

anything other than the platitudinous when it comes to listing practical guidelines for managers. Every one of his fifteen points has been addressed at one time or another by organizational development practitioners (some of them he lists earlier in his book), and most of them are the commonplaces of consultant presentations. Many of them are a little more than what he terms the Rosabeth Moss Kanter "clichés and banalities".

Many an author creates problems for himself/herself in the first few pages of the text and this is no exception. Dawson clearly knows his way around the literature; he subjects it to rigorous and, for the most part, appropriate criticism; he is committed to an approach — studying change through time and in context — which promises much; and he has a number of well researched case studies, which contain more than he makes use of here. The book would be worth its cover price for these elements alone. In pushing Lewin's frame out a little, in building upon the work of Pettigrew *et al.*, Dawson offers a great deal. He promises more, however, than he delivers. There is nothing startling or new about the processual approach to organizational change, nor is the frame developed in this book. It is, however, substantially *grounded*, here using the term to convey the sense of having a foundation, but also to suggest that the theory does not yet fly. This is not a book for managers. It is a book for those interested in the continuing debate about the nature of change in organizations.

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The Networked Nation by the Australian Science and Technology Council (ASTEC) (Australian Government Publishing Service, Canberra, 1994) pp. iii + 82, A\$8.95, ISBN 0644-35058-X,

Traditionally, government reports excite little popular enthusiasm. But following high public interest in the US for creation of a national information infrastructure, this document may harness growing enthusiasm in Australia for a parallel venture. The report, however, is not an echo of American planning. Instead, it takes a close look at needs, institutions and available resources for a distinctly Australian situation. The role of government, for example, is to remain strong even as it fades as a development force in the US. The report's authors realise that major investments are now being made in what could be the components of a national network by institutional, commercial and governmental entities. The need for comprehensive planning and coordination among them remains best served by the federal government.

The report efficiently covers needs and benefits served by a national information network. While an 80 page report cannot be exhaustive in coverage on all these points, boxed stories and examples give substance to general goals throughout. The overall thrust of the report gives clear evidence of broadband networking's advantages for Australia. Particular attention is given to needs posed by distances to be covered within Australia and to service growing ties with other Asian/Pacific nations. As the report states, "Capacity and pricing are particularly important for Australia's international telecommunications links. The value to researchers of AARNet's trans-Pacific link to the Internet cannot be overstated, and its capacity cannot constrain Australia's international dialogue."

Organizationally, the report progresses logically from a consideration of what networks

do and their benefits generally to Australia's particular circumstances and how they may be addressed. There is a considerable compression of information here. So despite the short length of the report, it will not be fast reading for those new to the issues. The report does educate broadly, containing examples and strategies used in other nations such as the United Kingdom, the US, Canada and present efforts in Australia. Bulleted lists and summaries abound in an effort to organize a diverse collection of information. Many sources were used by the report's working party including universities, researchers, industry and government both in Australia and overseas. A preliminary report, *The Global Connection*, was issued electronically on the Internet in April 1994 to encourage further comment. With this depth of preparation, it is clear the working party wanted to create a defining document for Australia's networked future.

The most critical section of the report is found in the outline of three national options for networking. After reviewing maintenance of the status quo (keeping to the present AARNet and its primary function of research and education), a fully commercialised option and, thirdly, a "coordinated national approach" of government and industry, the report expands this last option as a preferred course. Government would provide "backbone" network facilities and a purchasing leverage that lowers costs. Market forces would be allowed more play as the network infrastructure matures and market "take off" seems likely. Government would incubate and nourish a young network which would become increasingly commercial and self-sufficient with wide use and a stable technology infrastructure. The report notes accurately that even in the US where pressure to commercialise the Internet is strong, that infrastructure upgrades still are largely government-funded.

Part of the report is unavoidably oriented to technical issues. Readers are confronted in at least one chapter with bandwidth specifications, new transmission technologies (such as asynchronous transfer mode) and switching specifications. Unfortunate as this may be for the novice reader, it provides the bite of authenticity and planning for those needing key details of what a national network would be in practice. A series of appendices tries to clear a path for those unfamiliar with telecomms terminology and some important distinctions in billing for network services.

The major omission concerns what the report labels "the wider community." In the US, discussion of broadband networking has long passed the boundaries of the university campus and government agency. It is approaching the status of a new mass medium. Discussions in the popular press of "converging" media and changes in the function of information industries are rarely mentioned the report. While *The Networked Nation* describes benefits of wide public access to the Internet and to distance education through computer-based media, it is one of the report's least-specific sections. But, as the US case shows, it is where many of the controversial policy issues rest. Cost of access, censorship, privacy, intellectual property protection and universal service are but a sampling of difficult issues arising from networked media. They receive only brief (if any) attention. In short, those looking for social controversy may be disappointed, while others seeking planning and priorities will sense a ring of authenticity that only a major collaborative document brings.

The intended audience of *The Networked Nation* is other than the public at large. It is clearly a planning report to encourage coordination among government ministries, telecommunications providers, research groups, high technology industry and universities. As such, there is little novelty in its graphics or organization to entice a fickle mass readership. Nor, refreshingly, are there exaggerated benefits claimed for information networks. But there is little doubt in reading the careful, deliberate prose of the working group that they have created one of the seminal documents for Australia's information future. As such, its contents are of considerable importance to those study-

ing telecommunications development both within Australia and internationally.

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Information Acumen. The Understanding and Use of Knowledge in Modern Business edited by Lisa Bud-Frierman (Routledge, London, 1994), pp. x + 254, £40, ISBN 0-415-07788-5.

"The history of modern business information hardly exists...": thus runs the very first line of this peculiar volume. Why modern? The volume is a collection of papers given at a conference organised in 1992 by the Business History Unit at Reading University. It contains some papers - some of them very good papers - on the history of business information, which certainly is a subject rarely studied; and some other papers - some of them very bad papers - which are neither historical nor about modern business. In fact, there is nothing in this volume about modern business at all. As far too much is written about modern business anyway, this can only recommend the volume, but where the title has come from is a mystery. One must assume that the editor, daunted by the task of finding common ground among a farrago of conference papers, has had the acumen to select a title likely to sell. The editor's Introduction attempts - as editor's Introductions should - to draw everything together. The task is quite impossible, except at the lowest level of common denominator: "business people must often reach conclusions about their firms based on insufficient information".

The real strength of this volume lies with its overtly historical papers. Kaoru Sugihara describes the success with which the Japanese government in the late 19th century provided traditional industries with technological and marketing information from overseas, and examines the contribution to economic growth of information provided at public cost. His argument is the stronger for its concentration on the mundane - steam-powered noodle making machinery and the strategy whereby the Japanese came to dominate the lower end of the Indian cotton underwear market. JoAnne Yates argues that information issues were simple for firms until the development of systematic management at the turn of the century. In the United States at least, professionalisation of management as much as technology determined the information practices of firm. To what extent, she asks, has the adoption of computer technology been influenced by prevailing management ideology? Historians may indulge in the luxury of asking questions without being expected to answer them.

Martin Campbell-Kelly takes a British case from the mid-nineteenth century, the Railway Clearing House. This provides a fine example (as does his other work on Victorian insurance companies) of a complex information activity - sorting out whose trains were using whose tracks - carried out, apparently quite successfully, without any technological change. Ironically, it is organisational change which will require the same task to be carried out once again in the UK, though this time there will be much searching for a technological fix. Richard John addresses a more general but equally historical issue: why it is that technological developments in the handling of information are so frequently seen as revealing something about the progress of civilisation. Why the awed, millennial tone? Once again, the historian provides no answers, but it is therapeutic to discover that current notions of information age/society/economy actually have provenance sufficient to dampen even the most evangelistic fervour.