BOOK REVIEWS

Dictionary of Information Technology *by Dennis Longley and Michael Shain*
(MacMillan, London, 1982) pp. 381, $16.95.

Reviewing a dictionary is both an unusual and formidable task. What makes this dictionary different, and perhaps even unique, is its subject matter. It is certainly the most extensive dictionary of information technology terms that has come to this reviewer's attention. In the Introduction the authors state that when first considering the production of the dictionary they did a computer search of 1½ million periodicals and 2 million books which failed to reveal a source book or article on the topic. The case for a reference book to assist newcomers into the field, with the relevant technical terms, was, to their mind, thus established.

The first definition one looks at is that of information technology, which is defined as "The acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro-electronics-based combination of computing and telecommunications". The limits of the subject matter to be encompassed are indicated by the following constituent fields:

Printing and Publishing
Computers and Databases
Computer Networks and Communications
Photography and Cinematography
Television and Recording
Videotex and Micro-electronics
Word Processing and Business Systems

However, the authors also recognised the need for more descriptive articles on relevant topics, to highlight and illuminate developing areas of the technology. The dictionary, therefore, includes essays on Business Systems, Computer Networks, Consumer Electronics, Educational Technology, Information Technology, Microcomputers, Micro-electronics, Programming, Typesetting, Videotex and Word Processing. These essays are embodied as extended definitions in the body of the dictionary.

Another problem in compiling a dictionary in a field which is growing as rapidly as information technology, is the constant emergence of new words and new phrases, and perhaps the death of old words and old phrases. This is a problem which cannot be overcome, but will undoubtedly require frequent revisions. The dictionary is particularly easy to use, and follows a very simple format. To avoid confusion, sophisticated listing and cross-reference techniques have been avoided. Line drawings are used to help explain particular concepts or definitions. The number of such illustrations is not overly large, but deciding which definitions to illustrate would obviously be a very subjective decision.

The volume's 6,000 entries are well presented and very easy to read. Definitions are brief and direct, and provide succinct and easily under-

stood explanations of the term being explained. The definitions are primarily basic explanations rather than detailed expositions. For example, in 'binary to decimal conversion', the meaning is explained without any explanation as to how conversion is done.

There is no doubt that one of the major problems facing those concerned with information technology is understanding the jargon. It is the very use of this jargon which has created such an aura of mystery and a barrier to understanding in relation to information technologies. This dictionary will certainly help the newcomer to the field, as well as providing a useful source of reference for those already in the field and perhaps in doubt as to the precise meaning of particular technical terms. In this sense, the dictionary performs a very useful function, and certainly fills a gap that has existed for too long.

Ashley W. Goldsworthy
Australian Computer Society

Venture Capital and Technological Innovation in Australia *by J.M. Bennett, R.E. Cooke-Yarborough, G.C. Lowenthal (eds.)*
(NSW Division of Australian and New Zealand Association for the Advancement of Science Incorporated, Sydney, 1982) pp. xi + 171, $13.00.

This book contains all eighteen papers delivered during an ANZAAS Symposium on venture capital and technological innovation in Australia held in Sydney on 20 February 1982. The Symposium aimed to 'display a range of facts which both explain and offer a solution for Australia's failure to be an early leader in the development of technologies which offer significant economic or social benefits'. Such an aim is, of course, very ambitious, not only because innovation is itself a complex topic, but also because of the complications introduced when the Australian situation is considered.

The papers are assembled under four sections: the roles of governments and statutory instrumentalities; case studies; the roles of the private sector; and other constraints and stimulants to development. This broad coverage provides more scope for identifying problems and disseminating information than for getting down to the more difficult task of offering solutions to problems. The book covers most of the important issues relating to venture capital and technological innovation in Australia and this is largely due to a few very good contributions. However, one important omission from the collection is discussion on the effect that direct foreign investment has had on Australia's technological capability.

The theme of venture capital is central to about half of the papers. The five case studies of the experience of small high technology enterprises or individual inventors in obtaining venture capital provide some very useful insights. This is an area about which very little is known in Australia. The message from the case studies is not conclusive — some entrepreneurs have been more successful than others in obtaining venture capital. Those who have been successful in this respect see no particular shortage, whereas the unsuccessful ones call for more government assistance.