January, 2012

Curriculum Vitae

NAME: Erik	Brynjolfsson	WEBSITE:	http://digital.m	nit.edu/erik	-
EDUCATION					
MIT Sloan School	Ph.D. Managerial Economics		9/86	2/91	
Harvard University	S.M. Applied Math/Decision Sc	ience	9/83	6/84	

Harvard University	S.M. Applied Math/Decision Science	9/83	6/84
Sorbonne	Diplome Superieur	6/83	8/83
Harvard University	A.B. Applied Mathematics Magna cum Laude	9/80	6/84

TITLE OF DOCTORAL THESIS

Information Technology and the Re-organization of Work: Theory and Evidence

PRINCIPAL FIELD OF INTEREST

Information Technology and Economics, including:

- Information technology and the organization of work
- Information technology and productivity
- Pricing and sharing of digital information

EMPLOYMENT

MIT Sloan School	Schussel Family Professor of Management	7/01	_
Harvard Business School	Marvin Bower Fellow, Senior Research Fellow	9/04	8/05
MIT Sloan School	Associate Professor	7/95	6/01
Stanford University	Visiting Associate Professor	9/96	6/98
MIT Sloan School	Assistant Professor	6/90	6/95
	(Douglas Drane Career Development Chair)		
MIT Sloan School	Research Assistant	9/86	6/90
Harvard University	Instructor	9/85	9/94

OTHER ACTIVITIES

Director, Computer Sciences Corporation	12/10	_
Advisor, iRobot Healthcare	7/10	_
Chairman of the Board, MIT Sloan Management Review	7/07	_
Research Associate, National Bureau of Economic Research	9/06	_
Director, Center for Digital Business at MIT (<u>http://digital.mit.edu</u>)	9/02	_
Advisor, Academic Advisory Council, Federal Reserve Bank of Boston	9/01	_
Affiliate Member, MIT Computer Science and AI Laboratory	1/99	_
Advisor, AfterCollege, Inc.	9/98	_
Member, Time Magazine Board of Economists	9/98	_
Director, CSK Corporation	6/05	6/08
Co-Editor, Ecommerce Research Forum (<u>http://ecommerce.mit.edu/forum</u>)	3/99	10/07
Co-Chairman, Workshop on Information Systems and Economics	1/06	12/06
Expert Witness, SoundExchange, before Copyright Royalty Board	9/05	11/06
Co-Director, Center for eBusiness at MIT	6/99	8/02
Co-Director, Track on Electronic Commerce and Internet Marketing, MIT	1/99	6/99
Director, Program on Electronic Commerce and Marketing, MIT	8/98	6/99
Core Faculty, Stanford Computer Industry Project, Stanford University	9/96	6/98

Erik Brynjolfsson		Page 2
Co-Chairman, Workshop on Information Systems and Economics	1/93	12/93
Expert Witness, Lotus Development Corporation	9/93	3/95
Founder and Director, Boston Computer Society Expert Systems Group	9/86	12/89
Former Director or advisor; Flexplay Technologies, Inc. (Co-Founder); Founda	tion Tecl	hnologies,
Inc (Co-Founder); Frictionless Commerce, Inc; Interactive Transaction Service	s, Inc.; N	etwork
Subscriptions, Inc.; Nordia, Inc.; Optivo, Inc.		
or Advisor		

AWARDS AND HONORS

Distinguished Fellow of the INFORMS Information System Society	2011
Best Paper Overall, International Conference on Information Systems	2008
Best Paper Overall, International Conference on Information Systems	2006
Best Paper on "Economics and Information Systems", International	2006
Conference on Information Systems Best Paper on "Valuing IT Opportunities", International	2006
Conference on Information Systems	
Marvin Bower Fellowship, Harvard Business School	2004-2005
E-Business Executive of the Year Award,	2001
eBusiness Association of New York	
Best Paper in Field of Marketing Science in 1999, John D.C. Little Award	2000
Best Paper published in Information Systems and Economics in previous	1999
five years, Workshop on Information systems and Economics (WISE).	
Best Paper published in 1996, Management Information Systems	1997
Quarterly	
Best Paper on the Conference Theme, International Conference on Information Systems	1996
Named Douglas Drane Career Development Associate Professor of	1995
Information Technology and Management	
Best Paper Overall, International Conference on Information Systems	1994
Best Paper on the Conference Theme, International Conference	1994
on Information Systems	
Center for Telecommunications Management	1989-90
Dissertation Award	
Sloan Doctoral Scholarship	1986-90
Magna cum Laude in field of Applied Mathematics at Harvard College	1984
Magna cum Laude on Undergraduate Thesis at Harvard College	1984
Harvard College (Merit) Scholarship	1980-84
Winner, National Merit Scholarship	1980

RESEARCH AWARDS

"Management and organizational practices across the US", National Science	2010-2012
Foundation, (\$800,000, Co-PI)	
Principal Investigator, Center for Digital Business Focused Research	2008-2009
"Social Networks and Information Worker Productivity" (\$250,000)	
Principal Investigator, Center for Digital Business Focused Research	2008-2009
"Enterprise Information Technology" (\$200,000)	
Principal Investigator, Center for Digital Business Focused Research	2008-2009
"How Do Top Performers Use IT?" (\$200,000)	
Principal Investigator, HP Labs Innovation Research Program (\$50,000)	2008

Erik Brynjolfsson

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Principal Investigator, Google Research Awards Program (\$50,000)	2008
Principal Investigator, Center for Digital Business Focused Research	2007
"Social Networks and Information Worker Productivity" (\$250,000)	
Principal Investigator, Center for Digital Business Focused Research	2007
"Enterprise Information Technology" (\$200,000)	
Principal Investigator, Center for Digital Business Focused Research	2006
"IT, Innovation and Productivity" (\$50,000)	2007
Principal Investigator, Center for Digital Business Focused Research	2006
"EDM and Productivity" (\$300,000) Principal Investigator, Center for Digital Business Focused Research	2006
"IT and Customer Satisfaction" (\$150,000)	2000
Co-Principal Investigator, National Science Foundation (NSF) Grant, Computers	s. Information
Science and Engineering Division, "The Social and Economic Implications of	
Technology " (\$5,190,000) (continuing funding, 2001-2006)	
Principal Investigator, Center for eBusiness Focused Research	2002-2005
"Information Technology, Organization and Performance" and	
the "Matrix of Change" (\$150,000)	
Principal Investigator, Center for eBusiness Focused Research	2003-2005
"Internet Organization and Culture: Cases" (\$50,000)	
Principal Investigator, Center for eBusiness Focused Research	2002-2005
"Information Technology Outsourcing and Intangibles" (\$150,000)	2000 2005
Co-Principal Investigator, National Science Foundation (NSF) Grant	2000-2005
Computers, Information Science and Engineering Division, "The Social and Economic Implications of Information Technology."	
"The Social and Economic Implications of Information Technology" IIS-0085725 (\$5,190,000)	
Principal Investigator, Center for eBusiness Focused Research	2001-2004
"Internet Organization and Culture" (\$150,000)	2001-2004
Principal Investigator, Center for eBusiness Vision Fund	2001
"Next Generation Academic Publishing" (\$80,000)	
Principal Investigator, MIT New Economy Value Research Lab:	2000-2001
"Intangible Assets" (\$100,000)	
Co-Principal Investigator, Center for eBusiness Focused Research	2000
"The Matrix of Change" (\$150,000)	
Principal Investigator, Center for eBusiness Focused Research	1999-2001
"Pricing and Competition on the Internet (\$225,000)	
Co-Principal Investigator, National Science Foundation (NSF) Grant,	1997-2000
97-00316, July 1, 1997 - March 2, 2001, Computers, Information	
Science and Engineering Division, "Contributions of IT Investment	
to Economic Performance" (\$643,637) Principal Investigator Organization for Economic Cooperation and	1997-98
Principal Investigator, Organization for Economic Cooperation and Development (OECD) "IT and Organizational Architecture" (\$50,000)	1997-98
Subcontract, National Institute of Standards and Technology, (NIST)	1995-96
"Adoption Patterns for Information Technology", (\$39,000)	1775-70
$(\psi),(\psi)$	

PROFESSIONAL MEMBERSHIP AND ACTIVITIES

Chairman	MIT Sloan Management Review
Director	Information Systems Network (ISN) of the Social Science Research
	Network (SSRN)
Editor	Working Papers in Information System and Economics (ISN/SSRN)
Editor	Working Papers in Ecommerce and Ebusiness (ISN/SSRN)
Co-Editor	Ecommerce Research Forum (<u>http://ecommerce.mit.edu/forum</u>)

Co-Editor	<i>Management Science</i> Special Issue on "Information Systems and Economics"
Co-Editor	Journal of Organizational Computing Special Issue on
Associate Editor	"Economics, Information Systems and Organization" Information Systems Research, Management Science
Editorial Boards	Communications of the ACM, Information Technology and People,
	International Journal of Electronic Commerce, Journal of
	Organizational Computing and Electronic Commerce, Sloan
Program Committees	Management Review, Quarterly Journal of Electronic Commerce. ACM EC'01 - The Ecommerce Conference of the Association of
Program Commutees	Computing Machinery (2001), Telecommunications Policy Research
	Conference (1998), Economics of Digital Information and Intellectual
	Property (1997), International Conference on Information Systems
	(1995, 1996), Conference on Computer-Supported Cooperative Work
	(1994), INFORMS Conference on Information Systems and Technology
	(1996)
Referee	American Association for the Advancement of Science, American
	Economic Review, California Management Review, Decision Support
	Systems, Hawaii International Conference on System Sciences,
	Information Systems Research, Information Technology and People,
	Harvard University Press, Information Systems Network, International
	Conference on Information Systems, Journal of Management
	Information Systems, Journal of Organizational Computing,
	Management Information Systems Quarterly, MIT Press, National
	Bureau of Economic Research Book Series, National Science
	Foundation, New Palgrave Dictionary of Economics, Management
	Science, Quarterly Journal of Economics, RAND Journal of Economics, Providence of Economics and Statistics, Sloop Econodicop
Member	Review of Economics and Statistics, Sloan Foundation
WIEIIIDEI	American Association for Artificial Intelligence (AAAI), American Economic Association (AEA), Association for
	Computing Machinery (ACM), Association for Information
	Systems (AIS), Boston Computer Society (BCS), Institute for
	Electrical and Electronics Engineers (IEEE), Institute for
	Operations Research and Management Sciences (INFORMS)
	operations research and management belences (in the orthog)

TEACHING

At MIT:

15.567	The Economics of Information	Fall, '06; '07; '08; '09, '10
SIP	The Pricing Revolution (with Gabriel Bitran)	Spring, '06;
15.575	Research Seminar in Information Technology and Organizations: Economic Perspectives	Spring, '91, '93, '95, '01 '04 '06, '08, '10, '12
15.567	Fundamentals of Digital Business	Spring, '99; Fall, '99, '00, '01 '02
15.963	Proseminar in Electronic Commerce	Fall, '99
15.967	Electronic Commerce/Marketing and the Internet	Spring, '96, '98
15.566	Information Technology as an Integrating Force in Manufacturing	Spring, '94, '95, '96, '98 '99
15.561	Information Systems: From Technology Infrastructure to the Networked Corporation	Spring, '94, '99, '00, '02
15.562	Principles of Information Technology	Spring, '91, '92

15.599	Workshop in Information Technology	Fall, '91; Spring, '92
At Stanf T255	ord: Managing in an Information Age	Winter, '97, Spring '98
At Harve	ard:	
CSS-414	Building Expert Systems	Fall,'85, '86; Spring, '88, '89,
CSS-415	Applications of Artificial Intelligence	'90, '91, '92, '93,'94 Fall, '87

THESIS SUPERVISION

Doctoral Theses Supervised

L. Wu	Essays on social networks and information worker productivity(chair)	7/11	
A.R. Saunders	Intangible Assets (chair)	7/11	
A.S. Litwin	Information Technology and the Employment Relationship (Reader)	7/08	
S. Bhansali	Essays on the Impact of Information Technology (Chair)		
S. Aral	Essays on Information, Technology and Information Worker Productivity (Chair)		
M. Zhang	Tapping into the Pulse of the Market: Essays on Marketing	6/06	
8	Implications of Information Flows (Chair)		
Y. Hu	Essays on Internet Markets and Information Goods	9/04	
	(Chair)		
D. Fitoussi	Information Technology and Business Transformation: Work Location	6/04	
	and the Allocation of Decision Rights (Chair)		
M. Smith	Essays on Structure and Competition in Electronic Markets	8/00	
	(Chair)		
J. Gallien	Optimization-Based Auctions and Stochastic Assembly	5/00	
	Replenishment Policies for Industrial Procurement (Reader)		
S. Yang	Essays on Information Technology and Intangible Assets 2/00		
	(Chair)		
A. Wenger	Essays on Information Technology and Work Organization	9/98	
	(Chair)		
J. Bailey	Intermediation and Electronic Markets: Aggregation and Pricing	6/98	
	in Internet Commerce (Reader)		
M. Van Alstyne	M. Van Alstyne Information Distribution in Networks		
	(Chair)		
L. Hitt	Economic Analysis of Information Technology and Organization	6/96	
	(Chair)		
F. Zettlemeier	Three Essays on Marketing (Reader)	6/96	
D. Simester	Analytic Essays on Marketing (Reader)	5/93	

Masters Theses Supervised

Y. Bashir	Next generation business intelligence software, areas for growth &	7/11
	opportunities for innovation	
K. Son	Mobile Commerce	7/11
M.Z. Hydari	Unified Communications: Convergence of Platforms and Strategies of	5/08
	Two Software Vendors	
T. S. Choe	Identifying word categories for diffusion studies in an email	6/06
	social network	

P. Manoharn H. Tomikawa	Diversity measurement for the email content of information workers The Integration of Online Content Distribution and Electronic	6/06 6/03
H. Seshake	Payment businesses Telecommunications Strategy Transition: The Shift To Personalization and Non-Human Communication	6/03
E. Borbon T.Carvalho	The Effects of Technology in Retail Banking (Reader) Analysis of Business Performance Changes due to the Incorporation	6/03 6/02
S. Aldana	of Multimedia Information in the Internet Characteristics of he Innovation Process: Evidence from Intellectual	2/02
S. Coutin	Property Data Location-based services for Mobile Commerce,	6/01
N. Westphal A. Graylin	Partnerships between Shopping Smart Agents and Electronic Retailers Geographically distributed Facilities in the Creation of Global E-Business Hosting	6/00 6/00
M Perutz	An Investigation of Price Dispersion in Internet Auctions 2/00	
J. Wilcox	Pricing of Content on the Internet: The Aggregator Model	6/96
K. Berke	Evaluating Investments in Information Technology: Theory versus Practice	6/96
T. Akagi	The Intranet of Sun Microsystems: How Organizational Rules of the Game Affect Its Evolution	6/96
H. Kameda	The Business Value of Information Technology (IT) in the Banking Industry	5/96
R. Viswanathan	Economic Organization and the Impact of Information Technology	5/95
D. Kim	Multimedia Technology and Organizations in Consumer Electronics (Reader)	5/95
A. Cyrus	<i>The State of Business Reengineering: A Look at Information</i> <i>Technology's Role</i>	5/95
Y. Nakamori	The Impacts of Mass Customization and Information Technology on Japanese Banking Industry	
Y. Fukuda	Multimedia and Nintendo's Strategy (Awarded Second Prize in the 1994 ENNE Thesis Competition.)	5/94
S. Yang	The Relationship Between IT Investment and Market Value of Firms	
Y. Kuo	Some Estimates of the Value of Software	5/94
B. McHenry	Corporate Principles in the Information Age: Survey and Analysis	9/93
W. Newman	The Value of Knowledge and Intangible Capital: A Methodological Investigation	
A. Austin	Management and Scheduling Aspects of Increasing Flexibility in Manufacturing (Awarded First Prize in the 1993 ENNE Thesis Competition.)	5/93
D. Mayo	Product Strategies for Packaged Software: An Exploratory Study	5/93
& D. Young	of the Spreadsheet Market (Awarded Second Prize in the 1993 ENNE Thesis Competition.)	0,70
S. McGrady	Feasibility Analysis of a New Business Venture: Medimatch, An 5/93 Electronic Job Information Marketplace for Healthcare Professionals	
J. Hasegawa	Knowledge-Base and Relational Database Management Techniques for Scheduling Classes at the Sloan School	5/91
N. Yamamoto	Evaluating Investments in Information Technology	5/91
S. Sligh	An Assessment of the Analog Modem Market (Reader)	5/91

Ph.D. Theses in Progress

Adam Saunders	(chair)
Lynn Wu	(chair)
Heekyung (Helen) Kim	(chair)

PUBLICATIONS

Books

- 1. Brynjolfsson, Erik and Andrew McAfee, *Race Against the Machine: How the Digital Revolution is Driving Productivity, Accelerating Innovation, and Irreversibly Changing Employment and the Economy*, Digital Frontier Press, October, 2011.
- 2. Brynjolfsson, Erik, and Saunders, Adam, *Wired for Innovation: How Information Technology is Reshaping the Economy*, MIT Press, September, 2009.
- 3. Brynjolfsson, Erik, Intangible Assets, Tuttle-Mori /CSK Corp., Tokyo, Japan, May 2004.
- 4. Brynjolfsson, E. and Urban, G. (eds.) *Strategies for eBusiness Success*, Jossey-Bass, Cambridge, MA, November 2001.
- 5. Brynjolfsson, E and Kahin, B. (eds.) *Understanding the Digital Economy*, MIT Press, Cambridge, MA. September 2000. (Translated to Japanese, 2002)
- Varian, Hal, Allen, F., Brynjolfsson, E. Schement, J., Shenker, S., Sproull, L. and Sutch, R., Fostering Research on the Economic and Social Impacts of Information Technology, Computer Science and Telecommunications Board, National Research Council, National Academy Press, Washington, D.C. 1998.

Refereed Journal Articles

- 1. Aral, Sinan, Brynjolfsson, Erik and Wu, Lynn, "Three-Way Complementarities: Performance Pay, HR Analytics and Information Technology". *Management Science*, Forthcoming.
- 2. Aral, Sinan, Brynjolfsson, Erik and Van Alstyne, Marshall W., "Information, Technology and Information Worker Productivity" *Information Systems Research*, Forthcoming.
- 3. Tambe, Prasanna B., Hitt, Lorin M. and Brynjolfsson, Erik, (2012) "The Extroverted Firm: How External Information Practices Affect Innovation and Productivity" *Management Science*, pp. 1110-1446. (January, 2012).
- 4. Brynjolfsson, Erik, Hu, Yu Jeffrey and Simester, Duncan, (2011) "Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on the Concentration of Product Sales" *Management Science*, June, 2011.
- 5. Brynjolfsson, Erik, Hu, Yu (Jeffrey) and Michael D. Smith (2010) "Long Tails vs. Superstars: The Effect of Information Technology on Product Variety and Sales Concentration Patterns", *Information Systems Research*, (December) 21:736-747
- 6. Brynjolfsson, Erik, Hu, Yu (Jeffrey) and Rahman, Mohammad "Battle of the Retail

Channels: How Product Selection and Geography Drive Cross-channel Competition", *Management Science*, Vol. 55, No. 11, November 2009, pp. 1755-1765. (Lead Article)

- 7. Brynjolfsson, Erik, Astrid A. Dick, and Michael D. Smith (2009) "A Nearly Perfect Market? Differentiation vs. Price in Consumer Choice" *Quantitative Marketing and Economics*, November.
- Simester, Duncan, Hu, Yu (Jeffrey), Brynjolfsson, Erik and Anderson, Eric, "Dynamics of Retail Advertising: Evidence from a Field Experiment" *Economic Inquiry* (June, 2008).
- Van Alstyne, Marshall and Erik Brynjolfsson (2005) "Global Village or Cyberbalkans: Modeling and Measuring the Integration of Electronic Communities", *Management Science*, Vol. 51, No. 6 (June) pp. 851-868.
- Brynjolfsson, Erik, Michael D. Smith, and Yu (Jeffrey) Hu (2003) "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers" *Management Science*, Vol. 49, No. 11, November.
- 11. Brynjolfsson, Erik and Hitt, Lorin (2003) Computing Productivity: Firm-level Evidence, *Review of Economics* and Statistics, Vol. 84, No. 4. November.
- 12. Brynjolfsson, E, L. Hitt and S. Yang, (2002) "Intangible Assets: Computers and Organizational Capital" *Brookings Papers on Economic Activity*, Brookings Institution.
- Bresnahan, T, E. Brynjolfsson, and L. M. Hitt (2002). "Information Technology, Workplace Organization, and the Demand for Skilled Labor: Firm-Level Evidence," *Quarterly Journal of Economics*, Vol. 117, Issue 1, Feb 2002 pp 339-376.
- Smith, Michael D. and Erik Brynjolfsson, Consumer Decision-making at an Internet Shopbot: Brand Still Matters, *Journal of Industrial Economics*, Vol. XLIX No. 4 Dec 2001 pp 541-558
- 15. Brynjolfsson, E. and M. D. Smith (2000) "Frictionless Commerce? A Comparison of Internet and Conventional Retailers", *Management Science*, April.
- 16. Bakos, Y. and Brynjolfsson, E., (2000) "Bundling and Competition on the Internet", *Marketing Science*, Winter.
- 17. Bakos, Y. and Brynjolfsson, E., (1999) "Bundling Information Goods: Pricing, Profits and Efficiency", *Management Science*, December.
- 18. Bakos, Y., E. Brynjolfsson and D. Lichtman (1999) "Shared Information Goods". *Journal of Law and Economics*, April.
- Hitt, L. and E. Brynjolfsson, "Information Technology and Internal Firm Organization: An Exploratory Analysis" J. Management Information Systems, Vol. 14, No. 2. Fall, 79-99, (1997)
- 20. Brynjolfsson, E., A. Renshaw and M. V. Alstyne, "The Matrix of Change", *Sloan Management Review*, Winter (1997).
- 21. Van Alstyne, M. and E. Brynjolfsson, "Widening Access and Narrowing Focus: Could the Internet Balkanize Science?" *Science*, 274, 1479-1480, (1996).

- 22. Brynjolfsson, E. and C. Kemerer, "Network Externalities in Microcomputer Software: An Econometric Analysis of the Spreadsheet Market", *Management Science*, December, (1996). (Earlier version published in *Proceedings of the International Conference on Information Systems*. Orlando, FL., December, (1993))
- 23. Brynjolfsson, E., "The Contribution of Information Technology to Consumer Welfare", *Information Systems Research*, 7 September (1996).
- 24. Hitt, L. and E. Brynjolfsson, "Productivity, Business Profitability and Consumers' Surplus: Three Different Measures of Information Technology Value", *MIS Quarterly*, (June): 121-142, (1996). (Earlier version published as: "The Three Faces of IT Value: Theory and Evidence", *Proceedings of the International Conference on Information Systems*, Vancouver, British Columbia.(1994))
- 25. Brynjolfsson, E. and L. Hitt, "Paradox Lost? Firm-level Evidence on the Returns to Information Systems Spending", *Management Science*, April, (1996). (Reprinted in Willcocks, L. and Lester, S. (eds.). *Beyond The IT Productivity Paradox: Assessment Issues*. McGraw Hill, Maidenhead. (1998))
- 26. Brynjolfsson, E. and S. Yang, "Information Technology and Productivity: A Review of the Literature", in *Advances in Computing*, Zelkowitz, M. (ed.), Volume 43, (1996).
- Brynjolfsson, E. and L. Hitt, "Information Technology as a Factor of Production: The Role of Differences Among Firms", *Economics of Innovation and New Technology*, (1995).
- 28. Alstyne, M. V., E. Brynjolfsson and S. Madnick, "Why Not One Big Database? Principles for Data Ownership", *Decision Support Systems*, 15 (December): 267-284, (1995). (Earlier version published as: "Ownership Principles for Distributed Database Design". *Proceedings of the Second Workshop on Information Technology and Systems*, Dallas, TX (1992))
- 29. Brynjolfsson, E. "Information Assets, Technology, and Organization", *Management Science* 40, December (1994).
- 30. Brynjolfsson, E., T. Malone, V. Gurbaxani and A. Kambil, "Does Information Technology Lead to Smaller Firms?" *Management Science* 40, December (1994).
- 31. Brynjolfsson, E. "The Productivity Paradox of Information Technology: Review and Assessment", *Communications of the ACM*, Vol. 36, No. 12, Dec. 1993. (Translated to Japanese and reprinted in *Prevision*, June, 1994 and translated to Dutch and reprinted in *Management and Organization of Automation*, Fall 1994)
- 32. Bakos, J.Y. and Brynjolfsson, E., "From Vendors to Partners: Information Technology and Incomplete Contracts in Buyer-Supplier Relationships", *Journal of Organizational Computing*, December (1993).
- Bakos, J.Y. and Brynjolfsson, E., "Information Technology, Incentives and the Optimal Number of Suppliers", *Journal of Management Information Systems*, Fall 1993. (Revision reprinted in *Conference Proceedings of Electro/94 International*, Boston, May, (1994); a subsequent revision reprinted as "Organizational Partnerships and the Virtual Corporation," in Kemerer, C. ed., *The Future of Markets and Organizations: How IT Shapes Competition*, Kluwer Academic Press, (1997); and an earlier version published

as: "Why Information Technology Hasn't Increased the Optimal Number of Suppliers". 26th Annual Hawaii International Conference on System Sciences, Wailea, HI (1993))

Articles in Refereed Conference Proceedings

- 34. Erik Brynjolfsson, Lorin Hitt, and Heekyung Kim, "Strength in Numbers: How does data-driven decision-making affect firm performance?" *Proceedings of the International Conference on Information Systems* Shanghai, 2011.
- 35. Prasanna Tambe, Lorin Hitt, and Erik Brynjolfsson, "The Price and Quantity of IT-Related Intangible Capital" *Proceedings of the International Conference on Information Systems* Shanghai, 2011.
- 36. Lynn Wu, Erik Brynjolfsson "The Future of Prediction: How Google Searches Foreshadow Housing Prices and Sales" *Proceedings of the International Conference on Information Systems*, Phoenix, Arizona 2009.
- 37. Sinan Aral, Erik Brynjolfsson, Lynn Wu "Testing Three-Way Complementarities: Incentives, Monitoring and Information Technology", *Proceedings of the International Conference on Information Systems*, Phoenix, Arizona 2009.
- 38. Heekyung Kim, Erik Brynjolfsson "CEO Compensation and Information Technology" *Proceedings of the International Conference on Information Systems*, Phoenix, Arizona 2009.
- Wu, Waber, Aral, Brynjolfsson & Pentland (2008) "Mining Face to Face Interaction Networks Using Sociometric Badges: Evidence Predicting Productivity in IT Configuration. *International Conference on Information Systems*, Paris, France December. (Best Paper Award)
- 40. Tambe, Prasanna B., Hitt, Lorin M. and Brynjolfsson, Erik, (2008) "The Extroverted Firm: How External Information Practices Affect Productivity" *International Conference on Information Systems*, Paris, France December.
- 41. Wu, Waber, Aral, Brynjolfsson & Pentland (2008) "Mining Face to Face Interaction Networks Using Sociometric Badges: Evidence Predicting Productivity in IT Configuration. *International Workshop and Conference on Network Science*, Norwich, United Kingdom, June, 2008.
- 42. Aral, S., Brynjolfsson, E., & Van Alstyne, M. December, 2007. "Productivity Effects of Information Diffusion in Email Networks. *International Conference on Information Systems*, 2007
- 43. Wu, Waber, Aral, Brynjolfsson & Pentland (2008) "Mining Face to Face Interaction Networks Using Sociometric Badges: Evidence Predicting Productivity in IT Configuration. *Winter IS Conference*.
- 44. Aral, S., Brynjolfsson, E. and Van Alstyne, M. "Information Technology and Information Worker Productivity: Task Level Evidence" *Proceedings of the International Conference on Information Systems*, December, 2006.
- 45. Aral, Sinan, Brynjolfsson, Erik and Wu, D.J., "Which Came First, IT or Productivity? The Virtuous Cycle of Investment and Use in Enterprise Systems" *Proceedings of the International Conference on Information Systems*, December, 2006.

- 46. Brynjolfsson, Erik and Michael Zhang, "A Mechanism for Providing Innovation Incentives for Digital Goods" *Proceedings of the International Conference on Information Systems*, Washington, DC, December, 2004.
- 47. Brynjolfsson, E., L. M. Hitt, and S. Yang, (1998). "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations." *Proceedings of the International Conference on Information Systems*, 1998, Helsinki, Finland.
- 48. Bakos, J.Y. and Brynjolfsson, E. "Pricing and Distribution of Information Goods: Aggregation and Disaggregation Strategies" *INFORMS College on Marketing Conference on Marketing Science and the Internet*, MIT, Cambridge, March 6-8, 1998.
- 49. Brynjolfsson, E. and S. Yang, "The Intangible Costs and Benefits of Computer Investments", *Proceedings of the International Conference on Information Systems*, 1997, Atlanta, GA.
- 50. Brynjolfsson, E., A. Renshaw, M. V. Alstyne and A. Bernstein, "Matrix of Change Software: A Tool for Teaching Business Process Redesign," *Proceedings of the International Academy on Information Management*, 1997, Atlanta, GA.
- 51. Bailey, J. and Brynjolfsson, E. "In Search of "Friction-Free Markets": An Exploratory Analysis of Prices for Books, CDs and Software Sold on the Internet" *Proceedings of the* 25th Telecommunications Policy Research Conference, Washington, D.C., 1997.
- 52. Bakos, Y. and Brynjolfsson, E., "Aggregating and Disaggregating Information Goods: Implications for Bundling, Site Licensing and Micropayment Systems", *Proceedings of the* 25th Telecommunications Policy Research Conference, Washington, D.C., 1997. (reprinted in Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property, 1997).
- 53. Alstyne, M. V. and E. Brynjolfsson, "The Net Effect: Measures of Information Integration", *Proceedings of the 25th Telecommunications Policy Research Conference*, Washington, D.C., 1997 (earlier version published in *Proceedings of International Conference on Information Systems*, 1996).
- Alstyne, M. V. and E. Brynjolfsson, "Electronic Communities: Global Village or Cyber-Balkanization?" *Proceedings of the International Conference on Information Systems*, 1996, Cleveland, OH.
- 55. Alstyne, M. V. and E. Brynjolfsson, "Communication Networks and the Rise of an Information Elite", *International Conference on Information Systems*, Amsterdam, The Netherlands, pp. 93-95, 1995.
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Patented Inventions

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INVITED ORAL PRESENTATIONS

- 1. "Bob Gordon" Dinner in Honor of Robert Gordon, Economists for Peace and Security, American Economic Association Meetings, Chicago, IL, January 7, 2012
- 2. "Race Against the Machine", Five Fields Forum, Lexington, MA, December 18, 2011.
- 3. "Impact of IS Economics Research on Teaching" Workshop on Information Systems and Economics, Shanghai, China, December 9, 2011.
- 4. "Measuring the Value of Free Goods on the Internet" Workshop on Information Systems and Economics, Shanghai, China, December 8, 2011.
- 5. "Ecommerce and Global Media in China", Workshop on Information Systems and Economics, Shanghai, China, December 7, 2011.
- "Keynote: Race Against the Machine" Chinese National Association for Information Systems 2011 National Congress, Tongji University, Shanghai, China, December 3, 2011.
- 7. "Debate: Race Against the Machine", Silicon Valley Comes to Oxford Annual Debate, Oxford Union, Oxford University, Oxford, UK, November 20, 2011.
- 8. "Debate with Tyler Cowen on Productivity Growth", and "Race Against the Machine", Techonomy. Tucston, AZ, November 14-15, 2011.
- 9. "Race Against the Machine", Discussion on Fox Business TV, New York, NY, November 7, 2011.
- 10. "Race Against the Machine", Discussion on MSNBC's Morning Joe Program, New York, NY, November 7, 2011.
- 11. Comments on "Functional Centralization and the Division of Labor" and on "The Organization of Firms Across Countries", Harvard Business School-MIT, Strategy Research Conference, Boston, MA, November 4, 2011.
- 12. "Measuring the Price and Quantity of IT-Related Intangible Capital" MIT Organizational Economics Lunch, Cambridge, MA, November 3, 2011.
- 13. "Race Against the Machine" MIT CDB Workshop on Technology and Employment, MIT Media Lab, Cambridge, MA, October 31, 2011.
- 14. "ICT, Innovation and the E-Economy", European Investment Bank Conference, Luxembourg, October 27, 2011.
- 15. "Race Against the Machine", Compass Summit, Palos Verdes, CA, October 24, 2011.
- 16. "Strength in Numbers: Data Driven Decisionmaking", McKinsey Conference, Miami, FL, October 18, 2011.

- 17. "Nanodata" Center for Digital Business/Merck Meeting, MIT, Cambridge, MA, October 11, 2011.
- "Digital Innovation" Washington Ideas Forum, Newseum, Washington, DC, October 5, 2011.
- 19. "Connection Science: An Agenda" MIT Connection Science Workshop, CSAIL, Cambridge, MA, September 23, 2011.
- 20. "Digital Innovation", Dell Annual Conference, Austin, TX, September 1, 2011.
- 21. "IT and Organizational Capital" and "The Matrix of Change", Delivering Information Systems, Harvard Business School, Boston, MA, July 26, 2011.
- 22. "Digitization and Nanodata: A Research Agenda" Micro@Sloan Workshop, MIT, Cambridge, MA, August 10. 2011.
- 23. "Challenges and Opportunities in the Digital Economy" Science, Innovation and Entrepreneurship Policy Workshop, MIT, Cambridge, MA July 24, 2011.
- 24. "Director's Welcome" NBER Economics of IT and Digitization Workshop, Sonesta Hotel, Cambridge, MA, July 22, 2011.
- 25. "Nanodata and Nowcasting: Some Implications for the Census Bureau" U.S. Bureau of the Census, Washington, DC, July 12, 2011.
- 26. "Nanodata and Nowcasting: Some Implications for Science, Technology and Innovation Indicators" National Academy of Sciences, Washington, DC, July 11, 2011.
- "Directors Welcome", "Digital Productivity Research", "Data Driven Decision-making", Center for Digital Business Annual Conference and Board Meeting, MIT, Cambridge, MA, April 19, 2011.
- "Academic Panel: Research and Information Systems" MIT CIO Symposium, Cambridge, MA, May 18, 2012
- 29. "Nanodata and Nowcasting: Some Implications for Data Collection" National Academy of Sciences, Washington, DC, May 6, 2011.
- "The Extroverted Firm" Center for Digital Business Seminar, Cambridge, MA, April 27, 2011.
- 31. "The Extroverted Firm" Kellogg School, Northwestern, Chicago, IL, April 20, 2011.
- 32. "Wired for Innovation" SAS Global Forum, Las Vegas, NV, April 6, 2011.
- 33. "Data Driven Decision-making" MIT Executive Education for Nokia, Cambridge, MA April 5, 2011.
- 34. "Data-Driven Decision-making" New York University Information Systems Seminar, New York, NY, March 29, 2011.
- 35. "Research Opportunities in Information Systems and Economics" New York University Research Workshop, New York, NY, March 28, 2011.
- 36. "Wired for Innovation" Center for Digital Business Workshop, MIT, Cambridge, MA, March 23, 2011.
- 37. "Data Driven Decision-making" MIT Executive Education for Li & Fung, Cambridge, MA March 16, 2011.
- 38. "Digital Innovation: Implications for Retailing" Walmart Annual Conference, Orlando, Florida, March 9, 2012.
- 39. "Data Driven Decision-making" MIT Executive Education for Li & Fung, Cambridge, MA March 4, 2011.
- 40. "Digital Advantage" SAP Research Workshop, Palo Alto, California, February 28, 2011.
- 41. "Digital Innovation" FutureWorld Conference/Deloitte Netherlands, Rotterdam, Netherlands, February 23, 2011.
- 42. "The Future of Prediction" Center for Digital Business/Citigroup Workshop, MIT, Cambridge, MA, February 17, 2011.

- 43. "Digital Innovation" SAP GEA Advisory Board Workshop, New York, NY, February 16, 2011.
- 44. "IT Productivity and Innovation", Canadian Conference Board, Cambridge, MA, February 9, 2011.
- 45. "The Extroverted Firm" Harvard Business School, Boston, MA, February 3, 2011.
- 46. "Keynote: Digitization and Innovation: Lessons for CIOs" CRITO CIO Conference, University of California, Irvine, California, January 25, 2011.
- 47. "Keynote: Future Research in Information Systems and Computer Science" Merage & Cal-IT Joint Research Workshop, University of California, Irvine, California, January 24, 2011.
- 48. "Digitization and Innovation" Inaugural Speaker at M2E Series, Annenberg School, University of Southern California, Los Angeles, California, January 20, 2011.
- 49. "Data Driven Decision-making, Productivity and CEO Pay", Workshop on Information Systems and Economics, St. Louis, Missouri, December 11, 2010.
- 50. "Analytics and the Future of Management" IBM Livestream, Lexington, MA, November 11, 2010.
- "Director's Welcome", "The Digital Organization", "The Matrix of Change", "Information Analystics", "Wrap-up" GE Executive Information Management Program, MIT, Cambridge, MA, Sept 20-24, 2010.
- 52. "Information Technology and Productivity", Technology Conference, Reno, Nevada, August 5, 2010.
- 53. "Welcome and Overview" NBER IT and Economics workshop, Cambridge, MA, July 23, 2010.
- 54. "Keynote: Wired for Innovation" IBM System Z Announcement, New York, NY, July 22, 2010
- 55. "IT Advantage", McKinsey Offices, Palo Alto, California, July 16, 2010.
- 56. "Keynote: Wired for Innovation: How IT is Reshaping the Economy" EU Ministerial Meeting on Information Society Policies and Metrics, Madrid, Spain, June 14, 2010.
- 57. "The IT Organization of the Future" Academic Keynote Panel, MIT CIO Symposium, Cambridge, MA, May 19, 2010.
- 58. "Director's Update and Outlook", Center for Digital Business Board Meeting, MIT, Cambridge, MA, May 18, 2010
- 59. "Data Driven Decision-making", Center for Digital Business Annual Conference, MIT, Cambridge, MA, May 18, 2010
- 60. "Director's Welcome and Overview", Center for Digital Business Annual Conference, MIT, Cambridge, MA, May 20, 2010

- 61. "Wired for Innovation", Productivity Conference, University of Washington, Seattle, Washington, April 9, 2010.
- 62. "Wired for Innovation" Symposium on Transportation and Logistics, MIT, Cambridge, MA, March 11, 2010.
- 63. "Keynote: Wired For Innovation: How Is IT Reshaping Competition And What Can We Learn From High Performance Innovators?", Legal IT Conference, London, UK, February 11, 2010.
- 64. "CEO Compensation and Information Technology" International Conference on Information Systems, Phoenix, Arizona, December 13, 2009
- 65. "The Future of Prediction: How Google Searches Foreshadow Housing Prices and Quantities", International Conference on Information Systems, Phoenix, Arizona, December 13, 2009
- 66. "Testing Three-Way Complementarities: Incentives, Monitoring and Information Technology" International Conference on Information Systems, Phoenix, Arizona, December 13, 2009
- 67. "Panel: NeuroIS: Hype or Hope?" International Conference on Information Systems, Phoenix, Arizona, December 13, 2009
- 68. "Panel: WISE Celebration: Are We WISE About Sub-Fields in IS? Lessons from Forming and Sustaining a Research Community", International Conference on Information Systems, Phoenix, Arizona, December 13, 2009
- 69. "The Longer Tail" Workshop on Information Systems and Economics, Phoenix, Arizona, December 13, 2009
- 70. "Discussion of 'The Quest for Content" Workshop on Information Systems and Economics, Phoenix, Arizona, December 13, 2009
- 71. "The Future of Prediction: How Google Searches Foreshadow Housing Prices and Quantities" Workshop on Information Systems and Economics, Phoenix, Arizona, December 12, 2009
- 72. "Information Technology and Innovation" Seminar, Harvard Business School, Boston, MA, December 9, 2009.
- 73. "The Future of Prediction: How Google Searches Foreshadow Housing Prices and Quantities" NBER Productivity Workshop, Cambridge, MA, December 4, 2009.
- 74. "Director's Welcome", "The Digital Organization", "The Matrix of Change", "Information Analystics", "Wrap-up" GE Executive Information Management Program, MIT, Cambridge, MA, November 16-20, 2009.
- 75. "Wired for Innovation", MIT Communication Future Program, Computer Science and Artificial Intelligence Lab, Cambridge, MA, October 28, 2009.
- 76. "Wired for Innovation", Federal Communications Commission, Washington, DC, October 20, 2009.

- 77. "IT and Innovation", Presentation for Board of Governors, Federal Reserve Board, Washington, DC, October 16, 2009.
- 78. "Wired for Innovation" Center for Digital Business Seminar, MIT, Cambridge, MA, October 7, 2009.
- 79. "Leaders and Laggards: Experiment and Scale" MIT CIO Forum, Cambridge, MA, Sept 21, 2009.
- 80. "When Software Is Not Enough: Synergies between HR practices and HCM Software" SAP Academic Conference, Palo Alto, CA, August 21, 2009.
- 81. "Testing Three-way Complementarities: Incentives, Monitoring and Information Technology" NBER Personnel Economics Workshop, Cambridge, MA, July 22, 2009
- "Organizers Welcome" NBER IT and Economics Workshop, Cambridge, MA, July 17, 2009.
- 83. "Some thoughts on the Impact of ICT on Innovation" European Union Commission on Economic Impact of IT Workshop, Brussel, Belgium, June 29, 2009.
- 84. "The Matrix of Change" IMP Executive Program, MIT Cambridge, MA, June 22, 2009.
- 85. "How IT is Propagating Innovations and Accelerating Competition" Keynote, ASIGO Conference, Nuremburg, Germany, May 29, 2009.
- 86. "CIO Leadership and the Bottom Line", Moderator, CIO Panel, MIT CIO Symposium, Cambridge, MA, May 20, 2009.
- 87. "The Future of IT" Academic Keynote Panel, MIT CIO Symposium, Cambridge, MA, May 20, 2009.
- "Director's Update and Outlook", Center for Digital Business Board Meeting, MIT, Cambridge, MA, May 19, 2009
- "Leaders and Laggards", Center for Digital Business Annual Conference, MIT, Cambridge, MA, May 19, 2009
- 90. "Director's Welcome and Overview", Center for Digital Business Annual Conference, MIT, Cambridge, MA, May 19, 2009
- 91. "Experimentation, Measurement and Propagation: Chairman's welcome and overview", Workshop on Experimentation, MIT, Cambridge, MA, May 18, 2009.
- 92. "The Art and Science of Driving Business Results with IT", Sapphire, Orlando, Florida, April 13, 2009.
- 93. "Experiment, Measure, Share and Scale: Using IT to Drive Innovation" Novartis Annual Conference, Chatham, MA, April 29, 2009.
- 94. "The Future of Business: How IT is Transforming Business and What to Do about It" Keynote, Microsoft Annual User Conference, Lisbon, Portugal, March 5, 2009.

- 95. "How IT Accelerates Competition" Boston Chamber of Commerce, Boston, MA, February 25, 2009.
- 96. "How IT Accelerates Competition", Keynote, Cognizant Annual Conference, Boca Raton, Florida, February 9, 2009.
- 97. "Enterprise 2.0", Cisco Executive Briefing, Cambridge and San Jose (via Telepresence), February 6, 2009.
- 98. "IT and Organizational Productivity" Keynote, World Bank Annual Conference, Washington, DC, January 28, 2009.
- 99. "IT in Healthcare: Five Lessons from Other Industries" NBER Workshop on Healthcare, Cambridge, MA, January 16. 2009.
- 100. "IT and Firm Performance" Session Chair, International Conference on Information Systems, Paris, France, December 2008.
- "Trust, Costs and Incentives in Global Supplier Networks: Evidence From IT Sourcing Decisions." Workshop on Information Systems Economics, Paris, France, December, 2008.
- 102. "Comments on 'Organic and Paid Search Advertising", Workshop on Information Systems and Economics, Paris, France, December, 2008.
- 103. "The Digital Organization", "The Matrix of Change" and "Information Analytics" GE Executive Information Management Program, MIT, Cambridge, MA December, 2008.
- 104. "Managing in an Information Rich Environment", Keynote, Gartner Enterprise Networking Summit, November 18, 2008.
- 105. "Research on Digital Business" NTT Data, MIT, Cambridge, MA, October, 2008.
- 106. "Does Advertising Cause Future Sales?" Digital Advertising Workshop, MIT, Cambridge, MA, October, 2008.
- 107. "Research on Enterprise 2.0 and the Impact of IT", Cisco C-Level Executive Briefing, San Jose, CA (via Telepresence), October, 2008.
- 108. "Executive Education Faculty Development Workshop", MIT, Cambridge, MA, October, 2008
- 109. "How IT Accelerates Competition", SAP Research Workshop, Palo Alto, August, 2008.
- 110. "The Long Tail" Google China Headquarters, Beijing, China, June, 2008.
- 111. "Information Worker Productivity" Tsinghua University, Beijing, China, June, 2008.
- 112. ""The Digital Organization"" Tsinghua University, Beijing, China, June, 2008.
- 113. "The Long Tail" Tsinghua University, Beijing, China, June, 2008.
- 114. "Information Worker Productivity" Lingnan University, Guanzhou, China, June, 2008.
- 115. "The Digital Organization" Lingnan University, Guanzhou, China, June, 2008.
- 116. "The Long Tail" Lingnan University, Guanzhou, China, June, 2008.

- 117. "MIT Sloan MBA Overview" CSK Management Workshop, Tokyo, Japan, June 2008.
- 118. "Productivity and Performance Effects of Enterprise Systems" SAP, May 2008.
- 119. "Center for Digital Business Research Overview", MIT Sloan School, Cambridge, MA, May 2008.
- 120. "Digital Productivity Research", Center for Digital Business Annual Conference, MIT Sloan School, Cambridge, MA, May 2008.
- 121. "What Does IT Do?", Center for Digital Business Annual Conference, MIT Sloan School, Cambridge, MA, May 2008.
- 122. "Scale without Mass" The 2008 World Congress on National Accounts and Economic Performance Measures for Nations, Washington, DC, May 2008.
- 123. "Information Worker Productivity" ILP Research Directors Conference, MIT, Cambridge, MA, April 2008.
- 124. "Valuing Information" Oracle Management Briefing, April, 2008
- 125. "Current Research in Digital Business" Google Economics Workshop, Palo Alto, CA, April 10, 2008.
- 126. "Innovate then Propagate" SAP CEO Summit, Frankfurt, Germany, April, 2008.
- 127. "Scale without Mass" CART Seminar, Carnegie Mellon University, March, 2008.
- 128. "The Matrix of Change" News Corp Executive Program, March, 2008
- 129. "The Matrix of Change" BT Vital Vision Executive Program, March, 2008
- 130. "Scale without Mass", Dean's Visiting Committee, MIT Sloan School, Cambridge, MA March 15, 2008.
- 131. "The Global Economic Impact of Improvements in Information Worker Productivity", C-Scape Global Forum, Cisco Systems, Boston, as well as New York, San Jose, London and Cincinnati (via Telepresence), December 12, 2007.
- 132. "The Future of Information Systems and Economics" Plenary Panel, Workshop on Information Systems and Economics, Montreal, Canada, December 9, 2007.
- 133. "The Matrix of Change" GE Executive Information Management Program, MIT Sloan School, Cambridge, MA, November 16, 2007.
- "Information, Productivity and the Digital Organization", GE Executive Information Management Program, MIT Sloan School, Cambridge, MA, November 12, 2007.
- 135. "Scale without Mass: Business Process Replication and Industry Dynamics", Conference on Recent Trends In Economic Volatility: Sources And Implications Center for the Study of Innovation and Productivity (CSIP), Federal Reserve Bank, San Francisco, CA, November 2, 2007.
- 136. "The Digital Organization: What Every CFO Needs to Know About Creating Value from IT" Keynote, CFO Summit, Chicago, IL, October 30, 2007.
- 137. "The Matrix of Change" BT Partner Vision Executive Program, Boston, MA, October 17, 2008.

- 138. "Innovation, Productivity and the Digital Organization", BT Partner Vision Executive Program, Boston, MA, October 17, 2007.
- 139. "Information Worker Productivity in the Digital Organization", MIT CIO Summit, MIT, Cambridge, MA, 2007.
- 140. "Which Came First, IT or Productivity? The Virtuous Cycle of ERP Investment" NBER Productivity Summer Institute, Cambridge, MA, July 18, 2007.
- 141. "Information Worker Productivity" and "Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on The Concentration of Product Sales" Royal Complutense, Harvard University, Cambridge, MA, July 10, 2007.
- 142. "Information Worker Productivity: Networks and Information Diffusion". Hitachi-MIT Open Forum on Sensible Organization, Tokyo, Japan June 29, 2007.
- 143. "Information Worker Productivity: Networks and Information Diffusion". CSK Institute for Sustainability, Tokyo, Japan June 28, 2007.
- 144. "Information Worker Productivity in the Digital Organization", Cisco Executive Briefing, San Jose, CA, June 22, 2007.
- 145. "A Discussion of Information Worker Productivity with Erik Brynjolfsson", Cisco Senior Executive Videocast, San Jose, CA, June 22, 2007.
- 146. "Information Worker Productivity Lessons for Small and Medium Enterprises", Cisco SME Videocast, San Jose, CA, June 22, 2007.
- 147. "Some Comments on Dale Jorgenson et al.'s 'U.S. Labor Supply and Demand in the Long Run" Federal Reserve Bank of Boston Conference on Labor Supply in the New Century, Wequassett, MA, June 19, 2007.
- 148. "Innovation, Productivity and the Digital Organization" and "The Matrix of Change" MIT Nanyang Fellows Executive Program, MIT, Cambridge, MA, June 15, 2008.
- 149. "Impact of Electronic Document Management Technology on Time Distribution and Performance: Evidence From a Longitudinal Field-Experiment", Liberty Mutual Insurance, Boston, MA, June 7, 2007.
- 150. "Digital Productivity", MIT Center for Digital Business/GlaxoSmithKline, Cambridge, MA, May 29, 2007.
- 151. "Innovation, Productivity and the Digital Organization" and "The Matrix of Change" MIT Leading Innovative Enterprises Executive Program, MIT, Dedham, MA, May 25, 2008.
- 152. "Social Networks and Productivity", MIT CIO Symposium, MIT, Cambridge, MA, May 17, 2007.
- 153. "Director's Welcome", "Overview of Digital Productivity SIG", "Information Worker Productivity in the Digital Organization" Center for Digital Business Annual Conference, MIT Cambridge, MA May 16, 2007.

- 154. "Innovation, Productivity and the Digital Organization" and "The Matrix of Change" MIT NewsCorp Executive Program, Cambridge, MA, May 2, 2008.
- 155. "The Matrix of Change" BT Vital Vision Executive Program, Boston, MA, April 30, 2008.
- 156. "Innovation, Productivity and the Digital Organization", BT Vital Vision Executive Program, Boston, MA, April 30, 2008.
- 157. "Information Worker Productivity in the Digital Organization" Scientific, Technical and Medical Publishers Annual Conference, Cambridge, MA, April 25, 2008.
- 158. "Information, Technology and Organizational Capital" NYU IT Seminar, New York University, New York, NY, April 19, 2007.
- 159. "Policy Dimensions of the IT R&D Ecosystem", Assessing the Impact of Changes in the Information Technology Research and Development Ecosystem, Panel Presentation for the National Academy of Engineering, Boston, MA April 19, 2007
- 160. "Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on The Concentration of Product Sales" NYU IT Seminar, New York University, New York, NY, April 16, 2007.
- 161. "The Long Tail in the Digital Economy". Keynote, NVN Symposium, Amsterdam, The Netherlands, March 23, 2007.
- 162. "The Matrix of Change" MIT/UAE Executive Program, Abu Dhabi, United Arab Emirates, March 19, 2008.
- 163. "Innovation, Productivity and the Digital Organization", MIT/UAE Executive Program, Abu Dhabi, United Arab Emirates, March 18, 2008.
- 164. "Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on The Concentration of Product Sales" Wharton OPIM Seminar, Wharton School, University of Pennsylvania, Philadelphia, PA, March 12, 2007.
- 165. "Information Technology and Information Worker Productivity", NBER Program on Technological Progress and Productivity Measurement, National Bureau of Economic Research, Cambridge, MA, March 9, 2007.
- 166. "Information Technology, Productivity and Innovation: Where Are We and Where Do We Go From Here?", Center for Digital Business Information Worker Productivity Workshop, Salt Lake City, UT, February 21, 2007.
- "Information, Technology and Information Worker Productivity" Center for Digital Business Information Worker Productivity Workshop, Salt Lake City, UT, February 21, 2007.
- 168. "Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on The Concentration of Product Sales" American Economic Association, Chicago, IL, January 7, 2007.
- 169. "A Productive Decade: A Retrospective on the U.S. Productivity Resurgence" (Discussant), American Economic Association, Chicago, IL, January 6, 2007.

- 170. "Chairman's Welcome and Overview" Workshop on Information Systems and Economics (WISE), Northwestern University, Evanston, Il, Dec. 9, 2006.
- 171. "Complementarities in Organizations" (with Paul Milgrom), NBER Workshop on the Economics of Organizations, NBER, Cambridge, MA, Nov. 2, 2006.
- 172. "IT and Productivity" and "The Matrix of Change" Chairman and Speaker, GE Executive Information Management Program, MIT, Cambridge, MA Dec. 13-17, 2005.
- 173. "IT and Productivity" and "The Matrix of Change", BT Vital Vision, Harvard Faculty Club, Boston, Nov 8, 2006.
- 174. "Information Worker Productivity" Thinks That Think Conference, MIT Media Lab, Cambridge, MA, October 10, 2006.
- 175. "Information Technology and Organizational Capital" U.S. Census CAED Conference, Federal Reserve Bank, Chicago, IL, Sept 19, 2006.
- 176. "IT and Productivity" Keynote, Gartner Data Center Conference, Orlando, Fl, Sept 18, 2006.
- 177. "Information Technology and Organizational Capital" 2006 Census Research Data Center Annual Conference, Baruch College, New York, Sept. 14, 2006.
- 178. "Technology and Productivity" MIT MBA Pre-term session, Cambridge, MA, August 23, 2006.
- 179. "Comments on 'Technology, Information and the Decentralization of the Firm", Innovation Policy and the Economy, NBER Summer Institute, Cambridge, MA, July 24, 2006.
- "Comments on "Firm Resources, Location and Investment in Process Innovation", Productivity Workshop, NBER Summer Institute, Cambridge, MA, July 21, 2006.
- 181. "Productivity and Innovation in Health Care: the Digital Organization", Keynote, Health Information Technology Symposium, MIT, Cambridge, MA, July 19, 2006.
- 182. "Scale without Mass" and "Does Current Advertising Cause Future Sales" Seminar for Spanish Scholars, Royal Complutense, Cambridge, MA, July 11, 2006.
- "Scale without Mass" Opening Session, MIT CIO Summit, Cambridge, MA, June 22, 2006.
- 184. "Measuring IT Value", MIT CIO Symposium, Cambridge, MA, June 21, 2006.
- 185. "Director's Welcome", "Overview of Digital Productivity SIG", "Scale without Mass" Center for Digital Business Annual Conference, MIT Cambridge, MA, June 20.
- 186. MIT Center for Digital Business Annual Conference, Cambridge, MA, June 20, 2006.
- 187. "The Matrix of Change" Nanyang Executive Program, MIT, Cambridge, MA, June 15, 2006.
- 188. "Some Economics of Innovation and Collaboration" IBM Innovation Forum, Tokyo, Japan, June 8, 2006.
- 189. "IT and Organizational Productivity", News Corporation Seminar, Hotel@MIT, Cambridge, MA May 2, 2006.

- 190. "IT and Productivity" and "The Matrix of Change", BT Vital Vision, Harvard Faculty Club, Boston, April 28, 2006.
- 191. "A Mechanism for Providing Innovation Incentives for Digital Goods", NBER Conference on Innovation Policy and the Economy, Washington, DC, April 19, 2006.
- 192. "Does Current Advertising Cause Future Sales? Evidence from the Direct Mail Industry" Industrial Organization Workshop, MIT Department of Economics, February 27, 2006.
- 193. "Does Current Advertising Cause Future Sales? Evidence from the Direct Mail Industry" NBER Winter Industrial Organization Meetings, Stanford, CA, February 25, 2006.
- 194. "Does Current Advertising Cause Future Sales? Evidence from the Direct Mail Industry" NBER Productivity Program, February 21, 2006.
- 195. "IT and Organizational Productivity" News Corporation Executive Program, MIT, Cambridge, MA Feb 15, 2006.
- 196. "Does Process Enabling IT Matter? Measuring the Business Value of Extended Enterprise Systems" Workshop on Information Systems and Economics (WISE), UCI, Irvine, CA, Dec. 10, 2005.
- 197. "Goodbye Pareto Principle, Hello Long Tail: Modeling and Measuring the Effect of Search Cost on Product Sales Distribution" Workshop on Information Systems and Economics (WISE), UCI, Irvine, CA, Dec. 10, 2005.
- 198. "IT and Productivity" and "The Matrix of Change" Chairman and Speaker, GE Executive Information Management Program, MIT, Cambridge, MA Dec. 9, 2005.
- 199. "Keynote Session: The Digital Organization Unlocking the Business Value of IT" Gartner 24th Annual Data Center Conference, Las Vegas, NV Dec. 5, 2005.
- 200. "The Digital Organization" Microsoft Canadian IT Executive Summit, Redmond, WA, Nov 17, 2005.
- 201. "The Digital Organization" Microsoft Asian Executive Summit, Bangkok, Thailand, Nov. 15, 2005.
- 202. "IT and Productivity" and "The Great Debate: Nicholas Carr and Erik Brynjolfsson", AMR CIO Conference, Boston, MA Nov. 8, 2005.
- 203. "Thought Leader Panel: Context for Growth in the Next Five Years" Cisco CIO Summit, Amelia Island, Florida, Oct 26, 2005.
- 204. "The Digital Organization" AT&T Workshop, Tampa, FL, Oct 17, 2005.
- 205. "The Digital Organization" AT&T Workshop, Kohler, WI, Oct 12, 2005.
- 206. "Collaboration for Innovation", IBM CTO Conference, New York, NY, Oct 10, 2005.
- 207. "The Digital Organization" FT/Equant Workshop, MIT, Cambridge, MA, Sept 29, 2005.

- 208. "Keynote Session: New Growth Opportunities in Computing and Communications" Technology Review Emerging Technologies Conference, MIT, Cambridge, MA Sept 29, 2005.
- 209. "The Digital Organization" AT&T Workshop, Lansdowne, VA, September 26, 2005.
- 210. "The Digital Organization and the Matryoshka CIO" CIO Connect Bagshot, Surrey, England, September 13, 2005.
- 211. "IT, Productivity and the Management" Delivering Information Services Executive Session, Harvard Business School, July 26, 2005
- 212. "Comments on 'It Ain't What You do it's the way that you do I.T. Testing Explanations of Productivity Growth Using US Affiliates' Presentation at NBER Productivity Summer Institute, Cambridge, MA July 21, 2005.
- 213. "Information Worker Productivity" and "The Long Tail" Seminar for Spanish Scholars, Royal Complutense, Cambridge, MA, July 13, 2005.
- 214. "Information Worker Productivity" CSK Invited Talk, Tokyo, Japan, July 5, 2005.
- 215. "The Digital Organization: Practices of Highly Effective Companies" Keynote, Microsoft Business and Technology Conference, Singapore, July 1, 2005.
- 216. "Information Worker Productivity", IT and Competitive Advantage Conference, Montreal, Canada, June 28, 2005.
- 217. "The Digital Organization" Keynote, and "The Matrix of Change", workshop, Optimize CIO Summit, Naples, Florida, June 13-14, 2005.
- 218. "Channel Conflict" Keynote Address, Symposium on Electronic Commerce Research, University of Maryland, College Park, MD, May 22, 2005.
- 219. "Information Worker Productivity" Opening Session, MIT CIO Summit, Cambridge, MA, May 19, 2005.
- 220. "The Digital Organization" Keynote Address, ASG Conference, Naples, Florida, May 16, 2005.
- 221. "The Matrix of Change", Vital Vision Leadership Conference, Cambridge, MA, April 26, 2005.
- 222. "The Digital Organization" Keynote Address, Microsoft Business and Technology Conference, Scotts Valley, Arizona, February 24-25, 2005.
- 223. "Productivity Growth and the Federal Reserve Board's Interest Rate Hike", Remarks for Bloomberg World Financial Report, New York (via videoconference), February 2, 2005.

- 224. "Some Thoughts on Productivity Growth Trends and Predictions" Invited Talk, Academic Advisory Council, Federal Reserve Bank of Boston, January, 2005.
- 225. "Should the Core IS Course be Structured Around a Fundamental Question?" Panel Presentation, International Conference on Information Systems, Washington, D.C. December 15, 2004.
- 226. "A Mechanism for Providing Innovation Incentives for Digital Goods" Paper Presentation, International Conference on Information Systems, Washington, D.C. December 14, 2004.
- 227. "Business Transformation: Lessons from the Matrix of Change" and "Director's Course Wrap-up" General Electric Executive Information Management Program, MIT, Cambridge, MA December 10, 2004.
- 228. "Senior Executive Panel" General Electric Executive Information Management Program, MIT, Cambridge, MA December 9, 2004.
- 229. "Director's Welcome and Introduction" and "IT and Productivity" General Electric Executive Information Management Program, MIT, Cambridge, MA December 6, 2004
- 230. "The Digital Organization: How IT Drives Productivity" Keynote, CEFRIO Annual Conference, Montreal, Canada, December 3, 2004.
- 231. "The Digital Organization: How ICT Drives Productivity" Keynote, EuroCIO Annual Conference, Brussels, Belgium, November 24, 2004.
- 232. "The Digital Organization: How IT Drives Productivity" Keynote, Institutional Investor Financial Technology Forum, Boston, MA November 18, 2004.
- 233. "Using the Matrix of Change" and "Benchmarking the Digital Organization" Center for eBusiness Research Workshop on Tools and Frameworks for eBusiness, MIT, Cambridge, MA November 17, 2004.
- 234. "Information Worker Productivity: Task-level Evidence" Technology and Operations Management Research Seminar, Harvard Business School, Boston, MA November 10, 2004.
- 235. "Information Technology without Information Overload" CSK Executive CIO Event, Tokyo, Japan November, 2, 2004.
- 236. "The Digital Organization: How IT Drives Productivity" Keynote, Nikkei Technology Conference, Tokyo, Japan November 1, 2004.
- 237. "Information Worker Productivity: Task-level Evidence" Organizational Economic Seminar, MIT, Cambridge, MA October 28, 2004.
- 238. "Information Worker Productivity: Task-level Evidence", Productivity Seminar, National Bureau of Economic Research, Cambridge, MA October 26, 2004.
- 239. "Business Transformation: Lessons from the Matrix of Change" FutureFusion UK National Health Service Seminar, MIT Cambridge, MA October 21, 2004.

- 240. "The Digital Organization: What Every CFO Needs to Know about IT Value" Keynote, CFO IT Value Conference, San Francisco, CA September 29, 2004.
- 241. "The Digital Organization: How ICT Drives Productivity" Keynote, XXVIII Italian National Conference of Industrial Economics and Policy, Ancona, Italy, September 25, 2004.
- 242. "The Digital Organization" Mitsui Executive Meeting, Industrial Liaison Program, MIT, Cambridge, MA, September 15, 2004.
- 243. "The Digital Organization" Where IT's @: IT and the Economy, Federal Reserve Bank of Dallas, Dallas, TX, September 10, 2004.
- 244. "Power and Influence in Business Technology" Optimize Magazine Roundtable, New York (via teleconference) September 8, 2004
- 245. "Mandatory Unbundling and Economic Welfare" Symposium on Cable TV Bundling, Federal Communications Commission Hearings, Washington, DC, July 29, 2004.
- 246. "Comment on 'The (Teaching) Role of Universities in the Diffusion of the Internet' by Avi Goldfarb," Innovation Workshop, National Bureau of Economic Research, Summer Institute, Cambridge, MA July 19, 2004.
- 247. "Information Technology and Intangible Assets" and "Business Transformation: Lessons from the Matrix of Change" Seminar for Spanish Scholars, Royal Complutense College, Harvard University, Cambridge, MA July 16, 2004.
- 248. "The Digital Organization" eGov Conference, Dublin, Ireland (via videoconference), June 17, 2004.
- 249. "Digital Organizations: What do Productive IT Users do Differently", Ford-MIT Alliance, MIT, Cambridge, MA June 8, 2004.
- 250. "Business Transformation: Lessons from the Matrix of Change" Seminars for Nanyang Tech University Fellows, MIT, Cambridge, MA, May 28, 2004.
- 251. "Achieving Agility Without Information Overload" MIT CIO Summit, MIT, Cambridge, MA, May 20, 2004.
- 252. "IT and Productivity", Panel Chair, MIT CIO Symposium, MIT, Cambridge, MA, May 19, 2004.
- 253. "The Digital Organization" Keynote, MIT CIO Symposium, MIT, Cambridge, MA, May 19, 2004.
- 254. "Director's Review and Update on the Center for eBusiness", Center for eBusiness Semi-Annual Board Meeting, , MIT, Cambridge, MA, May 18, 2004.
- 255. "Research in the Digital Productivity Special Interest Group", Center for eBusiness Annual Conference, , MIT, Cambridge, MA, May 18, 2004.

- 256. "Director's Introduction and Overview", Center for eBusiness Annual Conference, MIT, Cambridge, MA, May 18, 2004.
- 257. "The Digital Organization" Keynote, Warburg Pincus IT Conference, New York, May 13, 2004.
- 258. "Business Transformation: Lessons from the Matrix of Change" Conference on Driving Innovation Throughout the Organization: The Interplay of Technology, Culture and Markets MIT, Cambridge, MA, May 11, 2004
- 259. "The Digital Organization" Executive Briefing for Merrill Lynch/MIT Alliance, MIT, Cambridge, MA, April 29, 2004.
- 260. "Consumer Surplus in the Digital Economy" (Keynote Address), Research Symposium on Interactive Marketing, Bentley College, Waltham, MA, April 16, 2004.
- 261. "IT, Productivity and the Digital Organization" Warburg Pincus Workshop, New York, NY, March 30, 2004.
- 262. "Why IT Does Matter" Teaching and Research Workshop, Stanford Graduate School of Business, Stanford, CA, March 19, 2004.
- 263. "The Digital Organization: Seven Practices of Highly Productive Companies," University of Navarra, IESE Business School, Barcelona Spain (via video conference), March 4, 2004.
- 264. "Price Dispersion on the Internet" Interview for National Public Radio, WBUR studios, Boston, MA February 24, 2004.
- 265. "The Matrix of Change" and "Information and Communications Technology and Productivity" BT Workshops, Melia White House, London, UK, January 19 and 20, 2004.
- 266. "Information Worker Productivity: Task Level Evidence" Workshop on Information Systems and Economics, Seattle, WA, December 14, 2003.
- 267. "Productivity in E-commerce and Retailing" Brookings Workshop on Service Sector Productivity, Washington, DC November, 21, 2003.
- 268. "Information Technology and Productivity: Where are we and where do we go from here?" MIT Center for eBusiness Digital Productivity SIG Workshop, MIT, Cambridge, MA November 19, 2003.
- "The Digital Organization: Practices of Highly Productivity IT Users" MIT/IMD Executive Program on Making Business Sense of IT, MIT, Cambridge, MA November 17, 2003.
- "The Digital Organization: Practices of Highly Productivity IT Users" Sloan Family Weekend, MIT, Cambridge, MA October 18, 2003.
- 271. "The Digital Organization: Practices of Highly Productivity IT Users" (Keynote) and "The Matrix of Change: A tool for business process redesign", Conference on IT and Business Value, University of San Diego, San Diego, CA October 2, 2003.

- 272. "IT and Productivity" CNN (Television) Boston, MA, October 1, 2003.
- 273. "IT and the Productivity Revival" Bloomberg Financial Network (Television), Boston, MA August 20, 2003.
- 274. "IT and Productivity: The Evidence" Center for eBusiness, MIT, August 12, 2003.
- 275. "The Great Equalizer" and "IT, Productivity and Organizational Change: Firm Level Evidence", Royal Complutense College, Harvard, Cambridge, MA July 15, 2003.
- 276. "The Digital Organization: Practices of Highly Productive IT Users" and "The Matrix of Change", Center for Information Systems Research Summer Session, MIT Cambridge, MA June 18, 2003.
- 277. "The Digital Organization: Practices of Highly Productive IT Users", CSK Executive Forums and "eBusiness Research at MIT", CSK Executive Meetings, Tokyo, Osaka and Nagoya, Japan, June 9-13, 2003
- 278. "A Research Agenda for Information Worker Productivity" Information Work Productivity Council, MIT, May 23, 2003
- 279. "Massive Bundling of Information Goods: The Superstructure for the Bandwidth Explosion" Colloquium on the High Bandwidth World, Harvard Business School, April 24, 2003.
- 280. "Intangible Assets and Growth Accounting: Evidence from Computer Investments" and "Consumer Surplus in the Digital Economy" Stern School, New York University, April 17, 2003
- 281. "Consumer Surplus in the Digital Economy Estimating the Value of Increased Product Variety" International Industrial Organization Conference, Boston, April 5, 2003
- 282. "Global Outsourcing", Keynote Presentation, MassEcomm Roundtable, John Hancock Conference Center, Northeastern University, Boston, MA, March 31, 2003.
- 283. "Information Technology and Productivity: The Digital Organization", Keynote Presentation, Gartner ITXPO, San Diego Convention Center, San Diego, CA, March 24, 2003.
- 284. "Information Technology and Productivity: Lessons for CFOs and CIOs",
 "Global Outsourcing", "Business Intelligence", "Business Continuity Planning",
 "Lessons Learned", Conference Co-Chairman, Speaker and Panel Chairman,
 BusinessWeek CFO-CIO Forum, The Breakers, Palm Beach, FL, March 20-21, 2003.
- 285. "Information Technology, Productivity and the Digital Organization" Keynote Presentation, UVa-CMIT program on "IT and Business Value", University of Virginia, Charlottesville, VA, March 14, 2003.
- 286. "Information Technology and Organizational Assets", Opening Presentation, Transformation Enterprise Conference, United States Department of Commerce, Washington, D.C. January 27. 2003.

- 287. "Managing the Transition to eBusiness using the Matrix of Change", Two Programs for British Government Officials and British County Officials, BT Offices, London, United Kingdom, January 22-23, 2003.
- 288. "Pervasive Computing" Panel Chair and Moderator, Cyberposium, Harvard Business School, Boston, MA, January 18, 2003.
- 289. "Managing the Transition to eBusiness using the Matrix of Change", Program for Senior BT Executives, MIT, Cambridge, MA, January 9, 2003.
- 290. "Consumer Surplus in the Digital Economy", Paper Presentation, American Economic Association Annual Meeting, Washington, DC, January 5, 2003.
- 291. "Information Technology and Organizational Assets", Paper Presentation, American Economic Association Annual Meeting, Washington, DC, January 4, 2003.
- 292. "Optimal Incentive Contracts for Internet Advertising", "Intangible Assets and Growth Accounting", "The Future of WISE", Workshop on Information Systems and Economics, Barcelona, Spain, December 14-15, 2002.
- 293. "Intangible Asset Research" BT Executive Visit, Center for eBusiness, Cambridge, MA, November 21, 2002.
- 294. "Workshop Overview", "Information Technology and Productivity The Role of Organizational Capital", "Business Transformation with the Matrix of Change", Faculty chair and keynoter, GE EIMP Executive Program, Cambridge, MA, November 18-22, 2002.
- 295. "Managing the Transition to eBusiness using the Matrix of Change", Digital Business Strategy Executive Program, MIT, Cambridge, MA, November 8, 2002.
- 296. "Seven Practices of Highly Productive IT Users" Center for eBusiness Lunch Seminar, MIT, Cambridge, MA, October 30, 2002.
- 297. "A Research Approach for Information Worker Productivity" Information Worker Productivity Council, Cisco Systems, San Jose, CA October 18, 2002.
- 298. "Information Technology and Organizational Assets" Haas School, University of California, Berkeley, Berkeley, CA October 17, 2002.
- 299. "Computers and Business Transformation" Sloan Fellows Convocation, MIT Sloan School Cambridge, MA, August 8, 2002.
- 300. "Discussion of 'Reassessing the Role of IT in the Production Function: A Meta Analysis" National Bureau of Economic Research Summer Session, Cambridge, MA, July 26, 2002.
- 301. "Aggregetion Strategy for Information Goods" and "Business Transformation with IT", Real Collegio Complutense, Harvard, July 16, 2002.
- 302. "Site Licensing Information Goods" Stanford Institute for Theoretical Economics Summer Workshop, Stanford, CA, June 27, 2002.

- 303. "Business Transformation and the Matrix of Change", Center for Information Systems Research Summer Session, MIT Cambridge, MA June 18, 2002..
- 304. "Information Technology and Productivity", Brookings Workshop on Productivity, Washington, DC May 17, 2002.
- 305. "Aggregation Strategies for Information Goods", Pricing Seminar, MIT Sloan School, May 2, 2002.
- 306. "Closing Panel" BT Executive Seminar, Cambridge, MA April 24, 2002.
- 307. "Business Transformation and The Matrix of Change", BT Executive Seminar, Cambridge, MA April 22, 2002.
- 308. "Intangible Assets and Organizational Transformation" Keynote Presentation, Center for eBusiness Annual Conference, MIT, Cambridge, MA, April 19, 2002.
- 309. "Intangible Assets and Organizational Transformation", MIT CIO Summit, Cambridge, MA April 18, 2002.
- 310. "Intangible Assets and Organizational Transformation: Lessons from the Matrix of Change" ILP Research Directors' Conference, MIT, Cambridge, MA, April 9, 2002.
- 311. "Intangible Assets: Computers and Organizational Capital" Brookings Panel on Economic Activity, Washington, DC, April 4, 2002.
- 312. "Information Technology and Organizational Capital: Implications for Growth Accounting" CRIW Conference on Measuring Capital in the New Economy, Federal Reserve, Washington, D.C. January 18, 2002.
- 313. "Information Technology and Organizational Capital: Evidence from the Stock Market", American Economic Association Annual Meeting, Atlanta, GA January 6, 2002.
- 314. "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety" and "eBusiness in a Down Economy (panel)"; Workshop on Information Systems and Economics, New Orleans, LA December 14-15, 2001
- 315. "Ecommerce Research at MIT" Tata Steel Executive Briefing, Center for eBusiness, MIT, November 16, 2001.
- 316. "eBusiness at MIT: Past and Future Research" Center for eBusiness Sponsor Board Meeting, MIT, November 15, 2001.
- 317. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Developing an Internet Strategy, MIT, Cambridge, MA, July 16-17, 2001.
- 318. "Information Technology and Organizational Assets: Evidence from the Stock Market" Technology and Operations Management research seminar, Harvard Business School, Boston, MA November 1, 2001.
- 319. "Education in E-commerce" EC '01 ACM Ecommerce Conference, Tampa, FL, October 16, 2001.

- 320. "Key Technology & Business Trends in the next 5 to 10 years" ALSTOM Executive Briefing, MIT Faculty Club, October 4, 2001.
- 321. "A Discussion of Information Technology and Monetary Policy" Federal Reserve Bank of Boston, Boston, MA September 21, 2001.
- 322. "Economic Policy in the Information Economy" Discussant for Hal Varian's Paper, Jackson Hole Symposium, Federal Reserve Bank, Jackson Hole, Wyoming, August 31, 2001.
- 323. "Information Systems: The Imperial Science", Americas Conference on Information Systems, Association of Information Systems, Boston, MA, August 3, 2001.
- 324. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Summer Institute, Royal Complutense College, Harvard University, Cambridge, MA, July 19, 2001.
- 325. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Developing an Internet Strategy, MIT, Cambridge, MA, July 16-17, 2001.
- 326. "eBusiness Transformation and the Matrix of Change", Summer Session Conference, Center for Information Systems, Cambridge, MA, June 19, 2001.
- 327. "eBusiness Transformation and the Matrix of Change", Workshop on eBusiness Transformation, MIT Center for eBusiness, Cambridge, MA, June 14, 2001.
- 328. "eBusiness Transformation", Informationweek/Businessweek eBusiness Expo, San Jose, June 12, 2001.
- 329. "Visionary Research in eBusiness" MIT Faculty Retreat, Endicott House, Dedham, MA, May 22, 2001.
- 330. "Intangible Assets and Growth Accounting: Evidence from Computer Investments", Conference on Intangibles, NYU Stern School, New York, NY, May 17, 2001.
- 331. "eBusiness Transformation", Opening Keynote Address, Businessweek CIO Summit, Boston, MA, May 10, 2001.
- 332. "The Center for eBusiness @ MIT: Annual Report" Center for eBusiness Executive Board Meeting, MIT, Cambridge, MA, April 24, 2001.
- 333. "eBusiness Students Choice Award: Nominees and Winners", eBusiness Awards Event, MIT, Cambridge, MA, April 23, 2001.
- 334. "eBusiness: Where do we go from here?" Panel presentation, eBusiness Day, MIT Sloan School, Cambridge, MA, April 23, 2001.
- 335. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Developing an Internet Strategy, MIT, Cambridge, MA, April 19-20, 2001.

- 336. "Consumer Decision-Making at Internet Shopbots", Harvard Industrial Organization Workshop, Cambridge, MA, April 16, 2001.
- 337. "Second Generation eBusiness: The Matrix of Change" Keynote, Board of Overseers, University of Mexico Conference, Monterrey, Mexico, February 20, 2001.
- 338. "The Great Equalizer? Consumer Decision-Making at Internet Shopbots", Stanford/NBER Conference on Ecommerce, Stanford, CA, February 9, 2001.
- 339. "The Great Equalizer? Consumer Decision-Making at Internet Shopbots", NBER Conference on Ecommerce Research, Bodega Bay, CA, January 26-27, 2001.
- 340. "Second Generation eBusiness" Closing Keynote, Annual Conference, Center for eBusiness, MIT Sloan School, Cambridge, MA, January 17, 2001.
- 341. "Managing the eBusiness Transformation" (lecture), "What Business Are you Really In?" (moderator), "Frictionless Commerce" (moderator), Businessweek/Informationweek eBusiness Expo and Conference, Javits Center, New York, December 12, 2000.
- 342. "Intangible Assets and Growth Accounting: Evidence from Information Technology Investments", NBER Workshop on Productivity, Cambridge, MA, December 1, 2000.
- 343. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Developing an Internet Strategy, MIT, Cambridge, MA, November 15-16, 2000.
- 344. "Managing the eBusiness Transformation", Keynote Address, Authoria Annual Conference, San Antonio, TX, November 9, 2000.
- 345. "Managing the eBusiness Transformation", The Economist eBusiness Summit, Chicago, IL, October 19, 2000.
- 346. "The Center for eBusiness @ MIT: Accomplishments and Plans" Center for eBusiness Executive Board Meeting, MIT, Cambridge, MA, October 13, 2000.
- 347. "The Role of eBusiness in the New Economy: Implications for Growth" National Academy of Sciences Workshop (STEP), Washington, D.C. October 6, 2000.
- 348. "The Future of eBusiness" Keynote Address, Business Week CEO Forum, New York, NY, October 5, 2000.
- 349. "Managing the eBusiness Transformation", The Economist eBusiness Summit, Atlanta, GA, October 3, 2000.
- 350. "Frictionless Commerce", Keynote Address, Annual Conference, National Retail Federation, San Diego, CA September, 2000.
- 351. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", 2 Panel sessions and Conference Co-Chairman, Developing an Internet Strategy, MIT, Cambridge, MA, July 24-25, 2000

- 352. "The Great Equalizer? Analyzing Shopbot Data" NBER Ecommerce/Industrial Organization Workshop, Cambridge, MA June 22, 2000.
- 353. "Frictionless Commerce" Plenary talk, CISR Summer Session, MIT, Cambridge, MA, June 20, 2000.
- 354. "Innovative E-business Models in Practice," Panel Chair, eBusiness Conference and Expo, San Jose, CA, June 13, 2000.
- 355. "E-business Model University," Invited Lecture, eBusiness Conference and Expo, San Jose, CA, June 13, 2000.
- 356. "True Partnering: Creating the Frictionless Value Chain," Panel Member, eBusiness Conference and Expo, San Jose, CA, June 13, 2000.
- 357. "Research Opportunities" Annual Conference, Future Professors of Manufacturing, Stanford University, May 12, 2000.
- 358. "Frictionless Commerce" Keynote Address, Delphi Automotive Annual Leadership Conference, Troy, MI, June 7, 2000.
- 359. "How Will the Next Wave of Internet Commerce Transform Your Industry and Organization? Lessons from the new Center for eBusiness@ MIT" Plenary Address, ILP Research Directors Conference, MIT, Cambridge, MA, May 10, 2000.
- 360. "Frictionless Commerce" Roundtable Group E-tail Bootcamp, University of Chicago, June 27, 2000.
- 361. "Ecommerce Opportunities in China" Panel Chair, Harvard Conference on Ecommerce in China, Harvard Kennedy School, Cambridge, MA, May 6, 2000.
- 362. Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Panel sessions and Conference Co-Chairman Developing an Internet Strategy, MIT, Cambridge, MA, April 13-14, 2000
- 363. "Frictionless Commerce" The Economist eBusiness Summit, Laguna Nigeul, CA, March 30, 2000.
- 364. "The Matrix of Change" Roundtable Group Ecommerce Bootcamp, University of Chicago, March 20, 2000.
- 365. "Frictionless Commerce" The Economist eBusiness Summit, New York, New York, March 21, 2000.
- 366. "eBusiness Research at MIT" Internet Telephony Convergence Consortium, MIT, Cambridge, MA, January 20, 2000.
- 367. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers", Young Presidents Organization, MIT, Cambridge, MA, January 18, 2000
- 368. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "Managing the Transition to eBusiness using the Matrix of Change", Panel sessions

and Conference Chairman, Developing an Internet Strategy, MIT, Cambridge, MA, January 13-14, 2000

- 369. "Information Technology, Work Organization and the Demand for Skilled Labor: Firm level Evidence", HR Network Meeting, Boston, MA January 6, 2000.
- 370. "Ecommerce Teaching and Research", Panel Presentation, Workshop on Information Systems and Economics, Charlotte, NC, December 11, 1999.
- "The IT Revolution and the Stock Market discussion of a paper by Boyan Jovanovic", NBER Workshop, December 3, 1999.
- 372. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" MIT Industrial Organization Seminar, November 22, 1999
- 373. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" Harvard Business School Accounting and Control Seminar, November 15, 1999
- 374. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers", ILP Conference for International Paper, MIT, Cambridge, MA, November 5, 1999.
- 375. "The IT Revolution and the 'New Economy'" Gilder Technology Conference, New York, October 28, 1999.
- 376. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers", RTG Ecommerce Bootcamp, Chicago,, October 27, 1999.
- 377. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers", Media Lab eMarkets Conference, MIT, Cambridge, MA, October 18, 1999.
- 378. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" Federal Reserve Bank Governor's Meeting, Boston, MA September 27, 1999.
- 379. "Marketing and the Internet", American Marketing Association Annual Meeting, San Francisco, CA, August 8, 1999.
- 380. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" NBER, Cambridge, MA July 23, 1999.
- 381. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" and "IT and Productivity: Making the Connection" CISR Summer Session, MIT, June 15-17, 1999.
- 382. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" Annual Conference on Intangibles, New York University, New York, May, 1999
- 383. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" White House/Dept. of Commerce Conference on the Digital Economy, Washington, DC, May 25, 1999.

- 385. "Intangible Assets: How the Interaction of Computers and Organizational Structure Affects Stock Market Valuations" Special Presentation for Alan Greenspan and Federal Reserve Board, Washington, DC.
- 386. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" Congressional Staff Seminar, MIT, Cambridge, MA, April 8, 1999.
- 387. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" ICRMOT Annual Meeting, MIT, Cambridge, MA, March 16, 1999.
- 388. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" Internet Telephony Convergence Consortium Annual Meeting, MIT, Cambridge, MA, January 28, 1999.
- 389. "Frictionless Commerce? A Comparison of Conventional and Internet Retailers" MIT Club of Northern California Conference, January 23, 1999
- 390. "Doing Business on the Internet ", MIT Internet Telephony Consortium Annual Conference, Cambridge, MA, January 29, 1999.
- 391. "Doing Business on the Internet: Seven Strategies for Success", MIT Alumni Association Conference, San Mateo, CA, January 23, 1999.
- 392. "Doing Business on the Internet", Keynote Speaker, Next Generation Internet and Beyond, MIT, Cambridge, MA December 2, 1998
- 393. "Doing Business on the Internet", Keynote Speaker, Washington University, School of Engineering & Applied Science, St. Louis, MO. November, 19, 1998
- 394. "Doing Business on the Internet", CISR Sponsors Board Meeting, MIT, Cambridge, MA. November, 19, 1998
- 395. "The Intangible Costs and Benefits of Computer Investments: Evidence from the Financial Markets," Productivity Group Seminar, National Bureau of Economic Research, Cambrdige, MA, October 7, 1999.
- 396. "Bundling and Competition on the Internet" Telecommunications Policy Research Conference, Washington, DC. October 4, 1998
- 397. "Computers, Productivity and the Economy" Time Magazine, Meeting of Board of Economists, September 14, 1998.
- 398. "How Do Information Technology and Organizational Design Affect Labor Demand?" CREST/ INSEE Conference on IT, Employment and Earnings, Nice, France June 22, 1998.
- 399. "Doing Business on the Internet", General Session Speaker, CISR Summer Session, MIT, Cambridge, MA June 17, 1998

- 400. "Computers and Productivity: Making the Connection", Special Session Speaker, CISR Summer Session, MIT, Cambridge, MA June 17, 1998
- 401. "Aggregating and Disaggregating Information Goods: Implications for Bundling, Site Licensing and Micropayment Systems", Marketing Seminar, Graduate School of Business, Stanford University, May 13, 1998.
- 402. "Personalization Issues on the Internet" Strategic Uses of Information Technology, Graduate School of Business, Stanford University, May 6, 1998.
- 403. "Computers and Organizational Structure" Strategic Uses of Information Technology, Graduate School of Business, Stanford University, May 4, 1998.
- 404. "Information Technology and Organizational Design: Evidence from Microdata" Graduate School of Business, University of California, Irvine, March 23, 1998.
- 405. "Computing Productivity: Evidence from Micro Data", Workshop on Micro studies of entry/exit and productivity, NBER Program on Growth, Boston, March 7.
- 406. "Pricing and Distribution of Information Goods: Aggregation and Disaggregation Strategies" INFORMS College on Marketing Conference on Marketing Science and the Internet, MIT, Cambridge, March 6-8, 1998.
- 407. "IT and Productivity", IT Conference, Union Bank of Switzerland, Stamford, CN February 20, 1998.
- 408. "Doing Business on the Internet", Sloan Executive Education Meeting, MIT, Cambridge, MA. February 13, 1998.
- 409. "Computers and Productivity: Making the Connnection", Special Session Speaker, Giga Conference, Boston, MA February 9, 1998.
- 410. "How Do Information Technology and Organizational Design Affect Labor Demand? Evidence from Microdata" Brookings/MIT Conference on Corporations and Human Capital, Dedham, MA January 12-13, 1998.
- 411. "The Intangible Costs and Benefits of Computer Investments: Evidence from the Financial Markets," International Conference on Information Systems, Atlanta, Georgia, December, 1997.
- 412. "Information Technology and Organizational Design: Evidence from Microdata" Competition and Organization in Technology-Intensive Industries, National Bureau of Economic Research Universities Research Conference, Cambridge, MA December 5-6, 1997.
- 413. "Information Technology and Organizational Design: Evidence from Microdata" Graduate School of Business, Stanford University, Stanford, November 19, 1997.
- 414. "Information Technology and Organizational Design: Evidence from Microdata" Center for Research on Information Systems, New York University, New York, October 16, 1997.
- 415. "Digitizing Jobs: How Information Technology Affects the Workforce" Panel at Wall Street Journal Technology Summit, New York, October 15, 1997.

- 416. "In Search of "Friction-Free Markets": An Exploratory Analysis of Prices for Books, CDs and Software Sold on the Internet" Telecommunications Policy Research Conference, Washington, D.C., September 28, 1997.
- 417. "Aggregating and Disaggregating Information Goods: Implications for Bundling, Site Licensing and Micropayment Systems", Telecommunications Policy Research Conference, Washington, D.C., September 28, 1997.
- 418. "The Net Effect: Measures of Information Integration", Telecommunications Policy Research Conference, September 29, Washington, D.C., 1997.
- 419. "Strategy and Organization in the Internet Age" Alumni Weekend Panel Chair, Graduate School of Business, Stanford University, September 27, 1997.
- 420. "Information Technology, Productivity and the Information-based Organization" Research Presentation, IBM Economics and IBM Strategy Division, IBM Corporate Headquarters, White Plains, NY, September 18 and September 19, 1997.
- 421. "Information Technology, Productivity and the Information-based Organization" Inaugural Seminar, Institute of Information Systems, Frankfurt University, Frankfurt Germany (via videoconference), September 5, 1997.
- 422. "Information Technology, Productivity and the Information-based Organization" Graduate School of Management, University of California, Irvine, CA, August 22, 1997.
- 423. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Productivity Summer Workshop, National Bureau of Economic Research, Cambridge, MA August 1, 1997.
- 424. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Conference on the Impact of Information Technology on Performance, U.S. Department of Commerce, Washington, D.C., July 29, 1997.
- 425. "Information Technology and Employment" and "Information Technology and Organizations", Session Leader, National Academy of Sciences Workshop on the Economic and Social Impacts of Information Technology, Berkeley, CA, June 30-July 1, 1997.
- 426. "Aggregating and Disaggregating Information Goods: Implications for Bundling, Site Licensing and Subscriptions" Berkeley Symposium On Policy and Strategy for Converging Information Industries, University of California, Berkeley, CA June 29, 1997.
- 427. "Doing Business on the Internet" Center for Information Systems Research Summer Session, MIT, Cambridge, MA, June 18, 1997
- 428. "Information Technology, Productivity and the Information-based Organization" Center for Information Systems Research Summer Session, MIT, Cambridge, MA, June 17, 1997
- 429. "Bundling Information Goods: Pricing Profits and Efficiency" Strategy Research Seminar, Graduate School of Business, Stanford University, May 21, 1997.

- 430. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Comparative Institutional Analysis Research Seminar, Department of Economics, Stanford University, May 19, 1997.
- 431. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Comparative Institutional Analysis Research Seminar, Department of Economics, Stanford University, May 19, 1997.
- 432. "Electronic Commerce" Strategic Uses of IT, Executive Course, Stanford University, May 13, 1997.
- 433. "IT and Productivity: How to Make the Connection" Strategic Uses of IT, Executive Course, Stanford University, May 12, 1997.
- 434. "IT and Productivity: How to Make the Connection" MIT Information Systems Course, MIT Sloan School, Cambridge, MA, May 5, 1997.
- 435. "Information Technology, Productivity and the Information-based Organization", CIO Thought Leadership Conference, Phoenix, AZ, April 30, 1997.
- 436. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Research Seminar, School of Management, University of California, Irvine, April 4, 1997.
- 437. "Information Technology, Organizational Design and Productivity: Firm-level Evidence" Research Seminar, Anderson School of Management, University of California, Los Angeles, April 3, 1997.
- 438. "Recent Research on Information Pricing", Meeting with Technologic Partners for Stanford Computer Industry Project, Stanford University, March 28, 1997.
- 439. "Recent Research on Information Pricing", Meeting with Phillips Research for Stanford Computer Industry Project, Stanford University, February 7, 1997.
- 440. "Recent Research on Information Technology, Productivity and Organization", Sloan Foundation Review, Stanford University, January 30, 1997.
- 441. "Information Technology, Productivity and the Information-based Organization" Seminar on Information Systems, School of Information Management and Systems, University of California, Berkeley, January 28, 1997.
- 442. "Bundling Information Goods: Pricing Profits and Efficiency", Conference on Internet Publishing and Beyond, Harvard University, Cambridge, MA, January 24, 1997.
- 443. "Bundling Information Goods: Pricing Profits and Efficiency", Stanford Computer Industry Project Research Seminar, Stanford, January 15, 1997.
- 444. "Bundling Information Goods: Pricing Profits and Efficiency", 30th Annual Hawaii International Conference on System Sciences, Wailea, HI, January 9, 1997.
- 445. "How Should Information Be Priced?", Keynote Panel, International Conference on Information Systems, December 16, 1996.

- 446. "Managing Software Piracy: Platform Switching and Strategic Copy Protection" (discussant) Workshop on Information Systems and Economics, Cleveland, OH, December 15, 1996.
- 447. "Pricing Strategies for Electronic Commerce", Plenary Panel Session, Workshop on Information Systems and Economics, Cleveland, OH, December 14, 1996.
- 448. "Computers and Productivity Growth: Micro Evidence" Workshop on Science, Technology and Economic Growth, Stanford, November 26, 1996.
- 449. "Information Technology, Productivity and the Information-based Organization" Annual Conference of Global Manufacturing Associates, Stanford, November 15, 1996.
- 450. "Pricing Information Goods: How to Make a Bundle on the Internet", Operations and Information Management Seminar, Wharton School of Business, University of Pennsylvania, November 6, 1996.
- 451. "Information Technology, Productivity and the Information-based Organization" Stanford Computer Industry Project Research Seminar, Stanford, October 16, 1996.
- 452. "Information Technology and Productivity or 'The Trouble with Computers'?" Sun Microsystems Seminar, Menlo Park, CA, October 11, 1996.
- 453. "Information Technology and Productivity: Making the Connection" Stanford Computer Industry Project Annual Forum, Stanford, September 19, 1996.
- 454. "Information Technology and Productivity: Making the Connection" Institute for International Research, Stockholm (via videoconference), September 17, 1996.
- 455. "Pricing Information Goods: How to Make a Bundle on the Internet", Operations, Information and Technology Seminar, Graduate School of Business, Stanford, October 2, 1996.
- 456. "Bundling Information Goods: Pricing Profits and Efficiency", Economics and Public Policy Seminar, Haas School of Business, UC/Berkeley, September 26, 1996.
- 457. "Bundling Information Goods: Pricing Profits and Efficiency", Industrial Organization Workshop, Department of Economics, MIT, September 16, 1996.
- 458. "Computers and Productivity Growth: Evidence from Microdata" Productivity Summer Workshop, National Bureau of Economic Research, July 16, 1996.
- 459. "Information Technology and the Information-Based Organization" Center for Information Systems Research Summer Session, MIT, June, 19, 1996.
- 460. "Information Technology, Organizational Design and Firm Performance: Firmlevel Evidence" OECD Workshop on Economics of the Information Society, Helsinki, Finland, June 6-7, 1996.
- "Electronic Commerce on the Internet: Three Stages of Business Model Evolution", Workshop on Inventing Organizations of the 21st Century, London, June 5, 1996.

- 462. "Information Technology, Organizational Design and Firm Performance: Firmlevel Evidence" Workshop on the Corporation of the Future , McKinsey Headquarters, London, June 4, 1996.
- 463. "Information Technology and the Information-Based Organization", Opinion Leaders Meeting for MIT Industrial Liaison Program and Seimens-Nixdorf, MIT, January 29 and January 30, 1996.
- 464. "Information Technology, Organizational Structure and Firm Performance: Are there Complementarities?" American Economic Association Annual Meeting, San Francisco, CA, January 6, 1996.
- 465. "Information Technology, Productivity and the Information-Based Organization" Royal Swedish Academy of Engineering Sciences (IVA), Stockholm, Sweden, December 14, 1995.
- 466. "Networks and the Rise of Information Elite" International Conference on Information Systems, Amsterdam, Netherlands, December 12, 1996.
- 467. "Information Technology, Organizational Structure and Firm Performance: Are there Complementarities?" Workshop on Information Systems and Economics, London, UK, December 9, 1995.
- 468. "How to Make a Bundle in Software: A New Mechanism for Pricing Information Goods" Workshop on Information Systems and Economics, London, UK, December 9, 1995.
- 469. "IT and Business Value", The CEO in a Wired World, CEO Institute, Phoenix, Arizona, December 1, 1995.
- 470. "Information Technology and High Performance Work Organization: Are they Complementarities?" Industrial Relations Research Seminar, MIT, November 21, 1995.
- 471. "Information Technology, Productivity and the Information-Age Organization", Decision Support Institute Annual Conference, Boston, MA, November 20, 1995.
- 472. "Overview of Research on IT and Productivity", Industrial Performance Center Research Retreat, Weston, MA, May 25, 1995.
- 473. "The Effects of Computers on Labor Demand and Wages", Discussant, OECD Workshop on IT Impacts, Toronto, Canada, June 28, 1995.
- 474. "Information Technology and Productivity: The Business Issues", Presentation and Discussion Group Leader, CISR Summer Session, June 13, 1995.
- 475. "Information Technology and Organizational Structure: Diversification and Vertical Integration", OECD & Department of Commerce, Washington, May 1, 1995.
- 476. "Information Technology and Productivity: Recent Findings", MIS Seminar, Harvard Business School, Boston, April 13, 1995.
- 477. "Information Technology and Productivity in American Industry", Presentation for IPC International Conference on Future of Industry in Advanced Societies, MIT, Cambridge, April 7, 1995.

- 478. "Information Technologies, their Interoperability and Productivity", Internet Economics Workshop, MIT, March 9, 1995.
- 479. "IT, Reengineering and Productivity", Executive Seminar on Information Technology, University of California, Irvine (via video conference), February 24, 1995.
- 480. "IT, Suppliers, and Incentives: Theory and Evidence", Workshop on the Changing Boundaries of the Firm, Wharton School, University of Pennsylvania, Philadelphia, January 27, 1995.
- 481. "IT, Productivity and the 21st Century Organization", Center for Coordination Science, MIT, January 26, 1995.
- 482. "Computers, Productivity and Performance: Firm-level Evidence", OIT Seminar, Stanford University, Stanford, CA, January 18, 1995.
- 483. "IT and Supplier Partnerships: Theory and Evidence from the Automobile Industry", Workshop on Information Systems and Economics, Vancouver, BC, Canada, December, 1994
- 484. "Information Technology and the Productivity Paradox: The Problem Facing Managers and Researchers", Panel Discussion, International Conference on Information Systems, Vancouver, BC, Canada, December, 1994.
- 485. "IT Productivity and the 21st Century Organization", Presentation at IBM Technology College, December, 1994, Pallisades, NY.
- 486. "Research on Information Technology and Productivity and Supplier Relations", Presentation for Leaders for Manufacturing, Cambridge, December, 1994.
- 487. "IT and Business Value", Panel Discussion, The CEO in a Wired World, CEO Institute, Mexico City, Mexico, November, 1994.
- 488. "Computers and Economic Growth: Firm-level Evidence", Research Seminar at Wharton School, University of Pennsylvania, November, 1994.
- 489. "Information Technology and Productivity in American Manufacturing", Presentation for Mitsui/ILP/IPC, Cambridge, November, 1994.
- 490. "Research on Information Technology and Productivity and Supplier Relations", Presentation for Center for Coordination Science Sponsors, Cambridge, November, 1994.
- 491. "Research on Information Technology and Productivity", Presentation for Center for Information Systems Research Sponsors Board, Cambridge, October, 1994.
- 492. "Incentives in Supplier Relations: Examining the Role of Information Technology", Presentation for International Motor Vehicles Program, Endicott House, Dedham, MA, September, 1994.
- 493. "Computers and Economic Growth: Firm-level Evidence", Research Seminar at University of Texas at Austin, September, 1994.

- 494. "Computers and Economic Growth: Firm-level Evidence", Research Seminar at University of California at Berkeley, September, 1994.
- 495. "Computers and Economic Growth: Firm-level Evidence", Productivity Workshop at the National Bureau of Economic Research, Cambridge, July, 1994.
- 496. "Research on Information Technology and Productivity and Supplier Relations", Presentation for Sloan Foundation Board and Industrial Performance Center, June, 1994.
- 497. "Information Technology and Productivity", Presentation and Discussion Group Leader, CISR Summer Session, June, 1994.
- 498. "Information Technology, Productivity and the Re-organization of Work", Conference on Inventing the Organizations of the 21st Century, MIT, May, 1994.
- 499. "Information Technology Payoffs", Twelfth Annual Information Management Conference, The Conference Board, New York, May, 1994.
- 500. "Information Technology, Productivity and the Re-organization of Work", MICOM Seminar for Senior Executives, MIT, May, 1994
- 501. "Information Technology, Incentives, and the Optimal Number of Suppliers", Electro'94 International, Boston, May, 1994.
- 502. "The Productivity of Information Technology" Seminar for London Business School Senior Executives, MIT, April, 1994.
- 503. "Comments on Estimates of Consumer and Producer Surplus in the Mainframe Computer Market", Discussant, Conference on New Goods, National Bureau of Economic Research (NBER), Williamsburg, April, 1994.
- 504. "Information Technology and the Performance of Firms" TIMS/ORSA Joint National Meeting, Boston, April, 1994 (session chair and paper presenter).
- 505. "Computers and Economic Growth: Firm-level Evidence", Industrial Organization Seminar, Economics Department, MIT, March, 1994.
- 506. "Productivity & Technology", Panel Discussion, The CEO in a Wired World, CEO Institute, Dana Point, CA, March, 1994.
- 507. "Paradox Lost? Firm-level Evidence of High Returns to Information Systems", Research Seminar, Harvard Business School, March, 1994.
- 508. "Information Technology, Productivity and the Organization of Work", Technology and Employment Symposium, MIT, January, 1994.
- 509. "Paradox Lost: New Evidence on the Returns to Information Systems", Operations and Information Technology Seminar, Stanford University, January, 1994.
- 510. "What Can Information Systems Learn from Economics? Applications and Highlights from Current Research", Panel Chairman, International Conference on Information Systems and Economics (ICIS), Orlando, December, 1993.

- 511. "Opening Remarks on Research in Information Systems and Economics", Co-Chairman, Workshop on Information Systems and Economics (WISE), Orlando, December, 1993.
- 512. "The Computer Productivity Paradox", Discussion on *Technology Edge*, CNBC Television Program, WBZ Studios, Boston, December, 1993; Rebroadcast, January, 1995.
- 513. "Downsizing and Unemployment", Interview on "Money Radio", KMNY, Los Angeles, December, 1993.
- 514. "Comments on Estimates of Consumer and Producer Surplus in the Mainframe Computer Market", Discussant, Workshop at the National Bureau of Economic Research (NBER), Harvard University, December, 1993.
- 515. "Network Externalities in Microcomputer Software: An Econometric Analysis of the Spreadsheet Market", ICRMOT Seminar, MIT Sloan School, November, 1993.
- 516. "New Evidence on Information Systems and Firm Performance", Information Technology Seminar, MIT Sloan School, November, 1993.
- 517. "New Evidence on the Returns to Information Systems", OECD/NSF Workshop on the Productivity Impacts of Information Technology Investments, Charleston, November, 1993.
- 518. "An Incomplete Contracts Theory of Information, Technology and Organization", ORSA/TIMS Joint National Meeting, Phoenix, November, 1993.
- 519. "Paradox Lost: New Evidence on Information Systems Productivity", CISR Workshop, Endicott House, October, 1993.
- 520. "Reexamining the Link Between Technology Investments and Productivity Gains", IFSRC/CCS Workshop, Citibank, New York, October, 1993.
- 521. "Information Technology and the New Management Work". Norwegian Academy of Technological Sciences, Trondheim, Norway, September, 1993.
- 522. "The Role of Information Technology in New Organizations" Program on Applied Coordination Technology, University of Trondheim, Trondeim, Norway, September, 1993.
- 523. "Is Information Systems Spending Productive? New Evidence and New Results". Center for Research on Information Technology and Organizations (CRITO) Research Seminar, University of California, Irvine, August, 1993.
- 524. "Is Information Systems Spending Productive? New Evidence and New Results". Research Seminar, Nanyang Technical University, (NTU), Singapore, July, 1993.
- 525. "Electronic Markets: Strategies for Competitive Advantage", Seminar at Nanyang Technical University (NTU), Singapore, July, 1993.
- 526. "The Technology and Economics of Electronic Markets", Two Classes at Nanyang Technical University (NTU), Singapore, July, 1993.

- 527. "Why Information Technology Hasn't Increased the Optimal Number of Suppliers". Research Seminar, Nanyang Technical University (NTU), Singapore, July, 1993.
- 528. "Paradox Lost? New Evidence on IT Productivity", Invited Talk, Epoch Foundation, Taipei, Taiwan, July, 1993.
- 529. "From Markets to Partnerships: IT and Buyer-Supplier Relationships", Invited Talk, CISR-IMARC Conference on "Managing IT for Business Transformation", Singapore, July, 1993.
- 530. "Paradox Lost? New Evidence on IT Productivity", Invited Talk, CISR-IMARC Conference, Singapore, July, 1993.
- 531. "From Markets to Partnerships: IT and Buyer-Supplier Relationships", Invited Talk, CISR Summer Session, Cambridge, June, 1993.
- 532. "Paradox Lost? New Evidence on IT Productivity", Invited Talk, CISR Summer Session, Cambridge, June, 1993.
- 533. "Is Information Systems Spending Productive? New Evidence and New Results". MIS Research Seminar, Boston University, April, 1993.
- 534. "Determinants of the Demand for Packaged Software: Preliminary Results from the Microcomputer Spreadsheet Market", Information Technology Seminar, Sloan School of Management, April, 1993.
- 535. "From Markets to Partnerships: IT and Buyer-Supplier Relationships", Workshop Sponsored by the Center for Coordination Science, the Leaders for Manufacturing Program and the International Center for Research on the Management of Technology, Cambridge, February, 1993.
- 536. "Why Information Technology Hasn't Increased the Optimal Number of Suppliers". 26th Annual Hawaii International Conference on System Sciences, Wailea, HI, January, 1993.
- 537. "Information Systems and Economics: Where Do We Go From Here?", Panel Chair, Workshop in Information Systems and Economics Panel Discussion, December, 1992.
- 538. "Some Estimates of IT's Contribution to Consumer Welfare", Workshop in Information Systems and Economics, Research Presentation, December, 1992.
- 539. "Information Technology and the Productivity Paradox: Review and Assessment", Workshop Sponsored by the Center for Coordination Science and the International Financial Services Research Center, Cambridge, December, 1992.
- 540. "Research on Information Technology and Productivity", Seminar for the Industrial Performance Center, Cambridge, November, 1992.
- 541. "Some Estimates of IT's Contribution to Consumer Welfare and Implications for Productivity", Seminar for the Industrial Performance Center, Cambridge, October, 1992.

- 542. "Information Technology and the Productivity Paradox: Lessons for MIS", Center for Information Systems Research, Sponsors Board Meeting, Dedham, MA, October, 1992.
- 543. "Research on Information Technology and Economics at the Center for Coordination Science", Seminar Sponsored by the Center for Coordination Science, Cambridge, October, 1992.
- 544. "Research on Information Technology and Economics at the Center for Coordination Science", Seminar Sponsored by the Center for Coordination Science, Cambridge, September, 1992.
- 545. "Information Technology and the Productivity Paradox: Lessons for the Software Industry", Keynote for Information Technology Association of America Annual Meeting, Washington, D.C. August, 1992.
- 546. "The Restructuring of the Computer Industry: Lessons from Wang's Bankruptcy", Discussion for Voice of America, Chinese Information Service, Broadcast August, 1992.
- 547. "Information Technology and the Productivity Paradox: What We Know and What We Don't Know", International Financial Services Research Center, New York, June, 1992.
- 548. "Information Technology and the Productivity Paradox: What We Know and What We Don't Know", Center for Information Systems Research Summer Session Presentation, Cambridge, June, 1992.
- 549. "Computers in the Workplace: Monitoring or Empowering?", Invited talk, Conference on Computers and Social Change, Northeastern University, Boston,
 550. April 24, 1992.
- 551. "Estimating IT's Contribution to Consumer Welfare: Money Talks", Information Technology Seminar, Sloan School of Management, April 22, 1992.
- 552. "An Incomplete Contracts Theory of Information, Technology and Organization", Workshop in Information Systems and Economics Paper Presentation, December, 1991.
- 553. "Comments on 'An Information Economics Approach to Analyzing Information Systems for Cooperative Decision Making'", International Conference on Information Systems Panel, December, 1991.
- 554. "Knowledge is Power: A Theory of Information, Technology and Organization", Center for Coordination Science Seminar, Paper Presentation, December, 1991.
- 555. "Information Technology and Productivity", International Financial Services Research Center (IFSRC) Presentation, December, 1991.
- 556. "Information Technology and Ownership Structure", ORSA/TIMS Joint National Meeting Paper Presentation, November, 1991.
- 557. "Information Technology and Productivity", IFSRC/Digital Equipment Corporation Presentation, October, 1991.

- 558. "The Productivity Paradox: What are the Issues?", Center for Information Systems Research Presentation, October, 1991.
- 559. "How Does Information Technology Affect Firm Boundaries?", International Strategic Management Society Conference Paper Presentation, October, 1991.
- 560. "Economics and Coordination Science", Panel Chair, Telecommunications Policy and Research Conference Panel, September, 1991.
- 561. "Reorganizing Work: Information and Incentives", Industrial Liaison Program Presentation, July, 1991.
- 562. "Solving the Productivity Paradox", Center for Information Systems Research Summer Session Presentation, June, 1991.
- 563. "Reorganizing Work: Information and Incentives", Center Coordination Science Symposium, April, 1991.
- 564. "Does Information Technology Lead to Smaller Firms?", Workshop in Information Systems and Economics, Paper Presentation, December, 1990.
- 565. "The New Organization of Work: Causes and Consequences", Center for Coordination Science Paper Presentation, December, 1990.
- 566. "Restructuring Business for the Information Age", Industrial Liaison Program/MIT Day in Copenhagen Presentation, December, 1990.
- 567. "Information Technology and the Productivity Paradox", IFSRC IT and Productivity Workshop Presentation, October, 1990.
- 568. "Information Technology and Economic Organization", Sloan School Strategy Group Paper Presentation, March, 1990.
- 569. "Information Technology and Economic Organization", Sloan School IT Group Paper Presentation, March, 1990.
- 570. "Information Technology and Economic Organization", UCLA Paper Presentation, February, 1990.
- 571. "Information Technology and Economic Organization", University of California at Irvine Paper Presentation, February, 1990.
- 572. "Information Technology and Economic Organization", Harvard Business School Paper Presentation, February, 1990.
- 573. "Information Technology and Economic Organization", University of Rochester Paper Presentation, February, 1990.
- 574. "Information Technology and the Productivity Paradox", Panel Chair, International Conference on Information Systems (ICIS), December, 1989.
- 575. "If Knowledge is Power, Can Ignorance Be Bliss? An Agent-Theoretic Analysis", Coordination Science Seminar Series, November, 1989.

- 576. "Information Technology and the Productivity Paradox", Workshop on Computers and Productivity, Laboratory for Computer Science, MIT, October, 1989.
- 577. "The Impact of Information Technology on Markets and Hierarchies", International Telecommunications Society (ITS) Annual Conference, July 1988.
- 578. "Project Management of Knowledge-based Systems", Boston Computer Society Artificial Intelligence group, May, 1988.
- 579. "Executive Briefing on Artificial Intelligence"; "Domain Selection"; "Expert System Shells"; and "Knowledge Engineering"; (Keynote speaker, lecturer), Conferences on Expert Systems, Advanced Computing Management, Amsterdam, Holland, November, 1986 and March, 1988.
- 580. "Expert Systems for Finance", AI East Conference, Atlantic City, NJ, November, 1987.
- 581. "Special Topics in AI", (Panel Chair), AI '86 Conference, Longbeach, CA, August, 1986.
- 582. "New Opportunities in AI", International Computer Consultants Association, Framingham, MA, March, 1986.
- 583. Various Topics in Knowledge-based Systems Development, Led a Series of Seminars Sponsored by Digital Consulting, Inc. Boston, New York, Washington and Chicago, 1987-89.
- 584. Various Topics in Artificial Intelligence, Director and discussion leader of Boston Computer Society Expert Systems Group, Monthly Meetings at MIT, Cambridge, MA 1986-89.