flexibility does not lead to the requirement of a large amount of data to describe the environment in which the tool is to run. Different sets of output statistics can be achieved by specifying different options. Statistics gathering and analysis routines can be readily provided as the mechanisms for measuring and the points at which these measurements can be taken should be those found in the real system.

The same results are produced in different runs when the tools are run with the same parameters, random numbers and timing considerations. If, however, timing considerations are derived using a hardware timing routine then the individual sequence of events is different but the overall results are effectively the same. The efficiency of the tool depends directly on the efficiency of the operating system which it models and, while being extensible, is, by definition, valid. Finally the modularity and readability depend on the high level language and the system design; topics related to the particular application thus lying outside the scope of this paper.

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Book review

An Introduction to Data Processing For Business, by R. J. Thierauf and J. F. Niehaus, 1980; 366 pages. (*John Wiley*, £9·75)

According to the preface 'this book represents a new and exciting direction in the teaching of data processing principles and practices. Specifically, the focus of its presentation, which differs from other data processing textbooks, is to have the student use the computer as early as possible'. In six parts the book covers: introduction to data processing for business; problem analysis and operating concepts of data processing for business; programming languages for business; data processing equipment for business; designing and implementing data processing for business; the impact of data processing on the individual and the organisation. There is an epilogue on 'future impact of data processing on society and business', two appendixes and an index.

Two essential characteristics of an introductory text (on any subject) are that it should offer a logical progression of ideas and that it should be easy for the beginner to read. This book possesses neither characteristic. The authors tend to proceed from topic to topic without adequate preparation or reasoned argument. To add to the reader's difficulties the multiplicity of summaries and self-study exercises produces confusion rather than the intended re-emphasis of key points, especially when the summary itself interrupts a discussion or descriptive passage. New terms are introduced almost without explanation, inadequate definitions are offered in the glossary and elsewhere and the index is incomplete. There are no bibliography or references for further reading.

Even with the assistance of 'a full package of support materials' as promised in the preface it is difficult to see how this book can meet the authors' claims for it.

T. G. GOUGH (Harrogate)