Editorial

We take this opportunity to remind readers and those wishing to contribute that the December 1990 edition of the Journal will be devoted to the theme *The Evaluation of Information Systems Investments*. Recent surveys carried out by ourselves as well as Business Intelligence indicate that this is a theme of widespread current interest, as those who stay in contact with the lecture and conference circuit will also readily appreciate. Readers who wish to gain a taste of some of the current debates and thinking in this area are referred to the conference report in the December Volume 4 No. 4 edition of the Journal, and the book review (Parker *et al.* Information Economics) in Volume 5 No. 1.

The major interest in IT evaluation seems to stem from a combination of the increasingly large amounts being spent on IT together with considerable dissatisfaction and scepticism about the efficacy of the more traditional methods used for analysing costs and benefits from IT. As a related point, the perceived increasing importance of evaluation methods to organizations would also seem to arise as a reaction against the consequences of too often abandoning normal business rigour and practice when deciding on making investments in IT. Whilst the decision to invest in strategic information systems is often characterized as an 'act of faith', unfortunately this has too often been interpreted too literally; belatedly managers are realizing that there are possible gradations in the quality of the 'act of faith' and that those responsible for making and controlling IT investments are not, and should not be, helpless in the face of the seeming inevitability of the need to adopt IT. The December issue will include the results of recent research on the evaluation of IT investments, and on methods adopted by successful companies, as well as details of a benefit-level matrix usable with strategic information systems as a tool for analysis and synthesis. Contributions in the form of refereed papers, personal reviews or reviews are always welcome and should be sent to either editor at the editorial office address in the first instance.

This issue

This quarter we are pleased to publish three new papers and two further contributions to the successful Third UK Conference of the Association for Infor-

mation Technology held in January 1990.

Rodger Jamieson and Graham Low offer a paper on the security and control aspects of local area network (LAN) operations. The paper is useful for breaking down LAN operations into functional areas, highlighting the security and control issues and proposing security guidelines to counter the various threats identified. As an increasing number of organizations move to using LAN's, it becomes highly important to provide usable guidelines for planning for the likely security problems. Jamieson and Low are to be commended for presenting their clear and coherent framework, and sensitizing practitioners to an area that is all too often overlooked, or not taken seriously enough until threats have already become an expensive reality. G. Roland Kaye provides a different sort of paper. He has researched the compounding industry, how over 100 companies have gone about introducing IT, and the level and types of success and failure experienced. His empirical data is interesting for providing insights into factors influencing success and characteristics of unsuccessful systems. Though the survey size is small and restricted to one sector, Kaye's contribution does add to the very rich picture that can now be built up from accumulated case studies and surveys in the area of systems outcomes.

A third paper by C. James Bacon has researched 14 US and British companies selected for their significant investments in and mature experience with decentralized information systems. In a tightly argued, thought provoking and empirically based presentation, Bacon produces eight organisational principles that appear to be common to the policies and practice of effective systems decentralization in the companies surveyed. These principles are usefully elaborated in some detail and the substance of this paper will be of considerable interest to academics and business practitioners alike.

The conference papers represent revised versions of two contributions to the AIT conference entitled 'Information Systems Teaching: Improving The Practice'. Robert Moreton has written a paper tangential to the main theme of the conference but highly pertinent to a subject that is receiving growing attention, namely software maintenance. His major aim is to present the elements of a coordinated program, effective across the whole maintenance process and designed to control changes to the system.

He convincingly argues that such a program becomes more and more critical as the complexity of the software increases. The second paper from the conference, by Edward James, Paul Lister and Costi Edelnau, concerns the design of an expert system shell. Their Juniper 1 program offers a simple low cost 'shell' for the construction of interactive knowledge bases. The authors claim a number of advantages for Juniper 1 over conventional expert systems.

The remainder of this edition of the Journal consists of a personal view by Garry Hunt on how technology needs to be harnessed to some business needs, a detailed account of a March 1990 conference on Senior Executive IT Education programmes, and reviews of two recent important books in the areas of technological

and organizational innovations and 'the industrialization of intelligence'. There is also a review of a recent report by the Kobler Unit and short reviews of four other recent publications. As ever, comments on the contents and presentation of the Journal are always welcome, and should be addressed to the editorial office in the first instance. The Journal is still being improved and, though the editorial board and the AIT committee have laid down clear and detailed policy guidelines, they and we are always open to constructive suggestions, especially from you, the reader.

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