



Book reviews

Excel Models for Business and Operations Management

John F. Barlow. Wiley, 1999, £24.95, ISBN no. 0-471-98350-0, 376 pp.

When this excellent book arrived on my desk for review it raised a major query which I am still trying to answer: what is the intended readership for this book? There is also the corollary on how I would approach it for review: it could be on the pure academic front or the Project Manager's viewpoint or as an Operation Research modeller or even as the general IT administrator. One does not have to search far to unearth these dilemmas because even the title gives a hint of the business spread. The author then immediately launches into a general review of possible model building techniques of use in business including the systems overview of a simple business environment. I welcome his clear statement that I have been making for many years that the type of model used will have to suit the questions to be answered and not the system being studied.

The layout of each of the main chapters is the same as each tackles a particular type of model and its use in the business. "The book's format is subject focussed following standard business/operation management texts. The mathematical concepts of operations research provide the tools for model building." Naturally Excel provides the modelling tool for each of these practical areas.

The problems tackled are:

1. Business models
 - Net present value
 - Cost accounting
 - Forecasting
 - Purchasing
2. Operations models
 - Analysis of Variance
 - Inventory Control
 - Production Scheduling (resource scheduling)
 - Project management

Three of these chapters are of obvious interest to Project Managers though there could be circumstances when four of the remainder could be needed.

The last chapter is the one dealing with network analysis, which is probably the one least likely to be of use to Project Managers. However, it can provide a measure of the usefulness of the rest of the book. The terminology jars a little as the author uses the graph theory terms for describing a network. He also correctly demonstrates how to use Excel to build the network logic and the interdependencies between the tasks. By ignoring this chapter the project manager will lose nothing from the repertoire I would expect to be in use already.

Looking at the other modelling techniques described in similar simplistic formats the Project Manager could build models for simple occasional problems that may be encountered in a project. If the decision will be critical there will almost certainly be many data items involved and so it would be worthwhile to employ a specialised package for the job. However, initial explorations are perfectly viable using the tools described in this book. The steps needed to build each model are illustrated by a simple worked example including the telling the reader where to find the command in the menus of the Excel product. The main candidates for this will be the forecasting and analysis of variance models which may occasionally be needed to guide a decision. I have also been involved in projects where the control of a few stock items turned out to be critical. In these cases I would have no hesitation in using a generalised modelling tool such as Excel to see me through.

As a last general thought I feel that this book should be used to guide those readers who need to know how the various techniques and models reflect the problems of everyday business (or projects). As such, for Project Managers, it should be available as a reference for when they need to move away from the normal procedures of their organisations.

Arthur Tulip
*Meadow Cottage, Cadwell Lane, Brightwell Baldwin
Watlington, Oxon, OX9 5PG, UK*