

CURRICULUM VITA

KIM BRYCE CLARK

NAC Distinguished Professor of Strategy
Marriott School of Business
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EDUCATION

Harvard University A.B., Magna Cum Laude with Highest Honors in Economics, 1974
Harvard University A.M., 1977 (Economics)
Harvard University Ph.D., 1978 (Economics)

HONORS AND AWARDS

Phi Beta Kappa, 1974
Allyn Young Prize (best honors thesis), 1974
Harvard Teaching Prize in Economics, 1975
Earhardt Fellowship, 1974-1976
McKinsey Award, *Harvard Business Review*, 1981
ASQ Award for Scholarly Contribution (with R. Henderson), 1996
Newcomen Award in Business History, 1998
Brigham Young University Alumni Achievement Award, 1998

TEACHING, RESEARCH AND ADMINISTRATIVE EXPERIENCE

Commissioner, Church Educational System –
The Church of Jesus Christ of Latter-day Saints 2015-2019
President, Brigham Young University-Idaho, 2005-2015
Dean of the Faculty, Harvard Business School, 1995-2005
George F. Baker Professor of Administration, Harvard Business School, 1999-2005 (*Emeritus*)
Harry E. Figgie, Jr. Professor of Business Administration, Harvard Business School, 1989-1999
Professor, Harvard Business School, 1987-1988
Associate Professor, Harvard Business School, 1983-1986
Assistant Professor, Harvard Business School, 1978-1982
Research Associate, National Bureau of Economic Research, 1978-1983
Teaching Fellow, Department of Economics, Harvard University, 1973-1977

OTHER PROFESSIONAL EXPERIENCE

Economist, Office of the Secretary, U.S. Department of Labor, 1975-1976
Member of Brookings Panel on Economic Activity, 1979
Rapporteur, Automobile Panel, Committee on International Trade and Technology, National Academy of Engineering, 1980-1982
Member, Committee on High Technology Ceramics in Japan, National Materials Advisory Board, National Academy of Engineering, 1983

MEMBERSHIPS

American Economic Association; Academy of Management; IEEE; The Institute of Management Sciences; Operations Management Association; Young Presidents' Organization

BOOKS

- Design Rules: The Power of Modularity* (2000). Cambridge: The MIT Press. (With C.Y. Baldwin)
- The Product Development Challenge: Competing through Speed, Quality, and Creativity* (1995). Boston: Harvard Business School Press. (Edited with S.C. Wheelwright)
- Leading Product Development: The Senior Manager's Guide to Creating and Shaping the Enterprise* (1995). New York: The Free Press. (With S.C. Wheelwright)
- The Perpetual Enterprise Machine: Seven Keys to Corporate Renewal through Successful Product and Process Development* (1994). New York: Oxford University Press. (Edited with H.K. Bowen, C.A. Holloway, and S.C. Wheelwright)
- Managing New Product and Process Development: Text and Cases* (1993). New York: The Free Press. (With S.C. Wheelwright; with accompanying Instructor's Manual)
- Revolutionizing Product Development: Quantum Leaps in Speed, Efficiency, and Quality* (1992). New York: The Free Press. (With S.C. Wheelwright)
- Product Development Performance: Strategy, Organization, and Management in the World Auto Industry* (1991). Boston: Harvard Business School Press. (With T. Fujimoto)
- Dynamic Manufacturing: Creating the Learning Organization* (1988). New York: The Free Press. (With R.H. Hayes and S.C. Wheelwright)
- The Uneasy Alliance: Managing the Productivity-Technology Dilemma* (1985). Boston: Harvard Business School Press. (Edited with R.H. Hayes and C. Lorenz)
- Industrial Renaissance* (1983). New York: Basic Books. (With W.J. Abernathy and A.M. Kantrow)
- The Competitive Status of the U.S. Auto Industry: A Study of the Influences of Technology in Determining International Industrial Competitive Advantage* (1982). Washington, D.C.: National Academy Press.
- Cases in Operations Management: Strategy and Structure* (1982). Illinois: Richard D. Irwin, Inc. (With E. Sasser, D. Garvin, M. Graham, R. Jaikumar, and D. Maister)
- Cases in Operations Management: Analysis and Action* (1982). Illinois: Richard D. Irwin, Inc. (With E. Sasser, D. Garvin, M. Graham, R. Jaikumar, and D. Maister)

ARTICLES AND CHAPTERS

- "The Architecture of Participation: Does Code Architecture Mitigate Free Riding in the Open Source Development Model?" (July 2006) *Management Science* 52, no. 7. (With C.Y. Baldwin)
- "Modularity in the Design of Complex Engineering Systems" (2006). In *Complex Engineered Systems: Science Meets Technology*, edited by Ali Minai, Dan Braha and Yaneer Bar Yam. New England Complex Systems Institute Series on Complexity. N.Y.: Springer-Verlag. (With C.Y. Baldwin)
- "Between 'Knowledge' and 'the Economy': Notes on the Scientific Study of Designs" (2006). In *Advancing Knowledge and the Knowledge Economy*, edited by B. Kahin and D. Foray. Cambridge, Mass.: MIT Press. (With C.Y. Baldwin)
- "Preface to the Chinese Edition" (2006). Preface to *Design Rules, Volume 1, The Power of Modularity*. Beijing, China: CITIC Publishing House, Chinese Mandarin ed. (With C.Y. Baldwin)
- "Architectural Innovation and Dynamic Competition: The Smaller "Footprint" Strategy" (2006). Harvard Business School Working Paper, No. 07-014. (With C.Y. Baldwin)

- "Where Do Transactions Come From? A Network Design Perspective on the Theory of the Firm" (2006). Harvard Business School Working Paper, No. 06-051. (With C.Y. Baldwin)
- "Designs and Design Architecture: The Missing Link Between "Knowledge" and the "Economy" (2005). Harvard Business School Working Paper, No. 05-052. (With C.Y. Baldwin)
- "Modularity in the Design of Complex Engineering Systems" (2004). Harvard Business School Working Paper, No. 04-055. (With C.Y. Baldwin)
- "Preface to the Japanese Edition" (2004). Preface to *Design Rules, Volume 1, The Power of Modularity*. Tokyo, Japan: RIETI, Japanese ed. (With C.Y. Baldwin)
- "The Architecture of Cooperation: Does Code Architecture Mitigate Free Riding in the Open Source Development Model?" (2003). Harvard Business School Working Paper, No. 03-209. (With C.Y. Baldwin)
- "Design Rules: Volume 1, the Power of Modularity: Preface to the Japanese Edition" (2003). Harvard Business School Working Paper, No. 04-013. (With C.Y. Baldwin)
- "The Pricing and Profitability of Modular Clusters" (2003). Harvard Business School Working Paper, No. 04-006. (With C.Y. Baldwin and C.J. Woodard)
- "Where Do Transactions Come From? A Perspective from Engineering Design" (2002). Harvard Business School Working Paper, No. 03-031. (With C.Y. Baldwin)
- "The Fundamental Theorem of Design Economics" (2002). Harvard Business School Working Paper, No. 02-077. (With C.Y. Baldwin)
- "Institutional Forms, Part 1: The Technology of Design and Its Problems" (2002). Harvard Business School Working Paper, No. 02-076. (With C.Y. Baldwin)
- "The Option Value of Modularity in Design: An Example from Design Rules, Volume 1: The Power of Modularity" (2002). Harvard Business School Working Paper, No. 02-078. (With C.Y. Baldwin)
- "The Value and Cost of Modularity" (2002). In *Modularity*, edited by Masahiko Aoki. Tokyo, Japan: RIETI. (With C.Y. Baldwin)
- "Commentary on Managing in an Age of Modularity" (2002). *Managing in the Modular Age: Architectures, Networks, and Organizations*, edited by Raghu Garud, Arun Kumaraswamy and Richard Langlois. Blackwell Publishers. (With C.Y. Baldwin)
- "Managing in the Age of Modularity" (2002). In *Managing in the Modular Age: Architectures, Networks, and Organizations*, edited by Raghu Garud, Arun Kumaraswamy and Richard Langlois. Blackwell Publishers. (With C.Y. Baldwin)
- "Modularity after the Crash" (2001). Harvard Business School Working Paper, No. 01-075. (With C.Y. Baldwin)
- "Afterword - Chapter 16" (1999). Harvard Business School Working Paper, No. 99-081. (With C.Y. Baldwin)
- "All Modules Are Not Created Equal - Chapter 11" (1999). Harvard Business School Working Paper, No. 98-097. (With C.Y. Baldwin)
- "Competition Among Hidden Modules and Industry - Chapter 15" (1999). Harvard Business School Working Paper, No. 99-069. (With C.Y. Baldwin)
- "Design Options and Design Evolution - Chapter 9" (1999). Harvard Business School Working Paper, No. 98-055. (With C.Y. Baldwin)

- "The Emergence of Modular Clusters - Chapter 14" (1999). Harvard Business School Working Paper, No. 99-068. (With C.Y. Baldwin)
- "Enterprise Design: A Task Structure Plus a Contract Structure - Chapter 8" (1999). Harvard Business School Working Paper, No. 98-054. (With C.Y. Baldwin)
- "The Value of Augmenting and Excluding - Chapter 12" (1999) Harvard Business School Working Paper, No. 99-066. (With C.Y. Baldwin)
- "The Value of Inverting and Porting - Chapter 13" (1999). Harvard Business School Working Paper, No. 99-067. (C.Y. Baldwin)
- "The Value of Modularity Splitting and Substitution" (1999). Harvard Business School Working Paper, No. 98-087. (With C.Y. Baldwin)
- "System/360: A New Design Creates New Contract Structure Possibilities" (1998). Harvard Business School Working Paper, No. 98-063. (With C.Y. Baldwin)
- "Organizing and Leading 'Heavyweight' Development Teams" (1997). In *Managing Strategic Innovation and Change: A Collection of Readings*, edited by M. L. Tushman and P. Anderson. New York: Oxford University Press. (With S.C. Wheelwright)
- "The Modular Operations - Chapter 4" (1997). Harvard Business School Working Paper, No. 98-059. (With C.Y. Baldwin)
- "The Value of Inverting and Porting" (1997). Harvard Business School Working Paper #98-055. (With C.Y. Baldwin)
- "The Value of Augmenting and Excluding" (1997). Harvard Business School Working Paper #98-054. (With C.Y. Baldwin)
- "The Economic System Surrounding the Artifacts and Designs" (1997). Harvard Business School Working Paper #98-053. (With C.Y. Baldwin)
- "Designs and the Structure of Firms and Industries" (1997). Harvard Business School Working Paper #98-052. (With C.Y. Baldwin)
- "The Microstructure of Designs" (1997). Harvard Business School Working Paper #98-031. (With C.Y. Baldwin)
- "Managing in an Age of Modularity" (1997). *Harvard Business Review*, 75 (5), 84-93. (With C.Y. Baldwin)
- "Value, Contract Structure and Organizations" (1997). Harvard Business School Working Paper #97-085. (With C.Y. Baldwin)
- "Sun Wars: Competition within a Modular Cluster, 1985-1990" (1997). In D.B. Yoffie (Ed.), *Competing in the Age of Digital Convergence*. Boston, MA: Harvard Business School Press. (With C.Y. Baldwin)
- "Technological Newness: An Empirical Study in the Process Industries" (1996). *Journal of Engineering and Technology Management*, 13 (3-4), 263-282.
- "The Value of Modularity – Splitting and Substitution" (1996). Harvard Business School Working Paper #97-039. (With C.Y. Baldwin)
- "Design Options and Design Evolution" (1996). Harvard Business School Working Paper #97-038. (With C.Y. Baldwin)

- "External Integration in Product Development" (1996). In T. Nishiguchi, *Managing Product Development*. New York: Oxford University Press. (With T. Fujimoto and M. Iansiti)
- "Competing through Manufacturing and the New Manufacturing Paradigm: Is Manufacturing Strategy Passé?" (1996). *Production and Operations Management*, 5 (1), 42-58.
- "Notes on Modularity in Design and Innovation in Advanced Ceramics and Engineering Plastics" (1995). Presentation to the American Economic Association, 6 January 1995; Harvard Business School Working Paper #95-073.
- "How to Integrate Work and Deepen Expertise" (1995). In *The Product Development Challenge: Competing Through Speed, Quality, and Creativity*, edited by K. B. Clark and S. C. Wheelwright. Boston: Harvard Business School Press. (With D.A. Leonard, H.K. Bowen, C. Holloway, and S.C. Wheelwright)
- "The Product Development Imperative: Competing in the New Industrial Marathon" (1994). In P.B. Duffy (Ed.), *The Relevance of a Decade: Essays to Mark the First Ten Years of the Harvard Business School Press*. Boston, MA: Harvard Business School Press. (With T. Fujimoto)
- "Development Projects: The Engine of Renewal" (1994). *Harvard Business Review*, 72 (5), 110-120. (With H.K. Bowen, C.A. Holloway, and S.C. Wheelwright)
- "How to Integrate Work and Deepen Expertise" (1994). *Harvard Business Review*, 72 (5), 121-130. (With D. Leonard-Barton, H.K. Bowen, C.A. Holloway, and S.C. Wheelwright)
- "Make Projects the School for Leaders" (1994). *Harvard Business Review*, 72 (5), 131-140. (With H.K. Bowen, C.A. Holloway, and S.C. Wheelwright)
- "Project Leadership and Organization" (1994). In H.K. Bowen, K.B. Clark, C.A. Holloway, and S.C. Wheelwright (Eds.), *The Perpetual Enterprise Machine: Seven Keys to Corporate Renewal through Successful Product and Process Development*. New York: Oxford University Press. (With M. Iansiti and R. Billington)
- "Regaining the Lead in Manufacturing: How to Integrate Work and Deepen Expertise."(1994). *Harvard Business Review* 72, no. 5, 121-130. (With D Leonard-Barton, H. Bowen, C. Holloway, and S. Wheelwright).
- "Capital-Budgeting Systems and Capabilities Investments in U.S. Companies after the Second World War" (1994). *Business History Review*, 68 (1), 73-109. (With C.Y. Baldwin)
- "Integration and Dynamic Capability: Evidence from Product Development in Automobiles and Mainframe Computers" (1994). *Industrial and Corporate Change*, 3 (3), 557-605. (With M. Iansiti)
- "Accelerating the Design-Build-Test Cycle for Effective Product Development" (1994). *International Marketing Review*, 11 (1), 32-46. (With S.C. Wheelwright)
- "Modularity and Real Options" (1992). Harvard Business School Working Paper #93-026. (With C.Y. Baldwin)
- "Manufacturing for Design: Beyond the Product/R&D Dichotomy" (1992). In G. Susman (Ed.), *Integrating Design and Manufacturing for Competitive Advantage*. New York: Oxford University Press. (With W.B. Chew and T. Fujimoto)
- "Strategies for Managing a Project Portfolio" (1992). Harvard Business School Working Paper #93-004. (With M.D. Watkins)
- "Creating Project Plans to Focus Product Development" (1992). *Harvard Business Review*, 70 (2), 70-82. (With S.C. Wheelwright)

- "Organizing and Leading 'Heavyweight' Development Teams" (1992). *California Management Review*, 34 (3), 9-28; also reprinted (1999) in R.C. Dorf (Ed.), *The Technology Management Handbook*. CRC Press. (With S.C. Wheelwright)
- "Competing through Development Capability in a Manufacturing-Based Organization" (1992). *Business Horizons*, 35 (4), 29-43. (With S.C. Wheelwright)
- "Managing the Product Line: A Case of the Automobile Industry" (1992). Harvard Business School Working Paper #92-067. (With T. Fujimoto and Y. Aoshima)
- "Product Development and Competitiveness" (1992). *Journal of the Japanese and International Economies*, 6, 101-143. (With T. Fujimoto)
- "Behind the Learning Curve: A Sketch of the Learning Process" (1991). *Management Science*, 37 (3), 267-281. (With P.S. Adler)
- "Capabilities and Capital Investment: New Perspectives on Capital Budgeting" (1991). *Journal of Applied Corporate Finance*, 67-82. (With C.Y. Baldwin)
- "High Performance Product Development in the World Auto Industry" (1991). *International Journal of Vehicle Design*, 12 (2), 105-131.
- "The Power of Product Integrity" (1990). *Harvard Business Review*, 68 (6), 107-118. (With T. Fujimoto)
- "Measurement, Coordination and Learning in a Multi-Plant Network" (1990). In R. Kaplan (Ed.), *Measures for Manufacturing Excellence*. Boston: Harvard Business School Press. (With T.F. Bresnahan and W.B. Chew)
- "Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms" (1990). *Administrative Science Quarterly*, 35, 9-30. (With R.M. Henderson)
- "What Strategy Can Do for Technology" (1989). *Harvard Business Review*, 67 (6), 94-98.
- "Lead Time in Automobile Product Development: Explaining the Japanese Advantage" (1989). *Journal of Engineering and Technology Management*, 6, 25-58. (With T. Fujimoto)
- "Reducing the Time to Market: The Case of the World Auto Industry" (1989). *Design Management Journal*, 1 (1), 49-57. (With T. Fujimoto)
- "Project Scope and Project Performance: The Effect of Parts Strategy and Supplier Involvement on Product Development" (1989). *Management Science*, 35 (10), 1247-1263.
- "Overlapping Problem Solving in Product Development" (1989). In K. Ferdows (Ed.), *Managing International Manufacturing*. Amsterdam: Elsevier Press. (With T. Fujimoto)
- "Recapturing America's Manufacturing Heritage" (1988). *California Management Review*, 30 (4), 9-33. (With R.H. Hayes)
- "A Perspective on Computer Integrated Manufacturing Tools" (1988). Harvard Business School Working Paper #88-048. (With R. Henderson and R. Jaikumar)
- "Managing Technology in International Competition: The Case of Product Development in Response to Foreign Entry" (1988). In A.M. Spence and H.A. Hazard (Eds.), *International Competitiveness*. Cambridge, MA: Ballinger Publishing.
- "The European Model of Product Development: Challenge and Opportunity" (May 1988). Paper presented at the Second International Policy Forum International Motor Vehicle Program, Italy. (With T. Fujimoto)

- "Product Development in the World Auto Industry" (1987). *Brookings Papers on Economic Activity*, 3, 729-771. (With W.B. Chew and T. Fujimoto)
- "Investment in New Technology and Competitive Advantage" (1987). In D.J. Teece (Ed.), *The Competitive Challenge*. Cambridge, MA: Ballinger Publishing.
- "Management and Innovation: The Evolution of Ceramic Packaging for Integrated Circuits" (1986). In W.D. Kingery (Ed.), *High-Technology Ceramics: Past, Present, and Future*. Ohio: The American Ceramic Society, Inc. (With E. Rothman)
- "Why Some Factories are More Productive Than Others" (1986). *Harvard Business Review*, 64 (5), 66-73. (With R.H. Hayes)
- "Explaining Observed Productivity Differentials Between Plants: Implications for Operations Research" (1985). *Interfaces*, 15 (6), 3-14. (With R.H. Hayes)
- "The Interaction of Design Hierarchies and Market Concepts in Technological Evolution" (1985). *Research Policy*, 14 (5), 235-251.
- "Innovation: Mapping the Winds of Creative Destruction" (1985). *Research Policy*, 14 (1), 3-22. (With W.J. Abernathy)
- "Exploring the Sources of Productivity Differences at the Factory Level" (1985). In *The Uneasy Alliance: Managing the Productivity-Technology Dilemma*. Boston: Harvard Business School Press. (With R.H. Hayes)
- "Exploring Factors Affecting Innovation and Productivity Growth within the Business Unit" (1985). In *The Uneasy Alliance: Managing the Productivity-Technology Dilemma*. Boston: Harvard Business School Press. (With R.H. Hayes)
- "Chief Executive Background and Firm Performance" (1985). In *The Uneasy Alliance: Managing the Productivity-Technology Dilemma*. Boston: Harvard Business School Press. (With L.H. Summers and P. Jarymiszyn)
- "Unionization and Firm Performance: The Impacts on Profits, Growth, and Productivity" (1984). *American Economic Review*, 74, 893-919.
- "Productivity, Growth and R&D at the Business Level: Results from the PIMS Data Base" (1984). In Z. Griliches (Ed.), *R&D, Patents, and Productivity*. Chicago: University of Chicago Press. (With Z. Griliches)
- "Management Response to Unionization" (1984). Harvard Business School Working Paper #84-38.
- "Competition, Technical Diversity and Radical Innovation in the U.S. Auto Industry" (1983). In R. Rosenbloom (Ed.), *Research on Technological Innovation, Management and Policy*, Volume 1. Greenwich: JAI Press Inc.
- "Labor Force Participation: Timing and Persistence" (1982). *Review of Economic Studies*, XLIX (5), No. 159. (With L.H. Summers)
- "Unemployment Insurance and Labor Market Transitions" (1982). In M.N. Baily (Ed.), *Workers, Jobs, and Inflation*. Washington, D.C.: The Brookings Institution. (With L.H. Summers)
- "The Dynamics of Youth Unemployment" (1982). In R.B. Freeman and D.E. Wise (Eds.), *The Youth Labor Market Problem: Its Nature, Causes and Consequences*. Chicago: University of Chicago Press. (With L.H. Summers)
- "The New Industrial Competition" (1981). *Harvard Business Review*, 59 (5). (With W.J. Abernathy and A.M. Kantrow)

- "Unionization and Productivity: Micro-Econometric Evidence" (December 1980). *Quarterly Journal of Economics*.
- "Unemployment Reconsidered" (1980). *Harvard Business Review*, 58 (6). (With L.H. Summers)
- "The Demographic Composition of Cyclical Employment Variations" (Winter 1980). *Journal of Human Resources*. (With L.H. Summers)
- "How Elastic is the Demand for Labor?" (November 1980). *Review of Economics and Statistics*. (With R.B. Freeman)
- "The Impact of Unionization on Productivity: A Case Study" (1980). *Industrial and Labor Relations Review*, 33 (4), 451-469.
- "Labor Market Dynamics and Unemployment: A Reconsideration" (1979). *Brookings Papers on Economic Activity*, 1, 13-60. (With L.H. Summers)
- "Labor Force Transitions and Unemployment" (October 1978). Technical Analysis Papers, Office of the Assistant Secretary of Labor for Policy Evaluation and Research, No. 54. (With L.H. Summers)