

READINGS FOR TECHNOLOGY AND INNOVATION

General Readings

- Abernathy, W J and Utterback, J M (1978) "Patterns of Industrial Innovation" Technology Review, 50, 7
- Abernathy, W J and Clark, K B (1985) "Innovation: Mapping the Winds of Creative Destruction," Research Policy, 14, 3-22
- Acs, Z J and Audretsch, D B (1991) Innovation and Technological Change: An International Comparison, London: Harvester Wheatsheaf
- Dosi, G (1988) "Sources, Procedures and Microeconomic Effects of Innovation," Journal of Economic Literature, Sept, 1120-1171
- Ettlie, J E, Bridges, W P and O'Keefe, R D (1984) "Organization Strategy and Structural Differences for Radical Versus Incremental Innovation," Management Science, 30, 6, June, 682-695
- Levin, R C, Cohen, W M and Mowery, D C (1985) "R&D Appropriability, Opportunity and Market Structure: New Evidence on Some Schumpeterian Hypotheses" American Economic Review, May, 20-24
- Levin, R C, Klevorick, A K, Nelson, R R and Winter, S G (1987) "Appropriating the Returns from Industrial Research and Development," Brookings Papers on Economic Activity, 3, 783-831
- Mohr, L B (1969) "Determinants of Innovation in Organizations" American Political Science Review, 63, 111-126
- Nelson, R R and Winter, S G (1982) An Evolutionary Theory of Economic Change, Cambridge, MA: Harvard University Press
- Tyler, B B and Steensma, H K (1995) "Evaluating Technological Collaborative Opportunities: A Cognitive Modeling Perspective," Strategic Management Journal, 16, 43-70

Management of Innovation

- Adler, P S (1986) "New Technology, New Skills" California Management Review, Fall, 9-28
- Berry, M M J and Taggart, J H (1994) "Managing Technology and Innovation: A Review," R&D Management, 24, 4, Oct, 341-353
- Dougherty, D (1992) "A Practice-Centred Model of Organizational Renewal Through Product Innovation," Strategic Management Journal, 13, Special Issue, Summer, 72-92

- Ettlie, J E and Reifeis, S A (1987) "Integrating Design and Manufacturing to Deploy Advanced Manufacturing Technology," Interfaces, 17, 6, Dec, 63-74
- Foray, D (1991) "The Secrets of Industry Are in the Air: Industrial Cooperation and the Organizational Dynamics of the Innovative Firm," Research Policy, 20, 393-406
- Frohman, A L (1985) "Putting Technology into Strategic Planning" California Management Review, XXVII, 2, Winter
- Garud, R and Kumaraswamy, A (1995) "Technological and Organizational Designs for Realizing Economies of Substitution" Strategic Management Journal, 16, Special Issue, Summer, 93-109
- Guerard, J B and Andrews, B A (1987) "R&D Management and Corporate Financial Policy," Management Science, 33, 11, 1419-1429
- Imai, K, Nonaka, I and Takeuchi, H (1985) "Managing the New Product Development Process: How Japanese Learn and Unlearn," In: Clark, K B, Hayes, R H and Lorenz, C (eds) The Uneasy Alliance: Managing the Productivity-Technology Dilemma, Boston, MA: Harvard Business School Press
- Leonard-Barton, D (1992) "Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development," Strategic Management Journal, 13, Special Issue, Summer, 111-125
- Maidique, M A (1980) "Entrepreneurs, Champions and Technological Innovation," Sloan Management Review, 21, 2, Winter
- Maidique, M and Hayes, R H (1984) "The Art of High Technology Management" Sloan Management Review, 25, Winter, 18-31
- McGrath, R, MacMillan, I and Tushman, M (1992) "The Role of Executive Team Actions in Shaping Dominant Designs: Towards the Strategic Shaping of Technological Progress," Strategic Management Journal, 13, Special Issue, Winter, 137-161
- Nelson, R R (1995) "Why Should Managers Be Thinking About Technology Policy?," Strategic Management Journal, 16, 581-588
- Quinn, J B (1986) "Innovation and Corporate Strategy: Managed Chaos," In: M. Horwitch (ed) Technology in Society, 2/3, 167-183
- Stopford, J M and Baden-Fuller, C (1994) "Creating Corporate Entrepreneurship," Strategic Management Journal, 15, 7, Sept, 521-536
- Tushman, M L (1979) "Managing Communication Networks in R&D Laboratories" Sloan Management Review, 20, 2, Winter, 27-49
- Wyman, J (1985) "Technological Myopia: The Need to Think Strategically About Technology," Sloan Management Review, Summer, 59-64

Structure and Innovation

- Amendola, M and Gaffard, J (1994) "Markets and Organizations as Coherent Systems of Innovation," Research Policy, 23, 6, 627-635
- Armour, H W and Teece, D J (1980) "Vertical Integration and Technological Innovation" Review of Economics and Statistics, 62, 470-474
- Balakrishnan, S and Wernerfelt, B (1986) "Technical Change, Competition and Vertical Integration," Strategic Management Journal, 7, 346-360
- Kamien, M, and Schwartz, N (1975) "Market Structure and Innovation: A Survey," Journal of Economic Literature, 13, 1, 1-37
- Pisano, G (1991) "The Governance of Innovation: Vertical Integration and Collaborative Arrangements in the Biotechnology Industry" Research Policy, 20, 237-249
- Robertson, P L and Langlois, R N (1995) "Innovation, Networks and Vertical Integration" Research Policy, 24, 4, 543-562
- Teece, D (1986) "Capturing Value from Technological Innovation: Integration, Strategic Partnering, and Licensing Decisions" Research Policy, 15, 285-305

Return & Measurement Issues

- Basberg, B L (1987) "Patents and the Measurement of Technological Change: A Survey of the Literature," Research Policy, 16, 131-141.
- Chaney, P K, Devinney, T M and Winer, R S (1991) "The Impact of New Product Introductions on the Market Value of Firms" Journal of Business, 64, 573-610
- Geroski, P, Machin, S and van Reenen, J (1993) "The Profitability of Innovating Firms," Rand Journal of Economics, 24, 2, 198-211
- Grupp, H (1994) "The Measurement of Technical Performance of Innovations by Technometrics and its Impact on Established Technology Indicators," Research Policy, 23, 2, 175-193
- Trajtenberg, M (1990) "A Penny for Your Quotes: Patent Citations and the Value of Innovations," Rand Journal of Economics, 21, 1, 172-187
- von Hippel, E (1982) "Appropriability of Innovation Benefit as a Predictor of the Source of Innovation," Research Policy, 11, 2

Geography of Innovation

- Acs, Z, Audretsch, D and Feldman, M (1994), "R&D Spillovers and Innovative Activity," Managerial and Decision Economics, 15, 2, 131-38
- Blakely, E J and Willoughby, K W (1990) "Transfer or Generation? Biotechnology and Local Industry Development," Journal of Technology Transfer, 15, 4, 31-38

- Boddy, M, Lovering, J and Bassett, K (1986) Sunbelt City? A Study of Economic Change in Britain's M4 Growth Corridor, Oxford: Clarendon Press
- Florida, R L and Kenney, M (1988) "Venture Capital, High Technology and Regional Development," Regional Studies, 22, 1, 33-38
- Florida, R L and Kenney, M (1990) "High-Technology Restructuring in the USA and Japan," Environment and Planning, 22, 3, 233-252
- Jaffe, A, Trajtenberg, M and Henderson, R (1993) "Geographic Localisation of Knowledge Spillovers as Evidenced by Patent Citations," Quarterly Journal of Economics, 108, 3, 577-98
- Krugman, P (1991) Geography and Trade, Cambridge, MA: MIT Press

Transfer of Knowledge and Technology

- Brooks, H (1994) "The Relationship Between Science and Technology," Research Policy, 23, 5, 477-486
- Garud, R and Nayyar, P R (1994) "Transformative Capacity: Continual Structuring by Intertemporal Technology Transfer," Strategic Management Journal, 15, 5, 365-385
- Hauschildt, J (1992) "External Acquisition of Knowledge for Innovations - A Research Agenda," R&D Management, 22, 2, 105-110.
- Pavitt, K (1985) "Technology Transfer Among Industrially Advanced Countries: An Overview," in Frischtak, C (ed) International Technology Transfer: Concepts, Measures and Comparisons, New York NY: Praeger
- Roberts, E and Hauptman, O (1986) "The Process of Technology Transfer to the New Biomedical and Pharmaceutical Firm," Research Policy, 15, 3, 107-120
- Schrader, S (1991) "Informal Technology Transfer Between Firms: Cooperation Through Information Trading," Research Policy, 20, 153-170.
- Stobaugh, R and Wells, L T (eds) (1984) Technology Crossing Borders, Boston: Harvard Business School Press
- Teece, D (1977) "Technology Transfer by Multinational Firms: The Resource Cost of Transferring Technological Know-How," The Economic Journal, June, 242-261

Innovation and Strategic Response

- Cohen, W and Levinthal, D (1989) "Innovation and Learning: The Two Faces of R&D," Economic Journal, 99, September, 569-99
- Cooper, R G and Schendel, D (1976) "Strategic Responses to Technological Threats," Business Horizons, 19, 1

- Greis, N P, Dibner, M D and Bean, A S (1995) "External Partnering as a Response to Innovation Barriers and Global Competition in Biotechnology," Research Policy, 24, 4, 609-630
- Henderson, R (1993) "Underinvestment and Incompetence as Responses to Radical Innovation: Evidence from the Photolithographic Alignment Equipment Industry," Rand Journal of Economics, 24, 2, 248-270
- Itami, H and Numagami, T (1992) "Dynamic Interaction Between Strategy and Technology," Strategic Management Journal, 13, Special Issue, Winter, 119-135
- Mansfield, E, Schwatz, M and Wagner, S (1981) "Imitation Costs and Patents: An Empirical Study" The Economic Journal, 91, 907-918
- Shroeder, D M (1990) "A Dynamic Perspective on the Impact of Process Innovation Upon Competitive Strategies," Strategic Management Journal, 11, 1, 25-41

Drivers of Innovation

- Damanpour, F (1991) "Organisational Innovation: A Meta-Analysis of Effects of Determinants and Mediators," Academy of Management Journal, 34, September, 55-590
- David, P A (1985) "Clio and the Economics of QWERTY," American Economic Review, 75, 2, 332-337
- von Hippel, E A (1977) "Users as Innovators," Technology Review, Oct-Nov
- von Hippel, E (1986) "Lead Users: A Source of Novel Product Concepts," Management Science, July
- von Hippel, E (1988) The Sources of Innovation, Oxford: Oxford University Press

Innovation & Networks

- DeBresson, C. and Amesse, F. (1991) "Networks of Innovators: A Review and Introduction to the Issue," Research Policy, 20, 363-379.
- Duysters, G and Hagedoorn, J (1995) "Strategic Groups and Inter-Firm Networks in International High-Tech Industries," Journal of Management Studies, 32, 3, 359-381
- Freeman, C. (1991) "Networks of Innovators: A Synthesis of Research Issues," Research Policy, 20, 499-514.
- Hagedoorn, J (1993) "Understanding the Rationale of Strategic Technology Partnering: Interorganizational Modes of Cooperation and Sectoral Differences," Strategic Management Journal, 14, 5, 371-385
- Hagedoorn, J and Schakenraad, J (1994) "The Effect of Strategic Technology Alliances on Company Performance," Strategic Management Journal, 15, 4, 291-309

- Hakansson, H and Johansori, J (1988) "Formal and Informal Cooperation Strategies in International Industrial Networks," In: Contractor, F J and Lorange, P (eds) Cooperative Strategies in International Business, Lexington, MA: Lexington Books
- Hamel, G, Doz, Y L and Prahalad, C K (1989) "Collaborate with Your Competitors and Win," Harvard Business Review, Jan-Feb, 133-139.
- Kotabe, M and Swan K (1995) "The Role of Strategic Alliances in High-Technology New Product Development" Strategic Management Journal, 16, 621-636
- Kreiner, K and Schultz, M (1993) "Informal Collaboration in R&D: The Formation of Networks Across Organizations," Organization Studies, 14, 2, 189-209
- Ouchi, W G and Bolton, M K (1988) "The Logic of Joint Research and Development," California Management Review, 30, 3, 9-33
- Star, C (1985) "Industrial Cooperation in R&D" Research Management, Sept-Oct, 13-15
- von Hippel, E (1987) "Cooperation Between Rivals: Informal Know-How Trading," Research Policy, 16, 291-301

Issues in the Commercialisation of Innovation

- Dougherty, D (1990) "Understanding New Markets for New Products," Strategic Management Journal, 11, Special Issue, Summer, 59-78
- Takeuchi, H and Nonaka, T (1986) "The New New Product Development Game" Harvard Business Review, Jan-Feb

Standard Setting

- Farrell, J and Saloner, G (1985) "Standardization, Compatibility and Innovation," Rand Journal, 16, Spring, 70-83
- Katz, M L and Shapiro, C (1985) "Network Externalities, Competition and Compatibility," American Economic Review, 75, May, 424-440
- Keeney, R L (1983) "Issues in Evaluating Standards," Interfaces, 13, 2, 12-22
- Kindleberger, C P (1983) "Standards as Public, Collective and Private Goods" Kyklos, 36, Fasc.3, 377-396

Order of Entry

- Golder, P and Tellis, G (1993) "Pioneer Advantage: Marketing Logic or Marketing Legend?" Journal of Marketing Research, 30, May, 158-170
- Lambkin, M (1988) "Order of Entry and Performance in New Markets," Strategic Management Journal, 9, Summer, 127-138

- Lieberman, M B and Montgomery, D B (1988) "First Mover Advantages," Strategic Management Journal, 9, Summer, 41-58
- Mitchell, W (1991) "Dual Clocks: Entry Order Influences on Incumbent and Newcomer Market Share and Survival When Specialised Assets Retain Their Value," Strategic Management Journal, 12, February, 85-100
- Robinson, W and Sullivan, M (1992) "Are Market Pioneers Intrinsically Stronger Than Later Entrants?" Strategic Management Journal, 13, November, 609-624
- Urban, G, et al (1986) "Market Share Rewards to Pioneering Brands: An Empirical Analysis and Strategic Implications," Management Science, 32, June, 645-649

Innovation: Industry Examples

- Gobeli, D H and Rudelis, W (1985) "Managing Innovation: Lessons from the Cardiac Pacing Industry," Sloan Management Review, Summer, 29-43
- Graves, S B and Langowitz, N S (1993) "Innovative Productivity and Returns to Scale in the Pharmaceutical Industry," Strategic Management Journal, 14, 8, 593-605
- Rosenbloom, R S and Cusumano, M A (1987) "Technological Pioneering: The Birth of the VCR Industry," California Management Review, XXIX, 4, 51-76
- Scott, A J and Angel, D P (1987) "The US Semiconductor Industry: A Locational Analysis," Environment and Planning A, 19, 875-912
- Shan, W, Walker, G and Kogut, B (1994) "Interfirm Cooperation and Startup Innovation in the Biotechnology Industry," Strategic Management Journal, 15, 5, 387-394
- Willyard, C H and McClees, C (1987) "Motorola's Technology Roadmap Process," Research Management, Sept-Oct, 13-19

Innovation and Firm Size

- Acs, Z and Audretsch, D (1988) "Innovation in Large and Small Firms," American Economic Review, 78, 4, 678-690
- Lawton Smith, H, Dickson, K and Smith, S L (1991) "There are Two Sides to Every Story: Innovation and Collaboration Within Networks of Large and Small Firms," Research Policy, 20, 457-468
- Lee, J (1995) "Small Firms' Innovation in Two Technological Settings," Research Policy, 24, 3, 391-401
- Smith, H. L, Dickson, K and Smith, S. L. (1991) "There are Two Sides to Every Story: Innovation and Collaboration Within Networks of Large and Small Firms," Research Policy, 20, 457-468.

BOOKS/ARTICLES TO BE REVIEWED
(in alphabetical order)

- Allen, T J (1984) Managing the Flow of Technology: Technology Transfer and the Dissemination of Technological Information Within the R&D Organisation, Cambridge, MA: MIT Press.
- Amin, A and Goddard, J B (1986) Technological Change, Industrial Restructuring and Regional Development, London: Allen & Unwin
- Arora, A and Gambardella, A (1994) "The Changing Technology of Technological Change: General and Abstract Knowledge and the Division of Innovative Labour," Research Policy, 23, 5, 523-532
- Axelsson, B and Easton, G (1992) Industrial Networks: A New View of Reality, London and New York: Routledge
- Biemans, W G (1992) Managing Innovation Within Networks, London & New York: Routledge
- Breheny, M J and McQuaid, R W (1987) The Development of High Technology Industries: An International Survey, London: Croom Helm
- Bughin, J and Jacques, J M (1994) "Managerial Efficiency and the Schumpeterian Link Between Size, Market Structure and innovation Revisited" Research Policy, 23, 6, 653-659
- Christensen, J F (1995) "Asset Profiles for Technological Innovation" Research Policy, 24, 5, 727-745
- Daghfous, A and White, G R (1994) "Information and Innovation: A Comprehensive Representation," Research Policy, 23, 3, 267-280
- Dosi, G (1984) Technical Change and Industrial Transformation, New York: St Martin's Press
- Dosi, G et al (eds) (1988) Technical Change and Economic Theory, London and New York: Pinter Publishers
- Gerlach, M. L. (1991) Alliance Capitalism: The Social Organisation of Japanese Business, Berkeley: University of California Press.
- Hakansson, H (ed) (1987) Industrial Technological Development: A Network Approach, London: Croom Helm
- Hakansson, H. (1989) Corporate Technological Behaviour: Co-operation and Networks, London & New York: Routledge
- Kelly P and Kranzberg, M et al (eds) (1981) Technological Innovation: A Critical Review of Current Knowledge, San Francisco: San Francisco Press

- Mowery D.C. and Rosenberg N. (1989) Technology and the Pursuit of Economic Growth, Cambridge University Press.
- Nohria N. and Eccles R.G. (eds) (1992) Networks and Organisations: Structure, Form and Perspectives, Boston: Harvard Business School Press.
- Schumpeter, J (1950) Capitalism, Socialism and Democracy, New York: Harper & Brothers.
- Scherer F.M. and Perlman M. (eds) (1992) Entrepreneurship, Technological Innovation and Economic Growth, The University of Michigan Press.
- Teece, D J (1987) The Competitive Challenge: Strategies for Industrial Innovation and Renewal, New York: Harper and Row
- Williamson, O. E. (1985) The Economic Institutions of Capitalism, New York: The Free Press.