



# HARVARD | BUSINESS | SCHOOL

STEFAN H. THOMKE |  
WILLIAM BARCLAY HARDING PROFESSOR OF BUSINESS ADMINISTRATION

## Curriculum Vitae

July 2009

STEFAN H. THOMKE

### CURRENT POSITION

William Barclay Harding Professor of Business Administration.  
Chair, MBA Program Required Curriculum.  
*Harvard University, Graduate School of Business Administration.*

### PRINCIPAL FIELDS OF INTEREST AND EXPERTISE

Managing Product and Service Development.  
Management of R&D, Technology and Innovation.  
Operations Strategy and Management.

### EDUCATION

- 2003                    Master of Arts (A.M.), *Honoris Causa*.  
*Harvard University (Cambridge, Massachusetts).*
- 1990 - 1995            Doctor of Philosophy (Ph.D.) in Electrical Engineering & Management.  
*Massachusetts Institute of Technology (Cambridge, Massachusetts).*  
Doctoral Thesis: *The Economics of Experimentation in the Design of  
New Products and Processes*. Advisor: Eric von Hippel.
- 1992 - 1993            Master of Science (S.M.) in Management.  
*MIT Sloan School of Management (Cambridge, Massachusetts).*
- 1990 - 1993            Master of Science (S.M.) in Operations Research.  
*Massachusetts Institute of Technology (Cambridge, Massachusetts).*
- 1988 - 1990            Master of Science (M.S.) in Electrical Engineering.  
*Arizona State University (Tempe, Arizona).*
- 1984 - 1988            Bachelor of Science (B.S.) in Electrical Engineering, *Special Distinction*.  
*University of Oklahoma (Norman, Oklahoma).*
- 1981 - 1984            Allgemeine Hochschulreife (Abitur), *Distinction*.  
*Technisches Gymnasium (Calw, Germany).*

**ACADEMIC APPOINTMENTS**

- 2006 – present William Barclay Harding Professor of Business Administration.  
*Harvard University, Graduate School of Business Administration.*
- 2004 – present Professor (Tenured), Technology and Operations Management.  
*Harvard University, Graduate School of Business Administration.*
- 2004 – present Faculty Member, *Harvard University, Faculty of Arts and Sciences.*
- 2000 – 2004 Associate Professor, Technology and Operations Management.  
*Harvard University, Graduate School of Business Administration.*
- 1995 – 2000 Assistant Professor, Technology and Operations Management.  
*Harvard University, Graduate School of Business Administration.*
- 1992 - 1994 Teaching and Research Assistant, Technology and Innovation.  
*MIT Sloan School of Management.*
- 1990 - 1992 Research Assistant, Microsystems Technology Laboratory and  
Laboratory for Manufacturing and Productivity.  
*Massachusetts Institute of Technology.*
- 1988 - 1990 Teaching Assistant, Electrical and Computer Engineering.  
*Arizona State University.*

**HARVARD UNIVERSITY LEADERSHIP & ADMINISTRATIVE RESPONSIBILITIES**

- 2006 - present Chair, MBA Program Required Curriculum.
- 2006 - present Curriculum and Calendar Committee (MBA Program).
- 2004 - present Co-Chair, Ph.D. Program in *Science, Technology and Management*  
(Doctoral Program Between Harvard Business School and  
Harvard's School of Engineering & Applied Sciences).
- 2002 - present Standing Committee on Higher Degrees in Business Studies:  
*Subcommittee on the Degree of Doctor of Philosophy in Science,  
Technology and Management.*
- 2004 - 2008 Doctoral Policy Committee.
- 2006 - 2007 MBA Program Review Committee.
- 2003 - 2007 Faculty Chair of Section C, MBA Class of 2005; Section H, MBA  
Class of 2006; and Section D, MBA Class of 2007.
- 2005 - 2006 HBS Global Initiative, Faculty Working Group.
- 2004 Member, HBS India Research Center Faculty Committee.
- 1996 - 2000 Member, HBS Academic Performance Committee.
- 1997 Member, HBS Global Initiative Task Force.

**BUSINESS EXPERIENCE**

- 1993, 1995      *McKinsey & Company (Stuttgart and Köln, Germany).*  
Management Consultant.
- 1989, 1990      *Institute for Microelectronics (Stuttgart, Germany).*  
Engineering Summer Intern, Integrated Circuit Fabrication.
- 1985, 1986, 1987      *Hewlett-Packard (Böblingen, Germany).*  
Engineering Summer Intern, Medical Division.

**TEACHING EXPERIENCE****Graduate-Level Courses at Harvard**

- 2009              *Managing Product and Service Innovation.*  
Elective Course, Second Year MBA Program.
- 2003 – 2006      *Technology and Operations Management.*  
1995 – 1997      Required Course, First Year MBA Program.
- 1997 - 2003      *Managing Product Development.*  
Elective Course, Second Year MBA Program.
- 1996 – present      *MBA Student Field Studies and Research Projects.*  
Elective Course, Second Year MBA Program.

**Executive Programs at Harvard – Open Enrollment**

- 2009              *Leading Product Innovation (Boston).*  
Faculty Chair.
- 2008              *Leading Product Development (Boston).*  
1997 - 2005      Faculty Chair (2000-2004, 2007-2008).
- 2005              *Leading Innovation and Creativity (Buenos Aires).*  
Executive Education Program Between Harvard Business School  
and IAE (Buenos Aires).
- 2002 - 2004      *Marketing Innovative Technologies (Boston).*
- 2004              *Breakthrough Insights (Boston).*
- 1998 - 2000      *Program for Global Leadership (Singapore, Boston).*  
Core Faculty (1998-1999), Guest Faculty (2000).
- 1996              *Implementing Strategic Change Through Operations (Buenos Aires).*  
Executive Education Program Between Harvard Business School,  
IESE (Barcelona) and IAE (Buenos Aires).

**Executive Programs at Harvard – Customized**

2009	Allianz Global Investors, <i>Senior Executive Program</i> (Boston).
2008-2009	Enel, <i>Executive Leadership Program</i> (Boston).
2006-2008	Royal Bank of Scotland, Executive and Senior Management Leadership Programs on <i>Innovation Driving Profitable Growth</i> (Edinburgh). Faculty Chair.
2001-2008	Michelin, <i>Senior Executive Program</i> (Boston).
2007	ThyssenKrupp, Executive Leadership Program on <i>Breaking New Grounds</i> (Boston).
2007	IBM, Executive Leadership Program on <i>Advanced Organizational Change Strategy</i> (Boston).
2007	Mahindra & Mahindra, <i>Executive Leadership Program</i> (Boston).
2005-2007	Stryker, <i>Advanced Leadership Academy Program</i> (Boston).
2006	Samsung Group, <i>Advanced Management Program</i> (Seoul).
2004-2006	Consultative Group on International Agricultural Research (CGIAR), <i>Senior Leadership Program</i> (Boston).
2005	Bertelsmann Direct Group, <i>Innovation through Customer Insights</i> (Boston).
1999-2003	Pfizer, <i>Program on Leadership Development</i> (Boston).
2002	DaimlerChrysler, <i>Managing Global Opportunities</i> (Berlin).
1999	Delco Remy, <i>Strategic Forum for Senior Leadership</i> (Boston).
1998	Novartis, <i>Creating and Sustaining the High Performance Organization</i> (Boston).
1996-1997	Johnson & Johnson, <i>Superior New Product Development</i> (Boston).

**Executive Programs – Other**

2008-present	<i>Advanced Management Program</i> (AMP). Nomura School of Advanced Management (Tokyo).
Since 1997	Numerous Innovation Workshops and Senior Management Programs In the United States, Europe, and Asia.

**PROFESSIONAL ACTIVITIES**

Editor	<i>Research Policy</i> (2003-2008); one of the leading international journals devoted to the policy and management problems posed by innovation, R&D, technology and science.
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- Advisory Editor *Research Policy (2009-present)*
- Associate Editor *Management Science, Production and Operations Management Journal (Management of Technology Department, Innovation and Product Development Department, and Special Issue on Product Development).*
- Editorial Boards *Journal für Betriebswirtschaft, Journal of Product Innovation Management, Journal of Engineering and Technology Management, Service Science.*
- Council/ Advisor *World Economic Forum (Council on Geography of Technology Innovation), Business Innovation Factory (State of Rhode Island Economic Development Corporation).*
- Academic Referee *California Management Review; Decision Sciences; Harvard Business School Press; Journal of Product Innovation Management; Management Science; Research Policy; R&D Management; Operations Research; Science, Technology, & Human Values; Sloan Management Review and Strategic Management Journal.*

#### AWARDS

- 2001 Shingo Prize for Manufacturing Research Excellence.
- 2000 Best Paper Proceedings, *Academy of Management, Business Policy and Strategy Division.*
- 1994 First Prize, Product Development & Management Association's (PDMA) International Dissertation Competition.
- 1993 Lemelson-MIT Doctoral Fellowship for Invention and Innovation Research.
- 1988 Graduated Special Distinction in Electrical Engineering.
- 1985 Dr. Jost Henkel Foundation Fellowship.

#### PUBLICATIONS

##### Theses

**Thomke, Stefan**, *The Economics of Experimentation in the Design of New Products and Processes*, Doctoral Dissertation, Electrical Engineering and Management, Massachusetts Institute of Technology, December 1994.

**Thomke, Stefan**, *Multivariate Quality Control of Flexible Manufacturing Processes*, Master's Thesis, Management and Operations Research, Massachusetts Institute of Technology, September 1992.

**Thomke, Stefan**, *Parameter Prediction and Visualization To Aid the Decision-Making Process in an Automated Fabrication Environment*, Master's Thesis, Electrical and Computer Engineering, Arizona State University, May 1990.

##### Books

**Thomke, Stefan**, *Managing Product and Service Development: Text and Cases*, McGraw-Hill Irwin (2006).

**Thomke, Stefan**, *Instructor's Manual for Managing Product and Service Development: Text and Cases*, McGraw-Hill Irwin (2006).

**Thomke, Stefan**, *Experimentation Matters: Unlocking the Potential of New Technologies for Innovation*, Harvard Business School Press (2003).

### Refereed Journal Articles<sup>1</sup>

Spethmann, Philipp, Cornelius Herstatt and **Thomke, Stefan**, "Crash Simulation Evolution and Its Impact on R&D in Automotive Applications," *International Journal of Product Development*, vol. 8, no. 3 (2009): 291-305.

Lee, Fiona, Amy Edmondson, **Stefan Thomke** and Monica Worline, "The Mixed Effects of Inconsistency on Experimentation in Organizations," *Organization Science*, vol. 15, no. 3 (May-June 2004): 310-326.

**Thomke, Stefan** and Walter Kuemmerle, "Asset Accumulation, Interdependence and Technological Change: Evidence from Pharmaceutical Drug Discovery." *Strategic Management Journal*, vol. 23, no. 7 (July 2002): 619-635.

Loch, Christoph, Christian Terwiesch and **Stefan Thomke**, "Parallel and Sequential Testing of Design Alternatives," *Management Science* 47, 5 (May 2001): 663-678.

**Thomke, Stefan** and David Bell, "Sequential Testing in Product Development", *Management Science* 47, 2 (February 2001): 308-323.

**Thomke, Stefan** and Takahiro Fujimoto, "The Effect of 'Front-Loading' Problem-Solving on Product Development Performance," *Journal of Product Innovation Management*, vol. 17, no. 2 (March 2000): 128-142.

➤ Winner of 2000-2001 Shingo Prize for Manufacturing Research Excellence.

**Thomke, Stefan** and Don Reinertsen, "Agile Product Development: Managing Development Flexibility in Uncertain Environments," *California Management Review* vol. 41, no.1 (Fall 1998): 8-30.

➤ Selected for translation and publication in the leading German business journal as "Agile Produktentwickler brauchen keine Marktprognosen," *Harvard Business Manager* (May 99): 31-43.

➤ Selected for publication in *Engineering Management Review* (vol. 28, no. 1, 2000) in a special issue on *Strategy and New Product Design*.

**Thomke, Stefan**, "Managing Experimentation in the Design of New Products," *Management Science* 44, 6 (June 1998): 743-762.

**Thomke, Stefan**, Eric von Hippel and Roland Franke, "Modes of Experimentation: An Innovation Process – and Competitive – Variable," *Research Policy* vol. 27 (1998): 315-332.

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<sup>1</sup> Sorted by date of publication.

**Thomke, Stefan**, "Simulation, Learning and R&D Performance: Evidence from Automotive Development," *Research Policy* vol. 27 no. 1 (1998): 55-74.

**Thomke, Stefan**, "The Role of Flexibility in the Development of New Products: An Empirical Study," *Research Policy* 26 (1997): 105-119.

- Selected for translation and publication in Portugal as "O papel da flexibilidade no desenvolvimento de novos produtos: Um estudo empirico," *Comportamento Organizacional E Gestao* (October 1998): 135-157.

**Thomke, Stefan** and Bernd Mittmann, "SPC bei mehreren Ausgangsgrößen (Statistical Process Control of Multiple Outputs)," *Qualität und Zuverlässigkeit*, 37 (September 1992).

### Invited Journal Articles

**Thomke, Stefan**, "R&D Comes to Services: Bank of America's Pathbreaking Experiments," *Harvard Business Review* (April 2003): 70-79.

- Selected for translation and publication in the leading German business journal as "Dienstleistung: Innovationen für den Service," *Harvard Business Manager* (July 2003).

**Thomke, Stefan** and Eric von Hippel, "Customers as Innovators: A New Way to Create Value," *Harvard Business Review* (April 2002): 74-81.

- Selected for translation and publication in the leading German business journal as "Kunden zu Erfindern machen," *Harvard Business Manager* (July 2002): 51-61.

**Thomke, Stefan**, "Managing Digital Design at BMW," *Design Management Journal* 12, 2 (Spring 2001): 20-28.

**Thomke, Stefan**, "Enlightened Experimentation: The New Imperative for Innovation," *Harvard Business Review* (February 2001): 66-75.

- Lead article in Feb. 2001 issue and HBR reprint bestseller during fall 2001.
- Selected for publication in *Harvard Business Review on Innovation*. Boston, MA: Harvard Business School Press (2001).

Von Hippel, Eric, **Stefan Thomke** and Mary Sonnack, "Creating Breakthroughs at 3M," *Harvard Business Review* (September-October 1999): 47-57.

- Selected for publication in *Health Forum Journal* (July / August 2000) in an issue on health care R&D.
- Selected for publication in *Harvard Business Review on Innovation*. Boston, MA: Harvard Business School Press (2001).

**Thomke, Stefan**, Michael Holzner and Touraj Gholami, "The Crash in the Machine," *Scientific American* (March 1999): 72-77.

- Selected for translation and publication in the following foreign journals: *Investigación y Ciencia* (Spain, May 1999), *Ke Xue* (China, June 1999), *Le Scienze* (Italy, May 1999), *Nikkei Science* (Japan, June 1999), *Scientific American Hellas SA* (Greece, April 1999), *Spektrum der Wissenschaft* (Germany, September 1999), and *Swiat Nauki* (Poland, May 1999).

### Articles in Refereed Conference Proceedings

**Thomke, Stefan** and Walter Kuemmerle "Strategic Assets, Interdependence and Technological Change: An Empirical Investigation of Complementarity in Pharmaceutical Drug Discovery." *Best Paper Proceedings of the Academy of Management, Business Policy and Strategy Division* (August 2000).

**Thomke, Stefan** and Takahiro Fujimoto, "Front-Loading Problem-Solving: Implications for Development Performance and Capability," *Refereed Proceedings of the Portland International Conference on Management of Engineering and Technology* (PICMET), (July 1999).

**Thomke, Stefan**, "The Impact of Design Technology on Product Development Performance and Strategy," *Refereed Proceedings of the Portland International Conference on Management of Engineering and Technology* (PICMET), (July 1997).

### Book Chapters

**Stefan Thomke**, "Learning by Experimentation: Prototyping and Testing," in Christoph Loch and Stylianos Kavadias, *Handbook of New Product Development Management*, Oxford: Butterworth-Heinemann (2008).

**Stefan Thomke**, "Innovation, Experimentation, and Technological Change," in Brian Kahin and Dominique Foray, *Advancing Knowledge and the Knowledge Economy*, Cambridge: MIT Press (2006).

**Stefan Thomke**, "Experimentation Strategies and Technological Change," in Soenke Albers and Oliver Gassmann, *Handbuch Technologie- und Innovationsmanagement*, Wiesbaden: Gabler Verlag (2005).

**Thomke, Stefan**, "Die Kunst des Experimentierens: vom Fehler zur Innovation," in Thomas Ganswindt (Editor), *Innovationen: Versprechen für die Zukunft*. Hamburg: Hoffmann und Campe (2004).

Fiona Lee, Arran Caza, Amy Edmondson and **Stefan Thomke**, "New Knowledge Creation in Organizations," in Kim Cameron, Jane Dutton, Robert Quinn, *Positive Organizational Scholarship*, San Francisco: Berrett-Koehler Publishers (September 2003).

**Thomke, Stefan**, "The Impact of Technology on Knowledge Creation: A Study of Experimentation in Integrated Circuit Design," in Nonaka, Ikujiro and Toshihiro Nishiguchi *Knowledge Emergence: Social, Technical, and Evolutionary Dimensions*. New York: Oxford University Press (September 2000).

**Thomke, Stefan** and Don Reinertsen, "Flexible Product Development," in Richard Dorf (editor) *Technology Management Handbook CRCnetBASE*, CRC Press: Boca Raton (October 1999).

**Thomke, Stefan**, "The Changing Economics of Problem-Solving: Some Implications for Innovation and Competitiveness," in Nick Franke and Christoph-Friedrich von Braun (Editors), *Innovationsforschung und Technologiemanagement*. Berlin: Springer Verlag (1998).

### PUBLISHED TEACHING MATERIAL

**Teaching Cases<sup>2</sup>**

**Thomke, Stefan** and Barbara Feinberg, "Design Thinking and Innovation at Apple," *Harvard Business School Case No. 609-066* (2009).

**Thomke, Stefan** and Briana Doerr Luthra, "Innovation at Mahindra & Mahindra (A)," *Harvard Business School Case No. 609-065* (2009).

**Thomke, Stefan** and Briana Doerr Luthra, "Innovation at Mahindra & Mahindra (B)," *Harvard Business School Case No. 609-067* (2009).

**Thomke, Stefan** and Briana Doerr Luthra, "Innovation at Mahindra & Mahindra (C)," *Harvard Business School Case No. 609-068* (2009).

**Thomke, Stefan** and Ashok Nimgade, "Pfizer Inc: Building an Innovation Center," *Harvard Business School Case No. 609-037* (2008).

**Thomke, Stefan** and Ashok Nimgade, "Bank of America (A)," *Harvard Business School Case No. 603-022* (2002).

**Thomke, Stefan** and Ashok Nimgade, "Bank of America (B)," *Harvard Business School Case No. 603-023* (2002).

**Thomke, Stefan** and Ashok Nimgade, "Millennium Pharmaceuticals, Inc. (B)," *Harvard Business School Case No. 602-063* (2001).

**Thomke, Stefan** and Ashok Nimgade, "Siemens AG: Global Development Strategy (A)," *Harvard Business School Case No. 602-061* (2001).

**Thomke, Stefan** and Ashok Nimgade, "Siemens AG: Global Development Strategy (B)," *Harvard Business School Case No. 602-062* (2001).

**Thomke, Stefan** and Ashok Nimgade, "Bush Boake Allen," *Harvard Business School Case No. 601-061* (2000).

**Thomke, Stefan**, "Developing Products on Internet Time: A Process Design Exercise," *Harvard Business School Case No. 600-121* (2000).

**Thomke, Stefan** and Ashok Nimgade, "IDEO Product Development," *Harvard Business School Case No. 600-143* (2000).

➤ Harvard Business School case bestseller.

Sinofsky, Steven and **Stefan Thomke**, "Learning from Projects: Note on Conducting a Postmortem Analysis," *Harvard Business School Case No. 600-021* (1999).

**Thomke, Stefan** and Ashok Nimgade, "Millennium Pharmaceuticals, Inc. (A),"

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<sup>2</sup> Sorted by date of first publication. In addition to MBA and Executive Courses at Harvard Business School, most of the listed cases have been taught in leading business schools, including Boston University (School of Management), Indian Institute of Management (Ahmedabad, India), MIT (Sloan), Rochester Institute of Technology, Stanford Business School, University of California (Haas at Berkeley), University of Michigan Business School, University of Munich, University of Southern California (Marshall), University of Texas (McCombs at Austin), University of Pennsylvania (Wharton) and University of Virginia (Darden).

*Harvard Business School Case No. 600-038 (1999).*

- Selected for publication in *Inside Biotechnology and Pharmaceuticals (From the Field Series)*. Boston, MA: Harvard Business School Publishing, 2000.

**Thomke, Stefan** and Andrew Robertson, "Project Dreamcast: Serious Play at Sega Enterprises Ltd. (A)," *Harvard Business School Case No. 600-028 (1999)*.

**Thomke, Stefan** and Andrew Robertson, "Project Dreamcast: Serious Play at Sega Enterprises Ltd. (B)," *Harvard Business School Case No. 600-029 (1999)*.

**Thomke, Stefan** and Ashok Nimgade, "BMW AG: The Digital Car Project (A)," *Harvard Business School Case No. 699-044 (1998)*.

- Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.

**Thomke, Stefan** and Ashok Nimgade, "BMW AG: The Digital Car Project (B)," *Harvard Business School Case No. 699-045 (1998)*.

**Thomke, Stefan** and Ashok Nimgade, "Innovation at 3M Corporation (A)," *Harvard Business School Case No. 699-012 (1998)*.

- Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.
- Harvard Business School case bestseller.

**Thomke, Stefan** and Ashok Nimgade, "Innovation at 3M Corporation (B)," *Harvard Business School Case No. 699-013 (1998)*.

Sinofsky, Steven and **Stefan Thomke**, "Microsoft Office: Finding the Suite Spot," *Harvard Business School Case No. 699-046 (1998)*.

**Thomke, Stefan** and Ashok Nimgade, "Note on Lead User Research," *Harvard Business School Note No. 699-014 (1998)*.

- Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.
- Selected for publication in *New Product Development, Business Fundamentals Series*. Boston, MA: Harvard Business School Publishing, 1999.

**Thomke, Stefan**, Vish Krishnan and Ashok Nimgade, "Product Development at Dell Computer Corporation," *Harvard Business School Case No. 699-010 (1998)*.

- Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.
- Harvard Business School case bestseller.

**Thomke, Stefan**, Ashok Nimgade, and Paul Pospisil, "Eli Lilly and Company: Drug Development Strategy (A)," *Harvard Business School Case No. 698-010 (1997)*.

- Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.

**Thomke, Stefan** and Ashok Nimgade, "Eli Lilly and Company: Drug Development Strategy (B)," *Harvard Business School Case No. 698-026 (1997)*.

**Thomke, Stefan** and Ashok Nimgade, "Note on New Drug Development in the United States," *Harvard Business School Note* No. 698-028 (1997).

➤ Selected for publication in R. Burgelman, M. Maidique, and S. Wheelwright, *Strategic Management of Technology and Innovation*. New York: McGraw-Hill, 2001.

Sensiper, Sylvia and **Stefan Thomke**, "Manufacturing the BMW Z3 Roadster: A Virtual Factory Tour," *Harvard Business School Note* No. 697-069 (1996).

**Thomke, Stefan** and Paul Pospisil, "Stocko Singapore Pte Ltd," *Harvard Business School Case* No. 697-059 (1996).

### Teaching, Module and Course Overview Notes

**Thomke, Stefan**, "Bank of America (A) and (B)," *Harvard Business School Teaching Note* No. 603-086 (2003).

**Thomke, Stefan**, "Developing Products on Internet Time: A Process Design Exercise," *Harvard Business School Teaching Note* No. 603-087 (2003).

**Thomke, Stefan**, "Managing Product Development: Course Overview Note for Instructors," *Harvard Business School Note* No. 603-088 (2003).

**Thomke, Stefan**, "Module Overview Note: Building Capabilities for Experimentation, Learning and Prototyping," *Harvard Business School Note* No. 603-089 (2003).

**Thomke, Stefan**, "Module Overview Note: Product Development Process Design and Improvement," *Harvard Business School Note* No. 603-090 (2003).

**Thomke, Stefan**, "Module Overview Note: Managing Development Networks," *Harvard Business School Note* No. 603-091 (2003).

**Thomke, Stefan**, "Project Dreamcast: Serious Play at Sega Enterprises Ltd. (A) and (B)," *Harvard Business School Teaching Note* No. 603-085 (2003).

**Thomke, Stefan**, "BMW AG: The Digital Auto Project (A) and (B)," *Harvard Business School Teaching Note* No. 603-117 (2003).

**Thomke, Stefan**, "Bush Boake Allen," *Harvard Business School Teaching Note* No. 603-115 (2003).

**Thomke, Stefan**, "Millennium Pharmaceuticals (A) and (B)," *Harvard Business School Teaching Note* No. 603-106 (2002).

**Thomke, Stefan**, "Siemens AG: Global Development Strategy (A) and (B)," *Harvard Business School Teaching Note* No. 603-009 (2002).

**Thomke, Stefan**, "IDEO Product Development," *Harvard Business School Teaching Note* No. 602-060 (2001).

**Thomke, Stefan** and Ashok Nimgade, "Innovation at 3M Corporation (A) and (B)," *Harvard Business School Teaching Note* No. 699-135 (1999).

**Thomke, Stefan** and Ashok Nimgade, "Microsoft Office: Finding the Suite Spot," *Harvard Business School Teaching Note* No. 699-136 (1999).

**Thomke, Stefan**, "Module Overview Note: Managing Experimentation" *Harvard Business School Note* No. 699-138 (1999).

**Thomke, Stefan** and Ashok Nimgade, "Product Development at Dell Computer Corporation," *Harvard Business School Teaching Note* No. 699-134 (1999).

**Thomke, Stefan** and Ashok Nimgade, "Eli Lilly and Company: Drug Development Strategy (A) and (B)," *Harvard Business School Teaching Note* No. 698-033 (1998).

**Thomke, Stefan**, "Design for Manufacturing: An Exercise," *Harvard Business School Teaching Note* No. 696-072 (1996).

### Published Video Materials

**Thomke, Stefan**, "Experimentation Matters: New Opportunities for Innovation," *Harvard-Stanford Faculty Seminar Series*, Harvard Business School Publishing No. 3706C; also available through the American Banking and Financial Leadership Institute (2006).

**Thomke, Stefan**, "BMW AG: The Digital Car Project—An Interview with Chris Bangle, Head of Worldwide Design," *Harvard Business School Video Case* No. 602-802 (2001).

### SELECTED PRESENTATIONS (1995-2008)

1. "Experimentation Matters: New Opportunities for Productivity and Innovation," *Mahindra Group Blue Chip Conference*, Kuala Lumpur, Malaysia, December 2008.
2. "Experimentation Matters: New Opportunities for Productivity and Innovation," *Stryker Global R&D Conference*, Kalamazoo, Michigan, April 2007.
3. "Experimentation Matters: New Opportunities for Productivity and Innovation," *Proctor & Gamble Global Innovation Productivity Conference*, Northern Kentucky, January 2007.
4. "Development Tools: A Research Lens for Studying R&D Organizations," *Production and Operations Management Society (POMS) Conference*, Boston, Massachusetts, May 2006.
5. "Experimentation and Breakthrough Innovation," Keynote Speaker, *International ANSYS Conference*, Pittsburgh, Pennsylvania, May 2006.
6. "Experimentation Matters: New Opportunities for Innovation," *Design Management Institute International Summit*, Boston, Massachusetts, December 2005.
7. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," *HBS Alumni Reunion*, Boston, Massachusetts, June 2005.
8. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," , Keynote Presentation, *The Front End of Innovation Conference*,

- Institute of International Research and Product Development & Management Association, Boston, Massachusetts, May 2005.*
9. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," Keynote Presentation, *Cutter Consortium Summit*, Cambridge, Massachusetts, May 2005.
  10. "Experimentation, Innovation and Technological Change," *Advancing Knowledge and the Knowledge Economy Conference*, National Academies, Washington, DC, January 2005.
  11. "Why and How Experimentation Matters to Innovation: New Technologies, Processes, Organization and Management," *LMU-MIT Workshop on User Innovation*, München, Germany, June 2004.
  12. "Experimenting Early and Often for Breakthrough Results," Keynote Speaker, *International ANSYS Conference*, Pittsburgh, Pennsylvania, May 2004.
  13. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," *Harvard Business School Association of Boston*, January 2004.
  14. "Why and How Experimentation Matters to Innovation: New Technologies, Processes, Organization and Management," *Health Care and Life Sciences Seminar*, Harvard Business School, October 2003.
  15. "Experimentation, Technological Change and R&D Performance: Empirical Findings from Global Automotive Development," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Atlanta, Georgia, October 2003.
  16. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," *Management of Technological Innovation and Entrepreneurship Seminar*, MIT Sloan School, Cambridge, Massachusetts, October 2003.
  17. "Innovation in R&D: The Power of Managing Experimentation," Keynote Speaker, *Siemens Information and Communications Network (ICN) Forum*, München, Germany, July 2003.
  18. "Experimentation Matters: Unlocking the Potential of New Technologies for Innovation," *Faculty Research Symposium*, Harvard Business School, May 2003.
  19. "Customers as Designers," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, San Jose, California, November 2002.
  20. "Enlightened Experimentation," *System Design and Management*, MIT, Cambridge, Massachusetts, July 2002.
  21. "Customers As Innovators," Keynote Speaker, *IBM Customer Dynamics Conference*, New York, June 2002.
  22. "New Imperatives for Product Development and Innovation," *The Connecticut Technology Council*, New Haven, Connecticut, May 2002.

23. "Teaching 'Managing Product Development' at Harvard Business School," *Production and Operations Management Society (POMS) Conference*, San Francisco, California, April 2002.
24. "Does Operations Effectiveness Converge? Early Findings from Product Development in the Global Auto Industry," *Production and Operations Management Society (POMS) Conference*, San Francisco, California, April 2002.
25. "Does Advanced Technology Lead to Better R&D Performance? Early Findings from Product Development in the Global Auto Industry," *Center for Innovation in Product Development (CIPD) Seminar*, MIT, Cambridge, Massachusetts, March 2002.
26. "Experimentation, Technological Change and R&D Performance: Evolving Evidence from Automotive Development," *Operations Management Seminar*, Boston University School of Management, Boston, Massachusetts, February 2002.
27. "Experimentation, Technological Change and R&D Performance," *Operations and Information Management Seminar*, The Wharton School, Philadelphia, Pennsylvania, December 2001.
28. "Enlightened Experimentation: The New Imperative for Innovation," Keynote Presentation, *Product Development Management Association's (PDMA) Annual Conference*, Santa Clara, California, October 2001.
29. "Breaking the Genetic Code: The Business of Life Sciences in the 21<sup>st</sup> Century," (with Jonathan West), *Harvard Business School Global Alumni Conference*, Cleveland, OH, May 2001.
30. "Role of IT in Product Development: Implications for Problem-Solving and Learning." *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, San Antonio, Texas, November 2000.
31. "Strategic Assets, Interdependence and Technological Change: An Empirical Investigation of Complementarity in Pharmaceutical Drug Discovery," (joint presentation with Walter Kuemmerle), *Academy of Management, Business Policy and Strategy Division*, Toronto, August 2000.
32. "Agile Product Development: Managing Development Flexibility in Uncertain Environments," Keynote Speaker, *Siemens Information and Communications Network (ICN) Forum*, München, Germany, June 2000.
33. "Trends in Automotive Product Development and the Role of Computer Technology," *Silicon Graphics AB*, Göteborg, Sweden, June 2000.
34. "Achieving Superior Performance Through Front-Loaded Development Processes," Keynote Presentation, *Institute of International Research and Product Development & Management Association*, Alexandria, Virginia, May 2000.
35. "Optimal Testing in Product Development," (with David Bell who presented), *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Philadelphia, Pennsylvania, November 1999.

36. "Revolutionizing Product Development Through Simulation Technologies," Keynote Presentation, *International Association of Product Development Conference*, Austin, Texas, November 1999.
37. "Parallel and Sequential Testing of Design Alternatives," (with Christoph Loch and Christian Terwiesch who presented), *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Philadelphia, PA, November 1999.
38. "Modes of Experimentation: Implications for Problem-Solving and Innovation," *Faculty of Economics Research Seminar*, University of Tokyo, Japan, October 1999.
39. "Strategic Assets, Interdependence and Technological Change: An Empirical Investigation of Complementarity in Pharmaceutical Drug Discovery," (with Walter Kuemmerle who presented), *Strategic Management Society, 19<sup>th</sup> International Conference*, Berlin, Germany, October 1999.
40. "Front-Loading Problem-Solving: Implications for Development Performance and Capability," (joint presentation with Takahiro Fujimoto), *Portland International Conference on Management of Engineering and Technology (PICMET)*, July 1999.
41. "How Companies Simulate to Innovate," Member of Expert Panel, *General Motors Global Conference*, Detroit, Michigan, June 1999.
42. "Learning by Experimentation: Implications for R&D Performance," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Cincinnati, Ohio, May 1999.
43. "Managing Development Flexibility in Uncertain Environments," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Cincinnati, Ohio, May 1999.
44. "Teaching Product Development at the Harvard Business School," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Cincinnati, Ohio, May 1999.
45. "Learning from Failure: A Laboratory Study," (joint presentation with Amy Edmondson), *Management of Technology Seminar*, MIT Sloan School, Cambridge, Massachusetts, April 1999.
46. "Optimal Testing Under Uncertainty," (joint presentation with David Bell), *Operations Management Seminar*, MIT Sloan School, Cambridge, Massachusetts, April 1999.
47. "Trends in Automotive Product Development and the Role of Computer Technology," *Silicon Graphics European Manufacturing Business Unit*, Darmstadt, Germany, January 1999.
48. "Building Capabilities for Rapid Product Development in the Automotive Industry," *SAE Global Vehicle Development Conference*, Dearborn, Michigan, December 1998.

49. "Optimal Testing Under Uncertainty," (joint presentation with David Bell), *Marketing Seminar*, MIT Sloan School, Cambridge, Massachusetts, November 1998.
50. "Managing Experimentation in the Development of New Products," Special Session for Award Winning Research, *The Product Development & Management Association's (PDMA) 22nd International Conference*, Atlanta, Georgia, October 1998.
51. Session Chair: "Learning, Experimentation and the Changing Economics of R&D," *Institute for Operations Research and the Management Sciences (INFORMS) International Conference*, Tel Aviv, Israel, June 1998.
52. "The Impact of Simulation on Learning and R&D Performance: Evidence from Automotive Development," *Institute for Operations Research and the Management Sciences (INFORMS) International Conference*, Tel Aviv, Israel, June 1998.
53. "Development Strategy and Aggregate Project Planning," Keynote Presentation at Symposium on *Corporate Infrastructure Challenges for Fast-Growth Companies*, Harvard University, Graduate School of Design, June 1998.
54. "Shortening Product Development Time Through Front-Loading Problem-Solving," (joint presentation with Takahiro Fujimoto), Opening Plenary Session for Best Conference Papers (3 out of 70 papers were selected), *5th European Product Development Management Conference*, Como, Italy, May 1998.
55. "The Impact of Simulation on R&D Performance: Evidence from Automotive Development," Invited Presentation, *Operations Management Seminar*, MIT Sloan School, Cambridge, Massachusetts, December 1997.
56. "Managing Experimentation and Learning in the Design of New Product and Processes," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference*, Dallas, Texas, October 1997.
57. "The Impact of Simulation on R&D Performance," *Management of Technology Seminar*, MIT Sloan School, Cambridge, Massachusetts, May 1997.
58. "The Impact of Technology on Knowledge Creation: A Study of Experimentation and Learning in the Design of New Products," *International Conference on the Study of Knowledge Creation: Implications for Business Enterprises of the 21st Century*, Honolulu, Hawaii, December 1996.
59. "The Economics of Experimentation in the Design of New Products and Processes," *Annual Academy of Management Conference*, Cincinnati, Ohio, August 1996.
60. "The Role of Flexibility in Design: A Study of Integrated Systems Development," *Management of Technology Seminar*, MIT Sloan School, Cambridge, Massachusetts, April 1996.
61. "How to Manage Experimentation and Learning in Product and Process Development: A General Model and its Validation in the Design of ASICs and EPLDs," *Technology and Operations Management Research Seminar*, Research

Program for Managing Technological Change in Manufacturing, Carleton University and Northern Telecom, Ottawa, Canada, March 1996.

62. "Integrated Circuit Design Completion: A Comparison of ASIC and EPLD-Based System Design Practice," *Design SuperCon '96*, Santa Clara, California, February 1996.
63. "The Customer Develops The Product – New Dimensions for Quality and Innovation (in German)," *German National Scholarship Foundation Conference*, Harvard University, Cambridge, Massachusetts, October 1995.

#### **OTHER SPEAKING OPPORTUNITIES**

- Radio and television appearances (It's Your Money, Small Business Show, WMC-AM Memphis, KYW Philadelphia, CNBC Asia, etc.).
- Interviewed by national and international press (*Business Week*, *Financial Times*, *The Economist.com*, *Fast Forward*, *New York Times*, *HR.com*, *National Geographic Magazine*, *U.S. News & World Report*, etc.).

#### **PROFESSIONAL MEMBERSHIPS**

Academy of Management.

American Association for the Advancement of Science (AAAS).

American Society of Mechanical Engineers (ASME).

Eta Kappa Nu (Honor Society for Electrical Engineers).

Institute for Electrical and Electronic Engineers (IEEE).

Institute for Operations Research and Management Sciences (INFORMS).

Tau Beta Pi (Honor Society for Engineers).

#### **CONSULTING**

Over the last fifteen years, I have worked with many large, medium and entrepreneurial companies in the United States, Europe and Asia in a diverse set of industries and functions but with a primary focus on *innovation and R&D management*. My background and experience has enabled me to work closely with company CEOs and project teams in manufacturing and service settings.

Industry experience:      medical devices, instrumentation and in-vitro diagnostics; pharmaceutical; automotive supplier & manufacturing; semiconductor & discrete electronics; electrical engineering; energy; consumer goods; IT & design tools; financial services/investment banking; etc.

Consulting work:            teaching (custom executive programs); keynote speeches; top management advisor; business plan development related to private equity and initial public offerings; and facilitating restructuring & long-term organizational change programs.

References are available upon request.