

new art of the management of information technology for some time to come.

Igor Aleksander

*The Management Implications of New Information Technology* by Nigel Piercy (ed.). UWIST/Groomhelm Series on Management and New Information Technology, 1984.

This is the first volume in the new UWIST/Groomhelm series on management and new information technology. It addresses issues relating to the implication of new technology on business organization and the managers (or other employees) within them. (Further volumes in the series will focus on specialized areas within this general area.) The audience is the business manager and those facing the problems of analysing and preparing for work in the new technology environment. The book encourages one to embrace the view that '... the response required from management should be *strategic* and *proactive* and not merely an *ad hoc* reaction to implementation problems.' Hence, the book will also be of interest to those with general and functional management responsibilities.

There are three principal features of the new technology: the convergence of previously separate technologies; a common base of microprocessors, a reliance on photovoltaic cells, robotic devices and space electronics; and the wide and deep impact it has on society. These features in Chapter I are a working definition of new information technology (there is no mention of knowledge-based systems).

The central theme of the book could be said to be choice and managerial discretion in the management of new technology. The 15 chapters are divided into four parts. Part I addresses the possibilities of computer-aided planning, design and manufacture and the nature of the new technology seen from an engineering point of view. Part II takes another perspective and addresses the issues of the impact of new technology on employment. Part III looks at labour relations, and Part IV is concerned with the nature of management functions in a world with the new technological texture. A theme which runs confluent with the central theme is the need for a new type of management specialist who is trained to deal effectively with and through new technology. In this, the reviewer fully concurs and found that it was useful to reread the text mindful of the question 'What should this new type of management specialist be?'

The book is made from camera-ready copy prepared on a wordprocessor. The technology was not

well used and the pages are uninviting to read. I am surprised that a book that addresses issues of the best response to new technology should find itself the product of such a poor response. It is an example of the fact that the new technology may bring a '... damaging reduction in the quality and quantity of academic publications ...'. The quoted section of my last assertion comes from an article (Burges and Piercy, 1985) co-authored by the editor of the book under review! The article is about the myths surrounding the availability of wordprocessors. As for the book, if you are inclined to maladapt to the presentation of material that is not significantly new, then it may be read with profit.

L. Johnson

*The Information Technology Revolution* by Tom Forester (ed.). Basil Blackwell, London, 1985.

*The Information Technology Revolution* is a collection of 48 papers published by leading figures between June 1980 and June 1984. It covers the key technological developments over that period.

The emphasis is on case studies drawn from the cutting edge of technological change. Each chapter has four or five papers — the lead one introductory and the others either case studies or explorations of an issue in greater depth. There are separate chapters on new computer architectures, artificial intelligence, telecommunications, computers in the home, computers in schools, factory automation and the automated office. There are chapters dealing with information technology's impact on work and its implications for society. Each chapter ends in a comprehensive guide to further reading.

The book deserves even greater success than Forester's previous volume, *The Microelectronics Revolution* (1980). It is essential reading for groups as diverse as executives, managers, computer professionals, electronic engineers, social scientists and educators of all shades and levels. It is a complete guide to information technology. It is well produced, inviting to read and very reasonably priced.

L. Johnson

## References

Burges, S. and Piercy, N. (1985) Questions of a hit or a myth. *The Times Higher Education Supplement*, No. 672, 20 September.

Forester, T. (1980) *The Microelectronics Revolution*. Basil Blackwell, London.