logistics, Export/Import, Strategy, Supply Chain Management, Operations Management, Macroeconomics, Microeconomics, Managerial Economics, Purchasing, Quantitative Management, Coop Internship Supervision, Senior Portfolio, Maritime Economics, Organization Behavior and Labor Relations, and Leadership. Author of four online courses for master's degree program in Transportation and Engineering Management.

College of Business and Economics, California State University, East Bay.

Undergraduate and Graduate Courses in Quantitative Management and Operations Management. Graduate Courses in Quantitative Management Science, Global Operations and Outsourcing, Logistics Management, and Business Research Methods. Undergraduate Courses in Mathematics for Business and Social Science.

Mathematics Department, Visiting Assistant Professor, and School of Economics and Business Administration, St. Mary's College of California.

Courses in Executive MBA Program, Forecasting and Operations Management. Courses in Calculus, Probability and Statistics.

MIS Department, University of Arizona, Adjunct Assistant Professor.

Committees: College of Business and Public Administration, Committee on Mathematics Preparation and Committee on Core Statistics Curriculum for Business College.

Courses: Mathematical Modeling and Analysis, 1996-1997; Complete responsibility for this required core course for first-year PhD. students in MIS, which is also open to MBA students. Service Management, Spring 1997; Graduate level class taught by case method. Logistics and Supply Chain Management, Spring 1996-1998; Graduate level elective using a simulation, case studies, and projects. Principles of Operations Management, Spring 1993- Spring 1998; Complete responsibility for this upper-level required course for all majors in Operations Management, also taken by MBA students. Designed team projects, included outside speakers from industry, devised service project learning experience for class.

Project Management, Fall 1997-Spring 1998; Undergraduate-Graduate course in project management techniques, open also to MBA students. Included emphasis on software project management. Introductory Operations Management, Spring 1991- Fall 1997; Undergraduate course required for students in the School of Business and Public Administration. Developed own lectures and team projects.

Mathematics Department, University of Arizona

Business Calculus, 1997; Technical Advisor to classes using symbolic calculus computing and group projects in the business calculus curriculum. I designed this project and won grants from the university to cooperate with the Math Department to implement change to use of MathCad software in business calculus education. Business Calculus, 1994-1997; Required course for admission to College of Business and Public Administration. Emphasis is on business and economic applications of calculus. Adapted Harvard Calculus Consortium methods. Finite Mathematics, 1994-1996;

WORK EXPERIENCE

MIS Director, Intraware Inc., Orinda, CA; ran MIS operations for startup internet provider of software distribution management services.

IS Manager, Business and Manufacturing Applications, Lucent Technologies, San Jose, CA, 1998-1999; ran Oracle Applications for ERP, distribution and e-supplier for \$1.6B manufacturer of voice mail systems.

Director, Engineering; Director, Marketing; Director, MIS, System Industries, Milpitas, CA, 1985-1988, 1989-1991; ran engineering, marketing, consulting operations for major storage systems vendor.

Director, MIS, Santa Cruz Operation, Santa Cruz, CA, 1988-1989; responsible for all business systems and UNIX network of 260 computers.

Manager - Systems, Pennzoil Corporation, Tucson AZ, 1978-1985; managed development and deployment of all process control and computer systems for Duval mining division, a \$600M international company.

Senior Systems Analyst, Bell Technical Operations Co., Tucson, AZ, 1977-1978; developed parts of large scale computer simulations of communications networks on supercomputers for US Army.

Mathematician, US Army Communications Command, Ft. Huachuca, AZ, 1977, designed large computer models of communications networks, antennas, and radio propagation.

COLLEGE PREP TEACHING EXPERIENCE

Echo Farms Inc., Chalfont, PA, 1963-1978, and Community Camp School: Owner - president, Founder - instructor. Owned and ran a corporation that operated a youth camp. Founded and managed a private K-12 college prep school with two campuses.

William Penn Charter School, Philadelphia, PA, 1964-1969, and Germantown Academy: Instructor, Football Coach. Taught mathematics, computer science, and chemistry to college prep students.

PUBLICATIONS

- (1) Hartman, Bruce C. and Moshe Dror. (1993). "A Note on When Monotonicity Implies Differentiability a.e." International Journal of Mathematical Education in Science and Technology. 24 (6), 922-926. DOI: 10.1080/0020739930240616
- (2) Hartman, Bruce C. and Moshe Dror. (1996). "Cost Allocation in Continuous Review Inventory Models." Naval Research Logistics Journal, 43, 549-561. DOI: <a href="https://doi.org/10.1002/(SICI)1520-6750(199606)43:4<549::AID-NAV7>3.0.CO;2-7">https://doi.org/10.1002/(SICI)1520-6750(199606)43:4<549::AID-NAV7>3.0.CO;2-7
- (3) Hartman, Bruce C. and Moshe Dror. (1996). "Inventory Centralization: Some Cost Allocation Issues." Proceedings of the MSOM Conference, Dartmouth College, Hanover, NH. 149-154.
- (4) Hartman, Bruce C., Eugene A. Smith, and Thomas L. Rodgers. (1997). "Symbolic Math and Collaborative Learning: Teaching Business Calculus in a Group Decision Environment." In Managing Information Technology Resources and Applications in the World Economy, Proceedings of the Eighth IRMA International Conference, Vancouver, BC, Canada. Hershey, PA: Idea Group Publishing. 493-494.
- (5) Knotts, Gary, and Bruce C. Hartman. "A Project Management Tool for Computer-supported Cooperative Work during Project Planning." Proceedings of the 31st Hawaii International Conference on System Sciences. January 1998, I 623-631. DOI: https://doi.ieeecomputersociety.org/10.1109/HICSS.1998.653149
- (6) B. C. Hartman and T. L. Rodgers, "Developing proficiency in math: cause and effect in a cognitive process," *Proceedings of the Thirty-First Hawaii International Conference on System Sciences*, Kohala Coast, HI, USA, 1998, pp. 301-308 vol.1, DOI: 10.1109/HICSS.1998.653112
- (7) Knotts, Gary, and Bruce C. Hartman. "A Project Scheduling Methodology Derived as an Analogue of Digital Circuit Technology." Annals of Operations Research. 82 (1998) 9-27. DOI: https://doi.org/10.1023/A:1018995610856
- (8) Dror, Moshe, and Bruce C. Hartman. "Stopping Rules for Utility Functions and the St. Petersburg Gamble." Applied Mathematics and Computation. 98 (1999) 279-291. DOI: https://doi.org/10.1016/S0096-3003(97)10169-2
- (9) Dror, Moshe, and Bruce C. Hartman, co-editors, "Game Theory Applications in Industry," Special Issue, IIE Transactions on Operations Engineering. 1999. DOI: https://doi.org/10.1080/07408179908969881
- (10) Hartman, Bruce C., Moshe Dror, and Moshe Shaked. "Cores of Inventory Centralization Games." Games and Economic Behavior. 31 (2000) 26-49. DOI: https://doi.org/10.1006/game.1999.0732

- (11) Knotts, Gary, Moshe Dror, and Bruce C. Hartman. "Digital Circuits as a Modeling Metaphor for Resource Constrained Project Management." IIE Transactions on Scheduling and Logistics. 32 (2000) 387-401. DOI: https://link.springer.com/article/10.1023/A:1018995610856
- (12) Hartman, Bruce C. and Moshe Dror. "Optimizing Centralized Inventory Operations in a Cooperative Game Theory Setting." IIE Transactions, 35-3 (2003) 243-257. DOI: https://doi.org/10.1080/07408170304363
- (13) Dror, M., B.C. Hartman, G. Knotts, and D.D. Zeng,. "Autonomous Random Resource Allocation to Coordinate Access to Mutually Exclusive Resources", J. of Applied Mathematics and Decision Sciences 9(1) (2005), 1-18. DOI: 10.1155/JAMDS.2005.1
- (14) Hartman, Bruce C. and Moshe Dror. "Allocation of Gains from Inventory Centralization in Newsvendor Environments." IIE Transactions on Scheduling and Logistics, 37 (2005) 93-107. DOI: https://doi.org/10.1080/07408170490278283
- (15) Dror, Moshe, and Bruce C. Hartman. (2005). "Shipment consolidation—who pays for it and how much." Proceedings of the MSOM Conference, Northwestern University, Evanston, IL. July, 2005.
- (16) Dror, Moshe, and Bruce C. Hartman. (2006). "Shipment consolidation—who pays for it and how much." Management Science, 53(1) (2006) 78-87. DOI: https://doi.org/10.1287/mnsc.1060.0607
- (17) Bruce C. Hartman. (2007). "Cost Allocation in Inventory Consolidation." Proceedings of the BPS Conference, Mumbai, India. November, 2007.
- (18) Dror, Moshe, and Bruce C. Hartman. (2010). "Survey of Cooperative Inventory Games and Extensions." Journal of Operational Research Society, doi: 10.1057/jors.2010.65.
- (19) Dror, Moshe, Bruce C. Hartman, and Wei Chang. (2011). "The Cost Allocation Issue in Joint Replenishment." International Journal of Production Economics. 136 (1) 232-244. DOI: 10.1016/j.ijpe.2011.07.015.
- (20) Clott, Christopher B. and Bruce C. Hartman. (2013). "Clean Trucks in California Ports: Modelling Emissions Policy." International Journal of Shipping & Transport Logistics. 5 (4/5), 449-462. DOI: 10.1504/IJSTL.2013.055273
- (21) Hartman, Bruce C. and Christopher B. Clott. (2012). "An Economic Model for Sustainable Harbor Trucking." Transportation Research Part D: Transport and Environment. 17 (5) 354–360. DOI: 10.1016/j.trd.2012.02.004.
- (22) Hezarkhani, Behzad, Wieslaw Kubiak, and Bruce C. Hartman. (2014). "Asymptotic Behavior of Optimal Quantities in Symmetric Transshipment Coalitions". Operations Research Letters. DOI: 10.1016/j.orl.2014.07.008
- (23) Hartman, Bruce and Christopher B. Clott. (2014). "Intermodal Chassis Supply A Bayesian Game". Research in Transportation and Business Management. DOI: 10.1016/j.rtbm.2014.10.005
- (24) Clott, Christopher B., Bruce Hartman, Elizabeth Ogard, and Althea Gatto. (2014). "Container Repositioning and Agricultural Commodities: Shipping Soybeans by Container from US Hinterland to Overseas Markets". Research in Transportation and Business Management. DOI: 10.1016/j.rtbm.2014.10.006.
- (25) Clott, Christopher B. and Bruce C. Hartman. (2016). "Supply Chain Integration, Landside Operations and Port Accessibility in Metropolitan Chicago". Journal of Transportation Geography (51) 131-139. DOI: 10.1016/j.jtrangeo.2015.12.005

- (26) Bachkar, K., Awudu, I., Osmani, A., and Hartman, B. (2017) "Fleet Management for Rail Car Transport of Ethanol". Research in Transportation Business and Management. (25) 29-38. DOI: https://doi.org/10.1016/j.rtbm.2017.04.002
- (27) Hartman, B. and Clott, C. (2017) "Chassis Pooling and Profit Allocation". Submitted to Maritime Economics and Logistics.
- (28) Clott, C., Hartman, B., and Pudelek, A. (2018) "Built to Last? The Changing Role of Ocean Transportation Intermediaries: Disintermediation and Reintermediation". American Journal of Transportation and Logistics. (1) 5 0001-0017. DOI:10.28933/ajtl-2018-01-0201.
- (29) Hartman, Bruce. (2018) "Sharing Loading Costs for Multi Compartment Vehicles". Games. (9) 2, 25-45. DOI:10.3390/g9020025
- (31) Bruce Hartman, Christopher B Clott, Max Lyday (2018) "Transportation, Jobs, and Social Networks". Journal of Business Management and Economics, 6 (01), January, 2018. DOI: http://dx.doi.org/10.15520/jbme.2018.vol6.iss01.278.pp01-11
- (32) Clott, C., Hartman, B. and Cannizzarro, R. (2018) "Standard setting and carrier differentiation at seaports". Journal of Shipping and Trade 3:9. DOI: 10.1186/s41072-018-0035-0.
- (33) Clott, C., Hartman, B. and Beidler, B. (2020) "Sustainable blockchain technology in the maritime shipping industry". Maritime Supply Chains, 207-228. DOI: https://doi.org/10.1016/B978-0-12-818421-9.00011-2

PRESENTATIONS AND CONFERENCE PAPERS

- (1) "Stopping Rules for St. Petersburg Gamble: Utility Functions and Stochastic Dynamic Programming Framework." Moshe Dror and Bruce C. Hartman. (1992) ORSA-TIMS San Francisco.
- (2) "Cost Allocation in Continuous Review Inventory Models". Bruce C. Hartman and Moshe Dror. (1993). ORSA-TIMS Boston.
- (3) "Allocation of Costs of Centralizing Inventory." Bruce C. Hartman and Moshe Dror. (1994). ORSA_TIMS Detroit.
- (4) "Optimal Benefits from Inventory Centralization and their Fair Allocation." Bruce C. Hartman and Moshe Dror. (April, 1995). INFORMS, Los Angeles.
- (5) Session Chairman, Inventory Systems II, INFORMS, Los Angeles, April, 1995.
- (6) "Calculus and Consumers." Bruce C. Hartman. Entry Level Mathematics Colloquium, University of Arizona, March 1995.
- (7) "Stable Cost Allocation for Projects." Bruce C. Hartman. INFORMS, New Orleans, October, 1995.
- (8) "Resource Allocation for Mobile Computing Networks." Bruce C. Hartman and Anindya Datta. INFORMS, San Diego, May, 1997.
- (9) Session Chairman, Telecommunications, INFORMS, Los Angeles, May, 1997.
- (10) "Symbolic Calculus and Collaborative Learning: Some Experiments in the Making." Bruce C. Hartman, Eugene A. Smith, and Thomas L. Rodgers. IRMA Conference, Vancouver, BC, Canada, May 1997.
- (11) Session Chairman, Inventory, Games and Bargaining, INFORMS, Dallas, October, 1997.

- (12) "Cooperative Inventory Management when Cost Parameters Vary." Bruce C. Hartman and Moshe Dror. INFORMS, Dallas, October, 1997.
- (13) "Cooperative Games and Bidding in Resource Constrained Software Projects." Bruce C. Hartman . INFORMS, Dallas, October, 1997.
- (14) "Autonomous Agent Heuristics for Resource Constrained Project Scheduling." Gary Knotts, Moshe Dror, and Bruce C. Hartman. INFORMS, Dallas, October, 1997.
- (15) "Inventory Centralization: Dynamic Response to Static Cost" Moshe Dror and Bruce C. Hartman. 8th International Symposium on Dynamic Games and Applications, July 5-8, 1998, Chateau Vaalsbroek, Maastricht, the Netherlands.
- (16) "Supply Chains: Successes and Failures". MIS Department Conference of the University of Arizona, "Managing IT in Networked Organizations", October 24, 2003, Tucson, AZ. PDF
- (17) "Reducing Correlation: Some methods and applications", Ephibian Series Speaker, MIS Department, Eller School of Business and Economics, University of Arizona, December 4, 2009, Tucson, AZ.
- (18) "Peer Assessment of Student Talks in Micro", Conference on Teaching with Technology, San Francisco State University, May 8, 2010, San Francisco, CA.
- (19) Session Chair, Conference on Behavioral and Algorithmic Game Theory, May 14-17, 2010, Newport Beach, CA.
- (20) "The Clean Truck Program: Implementation of an Environmental Sustainability Initiative", Christopher B. Clott and Bruce C. Hartman, Conference on Port Management and Policy, November 5, 2010, CSU San Bernardino, San Bernardino, CA.
- (21) Clott, Christopher B. and Bruce C. Hartman. (2011). "Clean Trucks in California Ports: Modelling Emissions Policy". IAME2011 Conference, October 28, 2011.
- (22) Hartman, Bruce C. and Christopher B. Clott. (2012) "An Economic Model for Sustainable Harbor Trucking". Asian Logistics Round Table, ALRT2012, Vancouver BC, Canada, June 14-15 2012.
- (23) Hartman, B and Clott, C. (2013). "Chassis Pooling at the Chicago Dry Port Complex: A Model of Profit Allocation". OR 2013, Annual Meeting of Dutch and German Operations Research Societies. Erasmus School of Economics, Rotterdam, Netherlands. September 3-6, 2013.
- (24) Hartman, B and Clott, C. (2013). "Competitive Analysis of Port Production and Trucking Emissions". INFORMS Annual Meeting 2013, Minneapolis, MN. October 6-9, 2013.
- (25) Session Chair. (2013). INFORMS Annual Meeting 2013, Minneapolis, MN. October 6-9, 2013.
- (26) Clott, C. and Hartman, B. (2013). "Restructuring Chicago: Development of the Chicago Intermodal Dry Port Complex, Rail Bottlenecks, and new Supply Chain Requirements". 5th METRANS International Urban Freight Conference. The Westin Long Beach Hotel, Long Beach, CA. October 8-10, 2013.
- (27) Hartman, B. and Clott, C. (2014). "Intermodal Chassis Supply A Bayesian Game". International Association of Maritime Economists IAME Conference 2014. Norfolk Convention Center, Norfolk, VA. July 15-18, 2013.
- (28) Clott, C., Hartman, B., Ogard, E. and Gatto, A. (2014). "Matchback: Shipping Soybeans by Container". International Association of Maritime Economists IAME Conference 2014. Norfolk Convention Center, Norfolk, VA. July 15-18, 2014.

- (29) Session Chair. (2014). International Association of Maritime Economists IAME Conference 2014. Norfolk Convention Center, Norfolk, VA. July 15-18, 2014.
- (30) Hartman, B., Clott, C. and Lyday, M. (2015) "Transportation, Jobs, and Social Networks" I-NUF 2015 METRANS Conference, Long Beach, CA, October 20-23, 2015.
- (31) Clott, C. and Hartman, B. (2015) "Supply Chain Integration, Landside Operations and Port Accessibility in Metropolitan Chicago" I-NUF 2015 METRANS Conference, Long Beach, CA, October 20-23, 2015.
- (32) Session Chair. (2015) I-NUF 2015 METRANS Conference, Long Beach, CA, October 20-23, 2015.
- (33) Hartman, B. and Clott, C. (2016) "Chassis Pooling and Profit Allocation". International Association of Maritime Economists IAME Conference 2016. Hamburg, Germany. August 22-25, 2016.
- (34) Clott, C., Hartman, B. and Cannizzarro, R. (2016) "Standardization and Differentiation of Container Shipping Alliances at U.S. Ports". International Association of Maritime Economists IAME Conference 2016. Hamburg, Germany. August 22-25, 2016.
- (35) Clott, C., Hartman, B., Koutsakis, D., and Ulitenof, S. (2016) "Investing in Port Infrastructure: The Case for Privatization". International Association of Maritime Economists IAME Conference 2016. Hamburg, Germany. August 22-25, 2016.
- (36) Session Chair. (2016). International Association of Maritime Economists IAME Conference 2016. Hamburg, Germany. August 22-25, 2016.
- (37) Session Chair. (2016). INFORMS Annual Meeting 2016, Nashville, TN. November 13-16, 2016.
- (38) Clott, C. and Hartman, B. "Built to Last? The Changing Role of Ocean Transportation Intermediaries: Disintermediation and Reintermediation". Accepted at International Association of Maritime Economists IAME Conference 2017, Kyoto, Japan, June 23-26.
- (39) Clott, C., Hartman, B. and Beidler, B. (2018) "Sustainable Blockchain Technology in the Maritime Shipping Industry". Presented at WCTR SIG 2 Conference, Antwerp, 2018. May 4, 2018.
- (40) Hartman, Bruce. (2018) "Sharing Loading Costs for Multi Compartment Vehicles". Presented at INFORMS 2018 Conference, Phoenix, AZ. November 6, 2018.

UNPUBLISHED MANUSCRIPTS

- (1) Hartman, Bruce C. (1992). "Coordination Games and Equilibrium Selection."
- (2) Moshe Dror and Bruce C. Hartman. (2006) "A Note on Power of Two Inventory Games"
- (3) Hartman, Bruce C. (2014) "A note on 1-Convex Games"
- (4) Hartman, Bruce and Christopher B. Clott. (2016). "Competitive Analysis of Port Production and Trucking Emissions"

RESEARCH INTERESTS

Cost allocation in supply chains and centralized resource management situations: inventory, project management, and logistics. Management of services and supply chains. Information systems for operations management. Mathematics and economics of operations, especially game theory applications. Big data analytics and using the R language for analysis.

REVIEWING

Management Science, 2019-present

European Journal of Operational Research, 2007-2017

International Journal of Production Economics, 2010-2016

Research in Transportation and Business Management, 2014-present

International Journal of Production Research, 2013-2017

International Association of Maritime Economists Conference Scientific Committee, 2014, 2016, 2017

Maritime Policy and Management, 2016-2017

Mathematics Reviews, 2018-present

Journal of Transport Geography, 2017-present

Transportation Research Part E, 2019-present

Games, 2018-present

Sustainability, 2019-present

PROFESSIONAL SOCIETIES

INFORMS, Institute for Operations Research and Management Science IAME, International Association of Maritime Economists

AWARDS

2007, 2008, 2009 Academic Senate Recognition for service as Chair of Curriculum Committee

1996-1997 Provost's Learning Technologies Grants

1993 Graduate and Professional Students Council Grant

NON-REFEREED PUBLICATIONS

Hartman, Bruce C. (1987). "Disk Cache Processing Improves System Performance through User-Definable Parameters." Hardcopy, 7 49-56.

Hartman, Bruce C. and Dan Post. (1987). "Disk Cache Processor", video, Communication Strategies, San Francisco.

ACHIEVEMENTS

Pioneered and taught online courses in operations, logistics, analytics using R for over 10 years now.

Maintain a Supply Chain and Logistics blog since 2006.

Created a Logistics major and concentration at USF and attracted 22 students in 2.5 years. Established Intermodal Transportation Institute with several student based research activities and interaction with community logistics enterprises and policy bodies. Created an MBA concentration in Business Analytics, consisting of 4 courses to be taught in class or online, using R and SAP.

As Interim Chair, led business administration department at Cal Maritime to a complete curriculum revision, and a subsequent departmental assessment plan. Chaired Curriculum committee for 3 years, guided creation of new policy, new institution-wide objectives, and procedures program reviews school-wide. Participated in design of WASC approved master's degree in supply chain management and security. Designed four online courses for WASC interim approved master's degree program in transportation and engineering management. Designed the Moodle learning system for the TEM Masters program. Developed a course in Maritime Economics, and one in Advanced Information Systems and Database. Obtained funding for and ran HR Block Business Strategy competition.

Managed Siebel CRM and Peoplesoft Accounting systems at Intraware; also implemented Java web software for service and sales, and a data warehouse and data mining system for corporate sales and web traffic data.

Led to completion 4 high profile ERP projects within one year for Lucent Technologies' Communications Applications Group, all under budget and on time. Areas were Y2K readiness, a Transportation Management system, Ariba Operating Resource management system, and integration into a complex SAP environment.

Made five year business plan for \$150M company emerging from severe financial difficulty. Marketed major new products from conception to shipment. Planned acquisition of several manufacturers and disengagement from two marketplaces.

Changed an information systems activity (MRP II and Accounting) for a disk drive company from a major external audit liability to an efficient, productive, auditable organization. Installed measurement systems, information plan, steering committee, nationwide office automation network, and information center.

Created distributed business processing network (MRP) using Unix and microcomputers to run a software company. Installed MRP II, Order and Distribution systems, and financial databases.

Supervised writing and sale of geostatistical software (kriging) for modeling mines and mining exploration. Designed, deployed, and supported critical process control and instrumentation systems for sulfur wells, gold plant, large grinding mill, and portable crusher; and a realtime access control system with database for a complex of 7 buildings.

Installed relational data base system for mining process data and mine planning information. Designed and implemented special CAD system for mine design and CASE system for interactive data base program design.

Started a private college prep school grades K-12 with a diverse interracial clientele. Owned and operated an educational youth camp for 11 years.

Began one of the first programs to teach BASIC computer programming to eighth graders. Gave two presentations to NAIS on this subject.

BRUCE C. HARTMAN

SUMMARY OF QUALIFICATIONS

Extensive experience in information systems, manufacturing, distribution, and marketing in e-commerce, manufacturing and process businesses--- software services, telecommunications, mining, computer disk drives, and software. Led a major strategic information planning project with Pennzoil and AA; created other information plans at smaller concerns. Ran a pre-sales consulting group and marketed a \$60M product line. Thorough knowledge of Supply Chains, logistics, and ERP processes from practical experience. Led projects on major ERP systems in manufacturing companies. Extensive background in business processes and systems; author of a variety of business plans development strategies as a product development director. A wealth of experience leading and training professionals in the manufacturing and information systems fields.

EXPERIENCE HIGHLIGHTS

Professor, College of Business and Health Administration, University of Saint Francis, Joliet IL 2012-2014, and online teaching to present.

- Teach logistics, economics, project management, system analysis and design, supply chain management, data mining and analytics, and entrepreneurship design to graduate and undergraduate students, both in class and online.
- Started USF Intermodal Transportation Institute.
- Developed Logistics and Management Information systems programs.
- Developed Business Analytics concentration in MBA.

Lecturer with rank of Professor, ABS School of Maritime Policy and Management, California State University, Maritime, Vallejo, CA 2005-2011. Interim Department Head, Business Administration, 2007-2008; Program Director, 2008-2009.

- Taught various business courses to undergraduates, including quantitative methods in business, operations management, global logistics, supply chain management, purchasing, and economics- macro, micro, and managerial.
- Led development of two new curricula for department, and departmental assessment program.
- Developed new courses in Operations, Quantitative Methods, Logistics, and Portfolio analysis.
- Developed four online courses, including the capstone, for a Master's Degree in Transportation and Engineering Management, launched November 2011.
- Chair of Curriculum Committee, which developed its policy and conducted two program reviews as well as managing curriculum changes for school.
- Served on Chargeback Committee, which determines campus resource allocations, and on Website Committee, which makes policy for the school's website.
- Ran and served on several search committees for tenure track faculty.

Lecturer, Management and Finance Department, college of Business and Economics, California State University, East Bay, Hayward, CA 2003-2006.

• Taught various business courses to undergraduates and masters students, including quantitative methods in business, operations management, global operations management, and business research methods.

Visiting Professor, Mathematics, St Mary's College of California, Moraga, CA 2002-2004.

- Taught Finite Mathematics, Probability and Statistics, and Calculus I and II.
- Taught Operations and Statistics in Executive MBA program.

MIS Director, Intraware, Orinda CA, October 1999-December 2001.

• Lead MIS team at B2B ecommerce firm. Implemented Peoplesoft financials, Siebel Sales automation, Interwoven content management for web site. Managed contracts with these

vendors and specified additional procurements and professional services contracts with them. Some were implemented using ASP contracts. Ran staff of Java programmers and web developers who created web based business applications such as order entry, item and price maintenance, and customer support. Also implemented data warehouse for business reporting and Epiphany data mining for targeted database marketing efforts. Wrote RFP and procurement specs for Business Objects to be embedded in custom software. Procured and ran consulting contracts with these firms and with third parties as part of installations. Joined enterprise systems together using Active Works middleware.

IS Manufacturing Manager, Lucent Technologies, San Jose CA, 1998-1999.

 Coached a team of IS analysts using Oracle ERP system and other Oracle based manufacturing and distribution systems. Procured and installed Ariba B2B software and Optum shipping and distribution software, Informatica datamart. Ran data warehouse operation.

Adjunct Professor, MIS, University of Arizona, Tucson, AZ, 1991-1998.

- Taught supply chain management, software project management, operations management, logistics, and mathematical methods to MBAs and PhD candidates.
- Taught mathematics in Mathematics Department including calculus and finite math to undergraduates.
- Developed program integrating business calculus and computing into a two-semester course.

Director, Marketing and Consulting, System Industries, Milpitas, CA, 1989-1991.

Directed a consulting group who provided pre- and post-sales support for advanced computer
disk systems and software. Made frequent direct contact with customers in pre and post sales
technical consulting. Helped enterprises write RFPs for computer products. Led project to
develop and market a client-server Oracle-based database system. Led largest single sale in
company history (\$160 million contract) to Boeing.

Director, MIS, System Industries, Milpitas, CA, 1985-1988.

• Implemented ERP, telephone sales system, customer service database. Changed information systems activity from an audit liability to efficient, professional organization. Made site a customer showcase and drove customer demos. Negotiated company-wide contracts for various enterprise software systems as well as for implementation and ongoing support.

Director, MIS, Santa Cruz Operation, Santa Cruz, CA, 1988-1989.

• Installed QAD ERP, Order and Distribution systems, personnel and financial databases in large distributed UNIX client-server network.

IS Director, Duval mining division, Pennzoil Corporation, Tucson AZ, 1978-1985.

Project Leader on a Pennzoil-wide \$20 million Information Plan with 60 employees and 60
Arthur Andersen consultants. Trained with Andersen Consulting staff. Ran projects to install
process control, technical, research, and business computer systems for sulfur wells, gold
plant, large grinding mill, and portable crusher, with staff of 28 including engineers, software
pros, techs, and Chem Engg Ph.D.'s.

EDUCATION: AB, Princeton, *magna cum laude*, Math. MSEd, Penn, Math. Ph.D., Arizona, MIS/Manufacturing and Supply Chain Management. Several published papers in supply chain management and applications of game theory in manufacturing.