Matt Marx

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Massachusetts Institute of Technology
Sloan School of Management
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EMPLOYMENT

MIT Sloan School of Management

Associate Professor (without tenure) of Technological Innovation, Entrepreneurship, and Strategic Management

Mitsui Career Development Professor of Entrepreneurship

Alvin J. Siteman (1948) Career Development Professor of Entrepreneurship

Assistant Professor of Technological Innovation, Entrepreneurship, and Strategic Management

2009-2014

Tellme Networks (acquired by Microsoft)

Mountain View, CA

Vice President, Solutions Delivery

1999-2004

- Hired and led 75-person team that launched speech recognition services handling 1 billion calls per year.
- Grew annualized revenue from \$5M to \$100M. Reported to CEO and presented regularly to board.

SpeechWorks International (completed IPO)

Boston, MA

User Interface Engineer

1994-1999

- Designed and implemented applications for Fortune 500 clients.
- Catalyzed decision to switch company's commercialization strategy from technology licensing to services.

EDUCATION

Harvard University
Doctor of Business Administration
Dissertation Title: Essays on Employee Non-compete Agreements.

Boston, MA
June 2009

Dissertation Title: Essays on Employee Non-compete Agreements. Committee: Lee Fleming (chair), Rakesh Khurana, Josh Lerner

Harvard University
Master of Business Administration (with Distinction)
Boston, MA
2005

Massachusetts Institute of Technology

Cambridge, MA

S.M., Media Arts and Sciences (Motorola Fellow)

1995

Master's Thesis Title: Toward Effective Conversational Messaging

Committee: Christopher Schmandt (chair), Pattie Maes, Nicole Yankelovich

Stanford University Stanford, CA

B.S., Symbolic Systems (with Distinction, Phi Beta Kappa, degree completed in three years) 1993

RESEARCH INTERESTS

My years as an engineer and an executive in startup companies yielded a deep interest in the emergence and evolution of new organizations. My dissertation research explores how employee non-compete agreements affect the ability of organizations to acquire talent. It has been cited by the Massachusetts governor's office as driving the call for a statewide ban on non-competes and led to my role as an expert witness in a class-action suit against several Silicon Valley companies accused of secretly conspiring not to recruit each other's employees. In more recent work I explore the dynamics of commercialization strategy using a hand-built dataset of the speech recognition industry.

PUBLICATIONS

- K. Younge and M. Marx, "The Value of Employee Retention: Evidence from a Natural Experiment." *Journal of Economics & Management Strategy*, (forthcoming)
- M. Marx and D. Hsu, 2013. "Strategic 'switchbacks': dynamic commercialization strategies for technology entrepreneurs." *Research Policy* (forthcoming)
- M. Marx, J. Singh, and L. Fleming, "Regional Disadvantage? Employee Non-compete Agreements and Brain Drain." *Research Policy* 44(2):394-404 (2015).
- M. Marx, J. Gans, and D. Hsu. "Dynamic Commercialization Strategies for Disruptive Technologies: Evidence from the Speech Recognition Industry." *Management Science* 60(12):3103-3123 (2014).
- J. Singh and M. Marx. "Geographic Constraints on Knowledge Diffusion: Political Borders vs. Spatial Proximity." *Management Science* 59(9):2056-2078 (2013).
- M. Marx and L. Fleming. "Non-compete Agreements: Barriers to Entry...and Exit?" in J. Lerner and S. Stern, eds., *Innovation Policy and the Economy* 12. (2012)
- M. Marx, "The Firm Strikes Back: Non-Compete Agreements and the Mobility of Technical Professionals." *American Sociological Review* 76(5):695-712. (2011)
- M. Marx, D. Strumsky, and L. Fleming, "Mobility, Skills, and the Michigan Non-compete Experiment." *Management Science* 55(6):875-889 (lead article). (2009). Winner of the 2014 INFORMS Technology Management Section award for best innovation and entrepreneurship article published in *Management Science* or *Organization Science* during 2009.
- L. Fleming and M. Marx, "Managing Inventive Creativity in Small Worlds." *California Management Review* 48(4):6-27. Winner of the Accenture Award for Contribution to Management Practice. (2007)
- C. Christensen, M. Marx, and H. Stevenson. "The Tools of Cooperation and Change." *Harvard Business Review* 84(10). (2006)

WORKING PAPERS

- A. Kacperczyk and M. Marx, 2014. "Revisiting the Small-Firm Effect on Entrepreneurship: Evidence from Firm Dissolutions." (Revise & Resubmit at *Organization Science*)
- M. Marx and B. Timmermans, 2014. "Comobility and Attainment." (under review at American Sociological Review)
- M. Ewens and M. Marx, 2014. "Founder Replacement in Venture-Backed Startups." (under development). Finalist for AOM TIM Division Best Paper.
- M. Bikard and M. Marx, 2015. "Frictions in the Flow of Academic Knowledge to Industry: Evidence from Simultaneous Discoveries." (under development)

FELLOWSHIPS AND AWARDS

2015 Academy of Management Technology & Innovation Management Best Paper Finalist

2014 INFORMS Technology Management Section award for best innovation and entrepreneurship article published in *Management Science* or *Organization Science* during 2009

2013 Ewing Marion Kauffman Foundation Junior Faculty Fellowship in Entrepreneurship (\$40,000) 2013-2015 Mitsui Career Development Chair

- 2011 MIT Sloan Junior Faculty Research Assistance Program Grant (\$33,000)
- 2011 Edward B. Roberts (1957) Fund, MIT Entrepreneurship Center Fund Grant (\$16,500)
- 2010-2013 Alvin J. Siteman (1948) Career Development Chair
- 2010 DRUID Best Dissertation Award
- 2010 Academy of Management Technology & Innovation Management Division Best Dissertation Finalist
- 2009 Academy of Management Technology & Innovation Management Division Best Student Paper Award
- 2009 Wyss Award from Harvard Business School for Excellence in Doctoral Research
- 2008 Academy of Management Business Policy and Strategy Division Distinguished Student Paper Award
- 2007 California Management Review Accenture Award for Contribution to Management Practice
- 2007-2008 Ewing Marion Kauffman Dissertation Fellowship

TECHNICAL PUBLICATIONS AND PATENTS

- U.S. Patent #7,321,856 "Handling of speech recognition in a declarative markup language." (2008)
- U.S. Patent #7,143,039 "Providing menu and other services for an information processing system using a telephone or other audio interface." (2006)
- U.S. Patent #7,140,004 "Method and apparatus for zero-footprint phone application development." (2006)
- U.S. Patent #6,107,696 "System and method for handling a voice prompted conversation." (2005)
- U.S. Patent #6,606,598 "Statistical computing and reporting for interactive speech applications." (2003)
- U.S. Patent #6,173,266 "System and method for developing interactive speech applications." (2001)
- U.S. Patent #6,747,026 "Transcription and reporting system." (2000)
- U.S. Patent #5,995,928 "Method and apparatus for continuous spelling speech recognition with early identification." (1999)
- M. Marx and C. Schmandt. "CLUES: Dynamic Personalized Message Filtering." *Proceedings of the ACM Conference on Computer Supported Cooperative Work* (1996)
- M. Marx and C. Schmandt. "MailCall: Message presentation and navigation in a non-visual environment." *Proceedings of the SIGCHI conference on Human Factors in Computing Systems* (1996)
- N. Yankelovich, G.A. Levow, and M. Marx. "Designing SpeechActs: Issues in Speech User Interfaces." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (1995)
- M. Marx and C. Schmandt. "Putting People First: Specifying Proper Names in Speech Interfaces." *Proceedings of the 7th annual ACM symposium of User Interface Software and Technology* (1994)
- M. Marx and C. Schmandt. "Reliable Spelling Despite Unreliable Letter Recognition." *Proceedings of the American Voice Input/Output Society* (1994)

GOVERNMENT TESTIMONY & EXPERT WITNESSING

Invited to privately address Massachusetts Joint Committee on Labor and Workforce Management, 8 July 2015.

M. Marx. "Testimony regarding Non-compete bills H1701, H1719, H1761, S169, and S957." Massachusetts Joint Committee on Labor and Workforce Management, 23 June 2015.

Plaintiffs' expert witness in a class-action suit on behalf of software engineers at Apple, Google, Intel, and Adobe regarding an alleged conspiracy to suppress wages by means of secretive non-solicitation agreements among Defendants. Final settlement of \$415 million approved October 2015.

M. Marx. "Testimony regarding MA House Bill H4082, an Act Relative to Noncompete Agreements. Massachusetts Joint Committee on Economic Development and Emerging Technologies, 1 July 2014.

M. Marx. "Testimony regarding MA House Bill H4045, An Act to Promote Growth and Opportunity. Massachusetts Joint Committee on Economic Development and Emerging Technologies, 27 May 2014.

M. Marx. "Testimony regarding HI House Bill SB3126 SD2, A Bill for an Act Relating to Employment Agreements." Hawaii Committee on Economic Development & Business, 14 March 2014.

Defendants' expert witness in patent litigation suit. I located sufficient prior art to achieve an attractive settlement for the defendant (identity confidential). Fall 2013.

M. Marx. "Testimony regarding MA house Bill H1794, An Act Regarding Noncompetition Agreements." Massachusetts Joint Committee on Labor and Workforce Development, Boston MA, 10 September 2013.

Invited to privately address Massachusetts Secretary for Housing & Economic Development, 3 March 2012.

M. Marx. "Testimony regarding MA house Bill H1794, An Act Regarding Noncompetition Agreements." Massachusetts Joint Committee on Labor and Workforce Development, Boston MA, 15 September 2011.

Defendants' expert witness where my Master's thesis served as prior art in defense against a patent infringement suit regarding a large health insurance provider. Spring 2010.

M. Marx. "Testimony regarding MA House Bills H1794 and H1799, Acts Regarding Noncompetition Agreements." Massachusetts Joint Committee on Labor and Workforce Development, Boston MA, 7 October 2009.

Defendants' expert witness where my Master's thesis served as prior art in defense against a patent infringement suit regarding a small technology company. Fall 2008.

TEACHING EXPERIENCE AND MATERIALS

15.394, Dilemmas in Founding New Ventures (2010, 2011, 2013, 2014, 2015). Grew enrollment from 73 to 156, with "Recommend Professor" ratings of 4.6-4.9/5.0. Overhauled prior syllabus and introduced simulation on firing employees, since adopted at Wharton and Harvard. Nominated for Sloan Excellence in Teaching Award each term.

Co-taught 15.390, New Enterprises (2010, 2011, 2013, 2014).

Frequent lecturer in executive education and the Trust Center for MIT Entrepreneurship.

Lee Fleming and Matt Marx. "Barry Riceman at NetD (A), (B), and (TN)." Harvard Business School Case 606-090.

OTHER ACADEMIC EXPERIENCE AND SERVICE

Advisory Editor at Research Policy, March 2014-present.

Guest Associate Editor at Management Science in 2012, 2014, and 2015.

Ad-hoc reviewer for Management Science, American Sociological Review, The Review of Economics and Statistics, Journal of Law & Economics, Organization Science, Journal of Labor Economics, Journal of Economics &

Management Strategy, Review of Industrial Organization, Research Policy, Strategic Management Journal, California Management Review, Entrepreneurship Theory & Practice, Industry & Innovation, Journal of Business Venturing, Economic Inquiry.

MIT Sloan Undergraduate Program Committee, 2010-2015.

Organizing Committee, 2011 Harvard/MIT Strategy Research Conference.

Led 2012 and 2013 Ph.D admissions and recruiting for the TIES group.

Organized MIT Sloan Behavioral and Policy Sciences Junior Faculty Retreat, 2010 and 2011.

PRESENTATIONS

Discussant/panelist

- Georgia Tech Roundtable on Engineering Entrepreneurship Research (REER) conference, November 2015.
- Academy of Management BPS Panel: Strategy Research at the Crossroads, August 2015.
- Academy of Management TIM Junior Faculty Consortium, August 2015.
- Academy of Management Professional Development Workshop on Mobility, August 2014.
- Academy of Management TIM Division Doctoral Symposium, August 2014.
- OECD Symposium on "A Policy Framework for Knowledge-Based Capital." December 2012.
- Georgia Tech Roundtable on Engineering Entrepreneurship Research (REER) conference, November 2012.
- NBER Summer Institute Intellectual Property Policy and Innovation Workshop, July 2012
- Boston Bar Association Symposium on Employee Non-Compete Agreements, July 2012
- CCC Doctoral Student Conference, April 2012
- NBER Productivity, Innovation, and Entrepreneurship Working Group, March 2012
- Labor and Employment Relations Association Annual Meeting, January 2012
- Georgia Tech Roundtable on Engineering Entrepreneurship Research (REER) conference, September 2011
- Boston Bar Association Symposium on Employee Non-compete Agreements, July 2011
- NBER conference on Innovation Policy and the Economy. National Press Club, April 2011.
- Boston University Law School, March 2011
- Boston Bar Association Symposium on Employee Non-compete Agreements, July 2010

"Frictions in the Flow of Academic Knowledge to Industry: Evidence from Simultaneous Discoveries"

- Georgia Tech Roundtable on Engineering Entrepreneurship Research (REER) conference, November 2015.
- NBER Productivity Seminar, October 2015.
- Harvard Business School Technology & Operations Management Alumni Research Symposium, August 2015.

"Comobility and Attainment"

- Academy of Management, August 2015.
- Wharton People & Organizations Conference, October 2014.
- Boston University Strategy & Innovation Group, October 2014.
- University of North Carolina at Chapel Hill, Management Group, October 2014.
- Harvard Business School Technology and Operations Management Alumni Conference, August 2014.
- Copenhagen Business School Mobility Workshop at Imperial College, June 2014.
- Strategy Research Forum, May 2014.
- NBER Productivity Lunch, March 2014.
- Organization Theory Workshop for Junior Faculty, University of Chicago Booth School of Business, October 2013.

"Should Investors Replace Founders?"

• Academy of Management, August 2015.

NBER Entrepreneurship Working Group, December 2013.

"Technology Commercialization Strategy Dynamics and Entrepreneurial Performance: Evidence from the Speech Recognition Industry"

- Harvard Business School Strategy Unit Seminar, November 2013.
- University of Toronto Rotman School of Business Strategy Unit Seminar, October 2013.
- Industry Studies Association Annual Meeting, May 2013.
- Darden/Cambridge Entrepreneurship Conference, May 2013
- Duke Fuqua School of Business Strategy Conference, October 2012
- Carnegie Mellon University, SETChange department seminar series, October 2012
- West Coast Research Symposium, September 2012
- Academy of Management Annual Meeting, August 2012
- Queen's University Conference on the Economics of Innovation and Entrepreneurship, June 2012
- Atlanta Competitive Advantage Conference, May 2012
- London Business School Sumantra Ghoshal Conference, May 2012
- University of Chicago Organizations and Markets Department Seminar, April 2012
- The Wharton School Management Department Seminar, University of Pennsylvania, March 2012
- BYU-University of Utah Winter Strategy Conference, March 2012
- INFORMS annual meeting, November 2011
- Harvard Business School Strategy Conference, November 2011

"Patent Citations and the Geography of Knowledge Spillovers: Disentangling the Role of State Borders, Metropolitan Boundaries and Distance."

- London Business School, Strategy & Entrepreneurship Department, November 2012
- Georgia Tech Roundtable on Engineering Entrepreneurship Research (REER) conference, November 2012.
- Boston University Strategy & Innovation Department, August 2012
- Academy of Management Annual Meeting, August 2012
- Sloan Economic Sociology Working Group, July 2011

"The Value of Employee Retention: Evidence from a Natural Experiment."

• Stanford Organizational Behavior Department Seminar, October 2012

"Regional Disadvantage? Non-compete Enforcement and Brain Drain"

- UCLA Anderson Policy Group seminar, October 2011.
- Stanford Institute for Economic Policy Research seminar, October 2011
- The Wharton School, University of Pennsylvania Management Department seminar, October 2011
- Olin School, Washington University in St. Louis, Organizations Department seminar, October 2011
- Harvard Business School, Entrepreneurial Management Department seminar, September 2011
- European School of Management & Technology Department seminar, September 2011
- Mobility and Competition Clause Workshop, Ludwigs-Maximilian-Universitaet, August 2011
- Academy of Management Annual Meeting, August 2011
- University of Virginia Darden Entrepreneurship Conference, May 2011
- NBER Summer Institute, Technology Policy and the Economy, July 2010.
- University of Maryland Entrepreneurship Conference, April 2010
- Georgia Tech Roundtable for Engineering Entrepreneurship Research Conference, November 2009
- Technology Transfer Society Annual Meeting, October 2009
- HEC Workshop on Entrepreneurial Entry, September 2009
- Wharton Operations and Information Management Department seminar, September 2009
- Association of American Geographers Annual Meeting, April 2008
- NBER Productivity Lunch, September 2009.

[&]quot;The Firm Strikes Back: Non-compete Agreements and the Mobility of Technical Professionals"

- American Sociological Association Annual Meeting, August 2010
- University of Oregon West Coast Research Symposium, August 2010
- Eastern Sociological Society annual meeting, March 2010
- NBER Entrepreneurship Working Group Summer Institute, July 2009
- Wharton People & Organizations Conference, June 2009
- Carnegie Mellon / Catholic University of Portugal Entrepreneurship Research conference, January 2009

"On a Tight Leash? Startups, Staging, and Strategic Change"

• Academy of Management Meeting, August 2008

"Mobility, Skills, and the Michigan Non-compete Experiment"

- CCC Doctoral Student Consortium, April 2008
- George Washington University Law School Department seminar, September 2007
- Academy of Management Annual Meeting, August 2007
- Wharton Technology Mini-Conference, April 2007
- NBER Productivity Lunch, November 2006

MEDIA COVERAGE

- "Shooting for Start-up Success? Take a Detour." Forbes, October 2015.
- "Are noncompete agreements hurting tech innovation?" Fortune, July 2015.
- "State holds hearing on non-compete pacts." Boston Herald, June 2015.
- "Ban noncompetes. Do it now." Slate, June 2015.
- "Non-compete clauses contribute to Michigan brain drain." Michigan Radio, March 2015.
- "Silicon Valley is the world's innovation capital because of a technicality." Bloomberg Business, March 2015.
- "Why non-compete agreements are not always good for business." INSEAD Knowledge, March 2015.
- "Workers fight back against non-compete agreements." The Detroit News, January 2015.
- "Are California and Minnesota the two most innovation-friendly states?" Washington Post, November 2014.
- "Employers increasingly strive to keep workers happy." Boston Globe, November 2014.
- "Are noncompetes a barrier to growth?" MBiz, November 2014.
- "How Companies Kill Their Employees' Job Searches." The Atlantic, October 2014.
- "Pardon the Disruption." The Economist, September 2014.
- "Why Disrupters Don't Always Topple Goliaths." Inc., August 2014
- "Taking a Wait-and-see Approach with Disruptive Innovation." TechCrunch, August 2014
- "Why Disruptive Innovation Can Help Market Leaders." Knowledge@Wharton, August 2014.
- "Uncertain Fate of Non-competes in Massachusetts: Senate Passes Compromise; Legislation Heads to Conference Committee Negotiations." National Law Review, July 2014.
- "MA won't change noncompete law, VCs pledge to continue campaign." Xconomy, July 2014.
- "Noncompete Clauses Increasingly Pop Up in Array of Jobs." New York Times, June 2014.
- "Noncompetes out of control." Boston Herald, June 2014.
- "More noncompetes in business." El Paso Inc., June 2014.
- "One reason you haven't heard yet for why non-competes must go." BetaBoston, June 2014.
- "Tactics put the spotlight on noncompete clauses." Boston Globe, May 2014.
- "Time to ditch non-competes agreements to increase entrepreneurial talent, investor says." GeekWire, May 2014.
- "Amid push to ban noncompetes, a look at which Boston tech firms do and don't have them." *BetaBoston*, May 2014.
- "Boston's Tech Community Responds to Gov. Patrick's Plan to Ban Non-Competes." BostInno, April 2014.
- "Time to get rid of 'noncompete' agreements." Boston Globe, April 2014.
- "Scientific Proof Competition is Good for Business." Inc. Magazine, April 2014.
- "Are noncompete agreements (finally) on the way out in Mass.?" BetaBoston, April 2014.
- "Mental Borders." Slate, October 2013.
- "Non-compete Agreements Troubling." Worcester Telegram, September 2013.

- "Cambridge firm is fertile ground for entrepreneurs." Boston Globe, September 2013.
- "In bid to keep entrepreneurs, Massachusetts moves to ban non-competes." Gigaom, September 2013.
- "Companies Loosen the Handcuffs on Non-competes." Wall Street Journal, August 2013.
- "The spreading sclerosis of the non-compete agreement." Quartz, July 2013.
- "Mapping Knowledge." Pacific Standard, July 2013.
- "State judges take increasingly dim view of non-compete agreements." Boston Business Journal, August 2013.
- "Non-compete agreements getting harder to enforce." *Mass High Tech: The Journal of New England Technology*, August 2013
- "Set the Creators Free." Wired Magazine, December 2012.
- "Marblehead state rep eyes non-compete agreements." Marblehead Reporter, 14 December 2011.
- "Non-compete Laws Stifling Mass. High Tech Industry." RadioBoston, WBUR, 29 November 2011.
- "[Governor] Patrick Threatens Enforcement Ban on Non-competes." Boston Business Journal, 16 September 2011.
- "Non-compete agreements carry high costs for engineers." *IEEE Spectrum*, 18 October 2011.
- "Non-compete agreements create 'career detours'" MIT News, 5 October 2011.
- "Want Your Innovators to Leave? Make Them Sign a Non-compete" CBS Bnet, 21 July 2011.
- "Non-compete Clauses Stifling to Innovation in Mass." Boston Globe, 3 July 2011.
- "Stop Enforcing Non-Competes." Inc. Magazine, 1 July 2010.
- "Industry veterans share their dealings with non-compete agreements." *Mass High Tech: The Journal of New England Technology*, 7 October 2009.
- "Non-compete agreements hinder job switchers." Wall Street Journal / FINS, 10 August 2009.
- "Non-compete clause changes are in the air again." *Mass High Tech: The Journal of New England Technology*, 31 July 2009.
- "Clause for Concern." Boston Globe, 10 July 2009.
- "Start-ups stifled by non-competes." Boston Globe, 21 June 2009.
- "I signed a non-compete, but now I want a new job." CNNMoney, 8 April 2009.
- "'Til lawsuits do us part." IEEE Spectrum, April 2009.
- "Non-compete pact called bad for innovation." PC World, 20 June 2008.
- "The noncompete conundrum: Holding back Bay State tech, or preserving IP?" Mass High Tech: The Journal of New England Technology, 11 February 2008.
- "Why non-compete means don't-thrive." Boston Globe, 30 December 2007.