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Computers and Quantity Surveyors

A. J. Smith

Department of Surveying
Trent Polytechnic, Nottingham

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For Christine, Joanna and Elaine

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It is difficult not to believe that the computer will become the medium through which increasingly large parts of design and construction will be done in the future; taking over from the manual process just as inexorably as steam power and machines took over from manual labour in the industrial revolution.

John Chalmers
'Computing for construction in the 'eighties'
Chartered Quantity Surveyor May 1979

Preface

The quantity surveyor and the computer have been partners in an intense love-hate relationship for over 30 years; indeed, it would be difficult to find any other profession in which the relationship between man and machine has generated, by turns, so much discussion; hope and optimism; disappointment and disillusion. Even now the rank and file of the profession is still sharply divided between those who claim 'computer literacy' and who consequently venerate the computer and all its works and those who, with apparently equal pride, proclaim themselves to be 'techno-peasants'.

It is not the intention of this book to attempt to persuade students or fellow practitioners to follow either view. The intention is to attempt to inform rather than to influence; to try to blow away some of the mystique which still surrounds the use of computer systems in order that, no matter which side of the computing fence one eventually elects to stand, at least the decision is made on some rational basis.

This book is therefore divided into two parts, the first part (chapters 1 to 8) dealing with general concepts of information technology, and the latter part (chapters 9 to 12) dealing with specific quantity surveying issues. In many ways this division is, of course, artificial as indeed is the subdivision in part 2 between the various aspects of quantity surveying, and the notion that the quantity surveyor stands alone from the rest of the construction team. I also recognise that there are some areas of work in which quantity surveyors are employed which are not specifically considered here; nonetheless, the first part of the book should still provide a useful introduction to the technology.

The book is directed primarily towards providing students with a basic grounding in the use of computers by quantity surveyors. It covers a wide range of subjects, and I am only too aware that some areas are treated in a very superficial way; this is partly deliberate and partly imposed by pressures of space, but I hope that the references given will aid the research of those wishing to pursue particular aspects of the subject to a greater depth. I hope that the book may also be of interest to those quantity surveying practitioners who have yet to come to terms with the technology, and also to students and practitioners of other construction disciplines.

A.J. Smith

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