

The main part of the book provides a one/two page summary of each of the commonest statistical tests, complete with details of the test objective, the limitations (or assumptions) involved, a brief outline of the method and a worked example. There are more detailed worked examples of the nine commonest tests at the start of the book. The information provided is ideal as a 'memory jog' for statisticians, although often insufficient for use by someone untrained in statistics.

From my viewpoint the main strength of the book lies in its extensive indexing of the applications of various tests. There is a simple listing of test titles (giving nine applications of the *t*-test, for example). There is also a four-page listing of the objectives of each of the 100 tests, which can be browsed to locate relevant alternatives for your given statistical problem.

One utterly invaluable table in the book gives a concise summary of common statistical problem types and a list of tests which may be appropriate. The problem types are classified by the number of samples (1, 2 or *k* samples), whether parametric or non-parametric tests are required, and the area of interest (e.g. central tendency, distribution function, association).

I cannot praise this book too highly—it is a godsend for practitioners who are competent statisticians but who need a sourcebook for precise details of all the various tests. Every OR department should have a copy!

Forward Trust

JASON LOWTHER

The Economics of Speed

WILLEM VAESSEN

Peter Lang, Berne, 1992, xiv + 321 pp. £32.00

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An intriguing title, conjuring up all sorts of possible interpretations. I suspect that few would come up with something approaching the subtitle: assessing the financial impact of the just-in-time concept in the chemical–pharmaceutical industry. This volume is the author's doctoral thesis, obtained at the University of Basel whilst Vaessen was a consultant in the Operations Research department of Ciba-Geigy. 'This is a long thesis. It is not a masterpiece in creative or technical writing. At times, the English is turgid, the subject matter dry and spiked with supplementary details.' These are the author's words, and who am I to disagree with him!

Vaessen believes that 'a central and unresolved issue in modern manufacturing remains the economics of speed'. In order to address this he develops a model, called QED for Quick et Dirty or Quite Easily Done, which translates low-level decision variables, such as lot size, and common measures of speed, such as lead time, into financial terms, such as return on assets. Also utilized is a visual interactive simulation model, ProfiSEE.

This is a most unusual book: not least because of the application of these ideas in Ciba-Geigy, which is presented. A great deal of detailed information is given about the production process and the results of many simulation experiments are described. The author concludes that the application of JIT to the pharmaceutical industry will have a major impact and that firms who 'are not in a position or otherwise fail to adopt the concept will find it increasingly difficult to maintain the competitive position of their products once the patent protection period has run out'.

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