

Vita

HENRY W. CHESBROUGH

Address: *Business*
Haas School of Business
Institute of Management, Innovation
& Organization
Faculty Wing, F402
University of California, Berkeley
Berkeley, CA 94720-1930

EDUCATION

Ph.D. in Business Administration, Haas School of Business, University of California at Berkeley. Degree conferred May, 1997.
M.B.A., Stanford University Graduate School of Business. Arjay Miller scholar (top 10% of class). Degree received June, 1983.
B.A., Yale College, Yale University. Economics major, with distinction, Engineering minor. Elected to Phi Beta Kappa, and graduated *summa cum laude*, June, 1979.

RESEARCH INTERESTS

Innovation. Organizing, structuring and managing internal and external research and development. Technology-based spinoffs, and corporate venture capital. Managing intellectual property. Comparative industry evolution in high technology industries between the US, Japan and Western Europe. Author of Open Innovation, HBS Press, 2003, which was awarded Best Business Book of 2003 by Strategy & Business Magazine.

ACADEMIC WORK EXPERIENCE

Executive Director, Center for Open Innovation, Haas School of Business, University of California, Berkeley, 2003-present.

- Teaching in the Management of Technology Program, a joint program between the Haas Business School and the Berkeley Graduate College of Engineering
- Directs the Center for Open Innovation, focused on research and teaching on the impact of intangible assets and globally distributed knowledge on firm strategy and industrial innovation.

Assistant Professor, Harvard Business School, 1997-2003. Joint appointment in the Technology and Operations Management area, and in Entrepreneurial Management. Responsible for second year elective course in Managing Innovation.

- Taught first year required course in Technology and Operations Management for two years.
- Taught Managing Innovation elective course for two years in MBA program

- Taught Building a Sustainably Successful Enterprise elective course with Prof. Clay Christensen.
- Faculty participant in numerous executive education programs at HBS.
- Appointed Class of 1961 Fellow in 1999.

Research Associate, UC-Berkeley School of Engineering, 1995-1996. Semiconductor Equipment Supplier Study of After-market Service and Support costs and strategies, with Engineering Professor Robert Leachman.

Research Assistant, 1993-1995. Technology Transfer Study of “dual track” projects from the National Laboratories to the private sector, with Haas Professor David Mowery.

Graduate Student Instructor, 1995. Assisted Professor Sara Beckman in the MBA required class, Manufacturing and Operations Strategy, in 3 sections totaling 180 students.

Received award for Outstanding GSI, May, 1996.

INDUSTRY WORK EXPERIENCE

Chesbrough Associates, Inc., Menlo Park, CA and Berkeley, CA, 1990-1996. Principal in product definition and marketing consulting services for technology-based companies in the computer industry. Worked with startup, medium-size and Fortune 500 companies in four technology areas: mass storage; application software; networking and communications; and information services. Recent projects include after-sale service and support in copier industry, the impact of Internet upon the Insurance Industry, and a strategic alliance in the DSP marketplace.

Quantum Corporation, Milpitas, CA, 1983-1990. Held a variety of product management and marketing positions in this Fortune 500 Winchester disk drive company, culminating in Vice President of Marketing and Business Development for \$100 million subsidiary, Plus Development.

- Corporate Officer and member of Plus’ Executive Staff. Reported to Plus’ CEO. Managed \$8 million budget, and staff of 22 people. Responsible for product requirements, product management, product marketing, corporate communications and customer service and support.
- Launched 15 new products into the end user mass storage market in over 15 countries around the world, yielding cumulative product revenues of over \$500 million. Products included PC storage upgrades, removable storage devices, and modular network storage servers.

Bain and Company, Boston, MA, 1979-1981. Associate Consultant in business strategy consulting firm. Team member on projects in ophthalmic goods, agricultural chemicals, and nylon intermediates industries.

REFEREED RESEARCH ARTICLES

"The Differing Organizational Impact of Technological Change: A Comparative Theory of National Institutional Factors", *Industrial and Corporate Change*, vol. 8:3: 447-485, 1999

"Arrested Development: The Experience of European Hard Disk Drive Firms in Comparison to US and Japanese Firms", *Journal of Evolutionary Economics*, special issue editor, Steven Klepper, volume 9, #3: 287-330, 1999

“Environmental Influences upon Firm Entry into New Sub-Markets: Evidence from the Worldwide Hard Disk Drive Industry”, Research Policy, vol.32 (4), 2003: 659-678

“Designing Corporate Ventures in the Shadow of Private Venture Capital”, California Management Review, volume 42, #3 (Spring): 31-49. 2000; reprinted in Corporate Entrepreneurship edited by Shaker A Zahra, (London: Elgar Publishing), 2005

“Commercializing New Ventures from Bell Labs Technology: The Design and Experience of Lucent’s New Ventures Group”, with Stephen Socolof, Research-Technology Management, vol. 43, (March): 1-11, 2000.

“Graceful Exits and Foregone Opportunities: Xerox’s Management of its Technology Spinoff Organizations”, Business History Review, vol. 76 (4) winter, 2002:803-838

“The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation’s Technology Spinoff Companies”, with Richard Rosenbloom, Industrial and Corporate Change, 2002, vol. 11 (3): 529-555.

“The Governance and Performance of Xerox’s Technology Spinoff Companies”, Research Policy, vol.32 (3), (2003): 403-421

Review of Markets for Technology: The Economics of Innovation and Corporate Strategy, by A. Arora, A. Fosfuri, and A. Gambardella, Journal of Economic Literature, vol. XL, #4, (December, 2002) : 1275-6.

“The Era of Open Innovation”, Sloan Management Review, vol. 44, #3 (Spring) 2003:35-41

“The Logic of Open Innovation: Managing Intellectual Property”, California Management Review, vol. 45 (3) 2003: 33-58

“Managing Open Innovation: Chess and Poker”, Research-Technology Management, vol. 47 (Jan.-Feb.) 2004:13-16, reprinted in IEEE Engineering Management Review, vol. 32(2), 2004: 52-56

OTHER RESEARCH CONTRIBUTIONS

“When is Virtual Virtuous: Organizing for Innovation”, with David Teece, Harvard Business Review, Jan.-Feb. 1996: 65-73; reprinted in John Seely Brown’s Seeing Differently, Harvard Business School Press, 1998; selected and reprinted as one of HBR’s “Best of Innovation” articles in August 2002.

“Networked Incubators: Hothouses of the New Economy”, with Morten Hansen, Nitin Nohria, and Donald Sull, Harvard Business Review, Sept./Oct. 2000, vol. 78(5): 74-84

- “Making Sense of Corporate Venture Capital”, Harvard Business Review, vol. 80(3), March, 2002: pp. 90-99
- “Open Innovation: How Companies Actually Do It,” Harvard Business Review, vol. 81 (7), July, 2003: pp.12-14
- “Toward a Science of Services”, in Breakthrough Ideas for 2005, Harvard Business Review, vol. 83 (February): p.16-17
- “Dynamic Coordination and Creative Destruction: A Comparative Analysis of Incumbent Success and Failure in the Worldwide Hard Disk Drive Industry”, unpublished dissertation, 1997. David Teece, committee chair, with David Mowery and Bronwyn Hall.
- "Outsourcing Strategies for Innovators: Opportunities & Limits", with David Teece, in David Teece, Managing Intellectual Capital: Organizational, Strategic, & Policy Dimensions, Oxford University Press, 1999
- “Assembling the Elephant: A Review of Empirical Studies on the Impact of Technical Change upon Incumbent Firms”, in Research on Technological Innovation, Management, and Policy, vol. 7, JAI Press, 2001, R. Burgelman and H. Chesbrough, editors; pages 1-36
- “Introduction to Comparative Studies of Technological Evolution”, with R. Burgelman, in Research on Technological Innovation, Management, and Policy, vol. 7, JAI Press, 2001, R. Burgelman and H. Chesbrough, editors; pages ix-xvi
- “The Dual-Edged Role of the Business Model in Leveraging Corporate Technology Investments,” with Richard Rosenbloom, in NIST Report GCR 00-787, Managing Technical Risk – Understanding Private Sector Decision Making on Early Stage Technology-based Projects, Lewis Branscomb, principal investigator, 2000.
- "The Modularity Trap: Innovation, Technology Phase-Shifts and the Resulting Limits of Virtual Organizations", with Ken Kusunoki, in Ikujiro Nonaka and David Teece, Managing Industrial Knowledge, Sage Publications, 2001
- “Open Platform Innovation: Creating Value from Internal and External Innovation”, Intel Technical Journal, vol. 7 #3 (August), 2003. Online at: http://www.intel.com/technology/itj/2003/volume07issue03/art01_open/p01_abstract.htm
- “Towards a Dynamics of Modularity: A Cyclical Model of Technical Advance”, in Prencipe, A., Davies, A., and Hobday, H., eds., The Business of Systems Integration, Oxford University Press, 2003

BOOK LENGTH PUBLICATIONS

Open Innovation: Researching a New Paradigm, (Oxford University Press, expected in 2006), (with Joel West and Wim Vanhaverbeke). An edited volume of research contributions, all informed by the Open Innovation perspective.

Open Innovation: The new imperative for creating and profiting from technology, (Harvard Business School Publishing: Boston, MA), 2003

This book introduces a new paradigm, “open innovation”. Built upon extensive field research, Open Innovation outlines a new environment for R&D. It demonstrates that this new environment replaces the logic of an earlier era, where innovation was inwardly-focused, and closed off from outside ideas and technologies. It proclaims a new logic for the innovation process, one that requires technical managers to become conversant with business models, to seek new avenues to access external knowledge, and new structures for taking technology to market. And it requires senior managers in the firm to change the charter of their R&D organization, to turn it into an effective generator, user, and integrator of knowledge, adept at utilizing both internal and external ideas. Includes a Foreword by John Seely Brown.; published in Japanese by Sanno Daigaku in October, 2004; published in Chinese by Tsinghua University Press, December, 2004

Comparative Studies of Technological Evolution, an edited volume, with R. Burgelman, volume #7 in the series, Research on Technological Innovation, Management, and Policy, vol. 7, JAI Press, 2001

WORKING PAPERS

“Technology Markets, Technology Organization, and Appropriating the Returns from Research”, with Clay Christensen, mimeo, July 2001

CASES and TEACHING MATERIALS

Apple Computer in the Portable Computer Market (A), Stanford Business School, S-SM-1
 Apple Computer in the Portable Computer Market (B): Building the PowerBook 100, Stanford Business School, S-SM-2

PlaceWare: Issues in Structuring a Xerox Technology Spinout, HBS case # 9-699-001

Inxight: Incubating a Xerox Technology Spinout, HBS case #9-699-019

Intel Labs (A): Photolithography Strategy in Crisis HBS case #9-600-032

Intel Labs (B): A New Business Model for Commercializing Research in Photolithography
 HBS case #9-600-033

Intel Capital: The Berkeley Networks Investment HBS case #9-600-069

alphaWorks: IBM's Technology Talent Agents HBS case #9-601-001

Managing IBM Research in Internet Time HBS case #9-601-058

Fsas: Fujitsu Support and Service, Inc. HBS case #9-601-003

The Patent & License Exchange: Enabling a Global IP Marketplace HBS case #1-601-019

Lucent Technologies: The Future of the New Ventures Group, HBS case # 9-601-102

National Innovation Systems and Comparative Industry Evolution HBS case #9-601-049

Hotbank: Softbank's New Business Model for Early Stage Venture Incubation HBS case #9-600-100
Structuring and Managing BizDev on the Net, A Note, HBS case #9-601-183
Rafael Development Corp.: Converting Military Technology to Civilian Technology in Israel, HBS case #9-602-011
Milcom: An External Partnership to Commercialize Military Technologies, HBS case # 9-602-006
Centagenetix (A): Building a Business Model for Genetic Longevity, HBS case # 9-602-087
Centagenetix (B): Staking a Claim to IP, HBS case # 9-602-088
Skolar: Commercializing a University Spin-off Technology, HBS case #9-601-162
Genzyme: Engineering the Market for Orphan Drugs, HBS case #9-602-147
Inhale Therapeutics: Breathing Life into the Business Model, HBS case #9-602-132
NeuroTherapy Ventures: Catalyzing Neurologic Innovations, HBS case #9-602-124

TEACHING NOTES

PlaceWare: Issues in Structuring a Xerox Technology Spinout, Teaching Note 5-601-118
Inight: Incubating a Xerox Technology Spinout, Teaching Note 5-601-119
Intel Labs (A): Photolithography Strategy in Crisis, Teaching Note 5-601-120
Managing IBM Research in Internet Time, Teaching Note 5-601-122
Intel Capital: The Berkeley Networks Investment, Teaching Note 5-601-121
Fsas: Fujitsu Support and Service, Inc., Teaching Note 5-601-123
The Patent & License Exchange: Enabling a Global IP Marketplace, Teaching Note 5-601-124
Hotbank: Softbank's New Business Model for Early Stage Venture Incubation, Teaching Note 5-601-125
Building and Managing the Company Innovation System, Module Teaching Note 5-601-133

TEACHING ASSIGNMENTS

Haas Business School, Management of Technology Program

Managing Innovation (MBA290.I). Taught second year elective course to graduate business and engineering students.

Introduction to Management of Technology (MBA 290.A). Taught first year introductory course to graduate business and engineering students.

Harvard MBA

Technology and Operations Management. Harvard Business School, first-year MBA required course. Taught for two years, taught two sections of 80 students in second of those years.

Managing Innovation. Harvard Business School, second-year elective course. Taught for two years.

Building a Sustainably Successful Enterprise. Harvard Business School, second year elective, taught for two years with Professor Clay Christensen.

Harvard Executive Education

Leading Product Development in Internet Time. One week open enrollment executive education program. First executive program HBS conducted in California. Participated with Kim Clark, Steve Wheelwright, Mike Tushman, and Clay Christensen.

Program for Management Development. 12 week mid-level management open enrollment executive education program. Taught 3 session elective course on Managing Innovation for three consecutive years.

Disruptive Technologies Consortium. Custom executive program at Harvard Business School. Taught in every program held at HBS, 7 programs in all.

AEA/Harvard CEO Leadership Forum. 12-week custom executive education program. Taught with Ed Zschau, coordinated with the American Electronics Association, and facilitated discussion among small group study teams.

Designed and delivered onsite custom education programs at Intel (3 years), Lucent, Xerox, GE, Johnson and Johnson (2 years), Novartis-CibaVision, Oy Yritysvalmennus Group Ltd (3 years), Center for Executive Development.

ACADEMIC AWARDS

Named as one of the Scientific American 50 for 2003, for leadership in technology and business, by *Scientific American* magazine, in recognition of his research on industrial innovation

Awarded Best Business Book of 2003, by Strategy & Business Magazine (for Open Innovation)

Appointed Visiting International Fellow by the Australian Industry Group, November, 2004

Received Dell, Inc. Gift for the study of innovation in standards-based industries, June, 2004

Received IBM Faculty Grant Award for the study of Innovation in Services, May, 2004

Received Alfred P. Sloan Foundation Grant Award of \$150,000 for the Study of Globalization of R&D in the Semiconductor Industry (with David Teece and David Mowery), April, 2004

Received NEDO/METI scholarship for research on spin-offs, March, 2003; renewed June, 2004

Appointed Sasakawa Foundation Research Fellow, Haas School of Business, January, 2002

Appointed Class of 1961 Fellow, Harvard Business School, 1999.

Awarded Robert Noyce Memorial Fellowship in Industrial Competitiveness from the Intel Foundation, 1995-1997.

Awarded Outstanding Graduate Student Instructor at UC-Berkeley, May, 1996.

Awarded Olin Foundation Fellowship in Law and Economics, Spring 1995.

Received Distinction on Field Examination in Business and Public Policy, June 1994.

ACADEMIC SERVICE

Executive Committee member, Technology and Innovation Management, Academy of Management, 1999-2002.

Academy of Management - BPS, OMT, TIM Divisions

California Management Review – ad hoc reviewer
 Industrial and Corporate Change – ad hoc reviewer
 Research Policy – ad hoc reviewer
 Journal of Economic Behavior and Organization – ad hoc reviewer
 Journal of Engineering and Technology Management – Board member

INVITED PRESENTATIONS

Palo Alto Research Center, December, 2004. “Why Innovators Need to Manage Intellectual Property (not the Lawyers)”, invited PARC Forum Address
 National Press Club of Australia, November, 2004. “Open Innovation: Implications for Innovation and for the Australian Economy” (televised live on ABC in Australia)
 Senior Leadership Forum, VIA Group, Helsinki, Finland. “Open Innovation: A New Paradigm for Industrial Innovation”, invited address
 Innovation Convergence, September, 2004. “Open Innovation: A New Approach to Innovation”, invited keynote address, Minneapolis, MN
 Intel Capital CEO Summit, July, 2003. “The Open Innovation Model: A New Pathway for Startups and Corporations to Engage”, invited speaker to annual meeting, Monterey, CA
 Industrial Research Institute, May, 2003. “Open Innovation and the Business Model: A New Mindset for Industrial R&D,” invited speaker to the annual meeting, Colorado Springs, CO
 Xerox Palo Alto Research Center, April, 2003. “Open Innovation and the Future of Innovation”, invited PARC Forum Address
 Churchill Club, Palo Alto, CA, April, 2003. Keynote Speaker on Open Innovation panel, with Scott Cook of Intuit, Arati Prabhakar, and Curt Carlson of SRI.
 IBM Almaden Labs Distinguished Speaker Series, April, 2003. “Open Innovation”.
 American Chemicals Society – Presidential Symposium Keynote Address, March 2003. “Open Innovation and the Future of Industrial R&D”
 OECD– Rapporteur for Workshop on “Changing Business Strategies for R&D, and Their Implications for Science and Technology Policy”, French Ministry for Research, Paris, France, October, 2001
 Bay Area Research Directors, August, 2001. “Open Innovation: A New Paradigm for Managing Industrial Research”, Dinner speaker, Palo Alto, CA
 Hewlett-Packard Laboratories, August 2000. “Chasing Economies of Scope: Xerox’s Management of its Technology Spin-off Organizations”, Palo Alto, CA
 Xerox Palo Alto Research Center Forum, June 2000. “Lessons from Xerox’s History with Technology Spin-off Companies”, PARC Forum Address, Palo Alto, CA
 Industrial Research Institute, May 1999. “Emerging Models for Commercializing Research out of the Lab”. Invited speaker to annual meeting of the IRI, Williamsburg, VA.
 Association of American Publishers, May 1996. “Organizing for Innovation in the Publishing Industry”, plenary address (with David Teece).
 US Government Accounting Office, September, 1995. “The Continuing Competitiveness of the US Hard Disk Drive Industry”.
 Dataquest Annual Storage Conference, June 1993. “Standards and Inertia in the Floppy Disk Drive market: 1975-1992”.

OTHER PROFESSIONAL ACTIVITIES

Invited Columnist, MIT Technology Review. “Rethinking Corporate Research”.

Columns include:

“Is the Central R&D Model Obsolete?”, at

<http://www.technologyreview.com/web/chesbrough/chesbrough042401.asp>,

“Old Dogs *Can* Learn New Tricks: The Transformation of IBM Research”, at

<http://www.technologyreview.com/web/chesbrough/chesbrough071801.asp>, and “Intel’s

Outsourced R&D Strategy”, at

<http://www.technologyreview.com/web/chesbrough/chesbrough100901.asp>

Executive Board Member, Epilepsy.com, a patient-oriented website dedicated to patients and their families who seek information to help them live with epilepsy

Member of Board of Directors, The Epilepsy Project, a public charitable research fund seeking to catalyze more rapid commercialization of promising research in epilepsy and related neurological areas

Mentor and Advisor to Innovent, a Nokia company. Innovent is an early stage investor in telecommunications-related startup companies, and a conduit for those startups into Nokia, as well as a window for Nokia onto emerging technologies and markets

April, 2005