

Summary and further reading

Few other texts cover the technological, market and organizational aspects of innovation in an integrated fashion. Drucker's *Innovation and Entrepreneurship* (Harper & Row, 1985), provides an accessible introduction to the subject, but perhaps relies more on intuition and experience than on empirical research. A number of interesting texts have also been published since the first edition of this book appeared in 1997. Trott's *Innovation Management and New Product Development* (fourth edition, Prentice Hall, 2008), particularly focuses on the management of product development, books by von Stamm (*Managing Innovation, Design and Creativity*, second edition, John Wiley & Sons, Ltd, 2008) and Bruce and Bessant (*Design in Business*, Pearson Education, 2001) have a strong design emphasis and Jones' book targets practitioners in particular (*Innovating at the Edge*, Butterworth Heinemann, 2002). Dogson, Gann and Salter (*The Management of Technological Innovation*, Oxford University Press, 2008) examine innovation strategy and the 'new innovation toolkit', whilst Goffin and Mitchell (*Innovation Management*, Pearson, 2005) also look from a management tools perspective. Brockhoff *et al.* (*The Dynamics of Innovation*, Springer, 1999) and Sundbo and Fugelsang (*Innovation as Strategic Reflexivity*, Routledge,

2002) provide some largely European views, whilst Ettlie's *Managing Technological Innovation* (John Wiley & Sons, Inc., 1999) is based on the experience of US firms, mainly from manufacturing, as are Mascitelli (*The Growth Warriors*, Technology Perspectives, 1999) and Schilling (*Strategic Management of Technological Innovation*, McGraw Hill, 2005). A few books explore the implications for a wider developing country context, notably Forbes and Wield (*From Followers to Leaders*, Routledge, 2002) and Prahalad (*The Fortune at the Bottom of the Pyramid*, Wharton School Publishing, 2006) and a couple look at public policy implications (Branscomb, L. and J. Keller, eds. *Investing in Innovation*, MIT Press, 1999; Dodgson, M. and J. Bessant, *Effective Innovation Policy*, International Thomson Business Press, 1996).

There are several compilations and handbooks covering the field, the best known being *Strategic Management of Technology and Innovation* (Burgelman, R., C. Christensen, and S. Wheelwright, eds., McGraw-Hill, 2004) now in its fourth edition and containing a wide range of key papers and case studies, though with a very strong US emphasis. A more international flavour is present in Dodgson and Rothwell (*The Handbook of Industrial Innovation*, Edward Elgar, 1995) and Shavinina (*International Handbook on Innovation*, Elsevier, 2003). The work arising from the Minnesota Innovation Project also provides a good overview of the field and the key research themes contained within it (Van de Ven, A., *The Innovation Journey*, Oxford University Press, 1999).

Case studies of innovation provide a rich resource for understanding the workings of the process in particular contexts. Good compilations include those of Baden-Fuller and Pitt (*Strategic Innovation*, Routledge, 1996), Nayak and Ketteringham (*Breakthroughs: How leadership and drive create commercial innovations that sweep the world*, Mercury, 1986) and von Stamm (*The Innovation Wave*, John Wiley & Sons, Ltd, 2003), whilst other books link theory to case examples, for example Tidd and Hull (*Service Innovation*, Imperial College Press, 2003). Several books cover the experiences of particular companies including 3M, Corning, DuPont, Toyota and others (Kanter, R., ed., *Innovation: Breakthrough thinking at 3M, DuPont, GE, Pfizer and Rubbermaid*, Harper Business, 1997; Graham, M. and A. Shuldiner, *Corning and the Craft of Innovation*, Oxford University Press, 2001; Kelley, T., J. Littman, and T. Peters, *The Art of Innovation: Lessons in Creativity from Ideo, America's Leading Design Firm*, Currency, 2001). Internet-related innovation is well covered in a number of books mostly oriented towards practitioners, for example, Evans and Wurster (*Blown to Bits: How the New Economics of Information Transforms Strategy*, Harvard Business School Press, 2000), Loudon (*Webs of Innovation*, FT.Com, 2001), Oram (*Peer-to-Peer: Harnessing the Power of Disruptive Technologies*, O'Reilly, 2001) Alderman (*Sonic Boom*, Fourth Estate, 2001) and Pottruck and Pearce (*Clicks and Mortar*, Jossey Bass, 2000). The implications of the Internet for greater user involvement in the innovation process and the emergence of new models is dealt with by von Hippel (*The Democratization of Innovation*, MIT Press, 2005) and others (e.g., Tapscott, D. and A. Williams, *Wikinomics*, Portfolio, 2006).

Most other texts tend to focus on a single dimension of innovation management. In *The Nature of the Innovative Process* (Pinter Publishers, 1988), Dosi adopts an evolutionary economics perspective and identifies the main issues in the management of technological innovation. On the subject of organizational innovation, Galbraith and Lawler (*Organizing for the Future*, Jossey Bass, 1988) summarize recent thinking on organizational structures and processes, although a more critical account is provided by Wolfe (Organizational innovation, *Journal of Management Studies*, 31 (3), 405–432, 1994). For a review of the key issues and leading work in the field of organizational change and learning see Cohen and Sproull (*Organizational Learning*, Sage, 1996). Bessant (*High Involvement Innovation*, John Wiley & Sons, Ltd, 2003), Boer *et al.* (*CI Changes*, Ashgate, 1999), Imai (*Kaizen*, Random House, 1987) Schroeder and Robinson (*Ideas are Free*, Berrett Koehler, 2004) look at the issue of high involvement incremental innovation.

Most marketing texts fail to cover the specific issues related to innovative products and services, although a few specialist texts examine the more narrow problem of marketing so-called ‘high-technology’ products, for example, Jolly (*Commercialising New Technologies*, Harvard Business School Press, 1997) and Moore (*Crossing the Chasm*, Harper Business, 1999). Helpful coverage of the core issues are to be found in the chapter, ‘Securing the future’ in Hamel and Prahalad’s *Competing for the Future* (Harvard Business School Press, 1994) and the chapter ‘Learning from the market’ in Leonard’s *Wellsprings of Knowledge* (Harvard Business School Press, 1995). There are also extensive insights into adoption behaviour from a wealth of studies drawn together by Rogers and colleagues (*Diffusion of Innovations*, Free Press, 1995).

Particular themes in innovation are covered by a number of books and journal special issues, for example, services (Best, M., *The New Competitive Advantage*, Oxford University Press, 2001), networks and clusters (Cooke, P. and K. Morgan, *The Intelligent Region: Industrial and Institutional Innovation in Emilia-Romagna*, University of Cardiff, 1991), sustainability (Dodgson, M. and A. Griffiths, *Sustainability and innovation – Special issue, Innovation Management, Policy and Practice*, 2004) and discontinuous innovation (Day, G. and P. Schoemaker, *Wharton on Managing Emerging Technologies*, John Wiley & Sons, Inc., 2000; Foster, R. and S. Kaplan, *Creative Destruction*, Harvard University Press, 2002). Various websites offer news, research, tools, etc., for example AIM (www.aimresearch.org) and NESTA (www.nesta.org.uk). A full and updated list is available on the website accompanying this book www.managing-innovation.com.

Web links

Here are the full details of the resources available on the website flagged throughout the text:



Case studies:

- Kumba Resources
- Inditex/Zara
- Aravind Eye Clinics
- Freeplay Radio
- Karolinska Hospital
- Model T Ford
- LEGO
- Threadless
- Philips Atmosphere provider
- The dimming of the light bulb
- Continuous improvement cases



Interactive exercises:

- Strategic advantage through innovation
- Using the 4Ps
- Patterns of discontinuous innovation
- Architectural and component innovation

**Tools:**

- 4Ps for mapping innovation space
- Continuous improvement tools and techniques
- Product life cycle analysis

**Video podcast:**

- Finnegans Fish Bar (4Ps)
- Patrick Mchaughlin, Cerulean

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