1. Record Nr. UNINA9910824443703321

Autore	Boussabaine Halim A
Titolo	Whole life-cycle costing : risk and risk responses / / Halim A. Boussabaine and Richard J. Kirkham
Pubbl/distr/stampa	Oxford, UK ; ; Malden, MA, : Blackwell Pub., 2004
ISBN	9786611321413 9781281321411 1281321419 9780470759172 0470759178 9780470759158 0470759151
Edizione	[1st ed.]
Descrizione fisica	1 online resource (266 p.)
Altri autori (Persone)	KirkhamRichard J
Disciplina	692/.5
Soggetti	Building - Estimates Building - Cost control Life cycle costing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Foreword by Nigel Dorman, NHS Estates; Preface; Acknowledgements; Part I: Fundamentals of Whole Life-cycle Costing; 1 Towards an Understanding of Whole Life-cycle Costing; 1.1 Introduction; 1.2 Whole life-cycle costing: a brief history; 1.3 Defining whole life-cycle costing; 1.4 Risk and uncertainty in WLCC; 1.5 Subjectivity in WLCC; 1.6 Summary; References; 2 Whole Life-cycle Costing Risk Management; 2.1 Introduction; 2.2 Why has the construction industry failed to embrace WLCC?; 2.3 Why risk assessment in whole life costing? 2.4 Data requirements in whole life-cycle costing and risk assessment2.5 Specifying a comprehensive set of objectives and measures for each WLCC component; 2.6 A framework for whole life costing risk management; 2.7 Summary; References; 3 Key Decisions in the Whole Life-cycle Costing Process; 3.1 Introduction; 3.2 Justification for investment and extraction of client requirements; 3.3 Key decisions

at the conceptual development stage; 3.4 Key decisions at the detailed design stage; 3.5 Key decisions at the production stage; 3.6 Decisions at the operational stage
3.7 Decisions at the end of economic life stage3.8 Summary; References; 4 Fundamentals of Whole Life-cycle Cost Analysis; 4.1 Introduction; 4.2 Concepts of the time value of money; 4.3 WLCC calculation models; 4.4 Measuring economic performance in whole life-cycle costing; 4.5 WLCC forecasting methods; 4.6 Benchmarking and key performance indicators; 4.7 WLCC key performance indicators; 4.8 Summary; References; 5 Whole Life Risk Analysis Techniques; 5.1 Introduction; 5.2 Risk analysis; 5.3 Qualitative risk analysis; 5.4 Risk matrices; 5.5 Risk registers; 5.6 Event trees
5.7 Influence diagrams5.8 SWOT analysis; 5.9 Brainstorming sessions; 5.10 Quantitative risk analysis; 5.11 Probabilistic approaches to risk; 5.12 Simulation; 5.13 Sensitivity analysis; 5.14 Markov theory; 5.15 Deterministic measures of risk; 5.16 Mathematical and analytical techniques; 5.17 Artificial intelligence and fuzzy set theory; 5.18 Summary; References; Part II: Whole Life-cycle Costing: The Design Stage; 6 Design Service Life Planning; 6.1 Introduction; 6.2 Estimation of service life for new structures; 6.3 Estimation of the remaining service life for existing structures; 6.4 Summary
References7 Design Environmental Life-cycle Assessment; 7.1 Introduction; 7.2 Life-cycle assessment; 7.3 Life-cycle assessment for design optimisation; 7.4 LCA tools; 7.5 Environmental life-cycle cost; 7.6 Case study; 7.7 Summary; Reference; 8 Whole Life-cycle Cost Planning at the Design Stage; 8.1 Introduction; 8.2 Design whole life-cycle cost planning; 8.3 An integrated framework for WLC budget estimation; 8.4 Benchmarking WLC budgets; 8.5 Whole life cost planning; 8.6 Summary; References; 9 Whole Life Risk and Risk Responses at Design Stage; 9.1 Introduction; 9.2 Design whole life risk 9.3 WLC risk identification and risk response measures at design/precontract stages

Sommario/riassunto

With its mixture of established theory, best practice and innovation Whole-life costing: risk and risk responses offers a thorough grounding in both the theory and practical application of WLCC. It will help to improve accuracy of the assessments of long-term effectiveness of projects - now an essential tool for those performing risk analysis in construction investment.