Cost Estimation Methods And Tools Wiley Series In Operations Research And Management Science

Electrical Estimating Methods
Transforming the Financing of Early Care and Education
Conceptual Cost Estimating Manual
Methods and tools for cost estimation
Estimating Software Costs
Cost Estimation
Project Management
Economic Analysis, Estimation, and Management
Cost Analysis and Estimating
Basic Skills for Building Construction
Proceedings of the International Conference on Design Tools and Methods in Industrial Engineering, ADM 2019, September 9–10, 2019, Modena, Italy
Tools and Techniques
Next Generation Concurrent Engineering
Cost Estimation Techniques for Web Projects
Software Estimation Best Practices, Tools & Techniques
How to Manage a Great Project
Expert Judgment in Project Management
Cost Estimating
Means Mechanical Estimating Methods: Takeoff & Pricing for HVAC & Plumbing, Updated 4th Edition
Guidance for Cost Estimation and Management for Highway Projects During Planning, Programming, and Preconstruction
Issues, and Guidelines
Agile Estimating and Planning
Issues in Aerospace and Defense Research and Application: 2013 Edition
APM - AcostE Estimating Guide
Bringing Realism to Estimating
Cost Estimation and Management
How to Estimate with RSMeans Data
A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition and The Standard for Project Management (RUSSIAN)
A Complete Step-By-Step Methodology for Initiating, Planning, Executing & Closing a Project Successf
Advances in Computers
Systems Life Cycle Costing
Leading the Web in Concurrent Engineering
The Impacts of the Handoffs on Software Development
Cost Estimation Techniques for Emerging Synthetic Fuels Technology
Narrowing the Theory-Practice Gap
Tools for Managing Project Costs
The Engineer's Cost Handbook
A Complete Guide for Software Project Estimators
Oversight, Volume IX : Joint Hearing Before the Subcommittee on Energy Development and Applications of the Committee on Science and Technology and the Subcommittee on Oversight and Investigations and the Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce, U.S. House of Representatives, Ninety-sixth Congress, First Session, July 16, 1979
A Cost Estimation Model

PHELPS HOUSTON

Electrical Estimating Methods Project Management Institute
Drawing on best practices identified at the Software Quality Institute and embodied in bodies of knowledge from the Project Management Institute, the American Society of Quality, IEEE, and the Software Engineering Institute, Quality Software Project Management teaches 34 critical skills that allow any manager to minimize costs, risks, and time-to-market. Written by leading practitioners Robert T. Futrell, Donald F. Shafer, and Linda I. Shafer, it addresses the entire project lifecycle, covering process, project, and people. It contains extensive practical resources-including downloadable checklists, templates, and forms.
Transforming the Financing of Early Care and Education Springer Science & Business Media
This is volume 74 of Advances in Computers, subtitled “Recent advances in software development. This series, which began in 1960, is the oldest continuously published series of books that has chronicled the ever- changing landscape of information technology. Each year three volumes are published, each presenting five to seven chapters describing the latest technology in the use of computers today. In this current volume, we present six chapters that give an update on some of the major issues affecting the development of software today. The six chapters in this volume can be divided into two general categories. The first three deal with the increasing importance of security in the software we write and provide insights into how to increase that security. The three latter chapters look at software development as a whole and provide guidelines in how best to make certain decisions on a project-level basis. The book series is a valuable addition to university courses that emphasize the topics under discussion in that particular volume as well as belonging on the bookshelf of industrial practitioners who need to implement many of the technologies that are described.
Conceptual Cost Estimating Manual Gulf Professional Publishing
Simplify the estimating process with the latest data, materials, and practices Electrical Estimating Methods, Fourth Edition is a comprehensive guide to estimating electrical costs, with data provided by leading construction database RS Means. The book covers the materials and processes encountered by the modern contractor, and provides all the information professionals need to make the most precise estimate. The fourth edition has been updated to reflect the changing materials, techniques, and practices in the field, and provides the most recent Means cost data available. The complexity of electrical systems can make accurate estimation difficult, but this guide contains all the necessary information in one place. An electrical estimate represents the total cost for materials, labor, overhead and profit, but accuracy is virtually impossible without a basic knowledge of the field, and real-world experience in the type of work required. Inaccurate estimates lead to problems with customer satisfaction, which often create payment issues. A thorough, complete, and accurate estimate is in the best interest of all parties involved in the

work. Electrical Estimating Methods provides more than just data. Detailed discussions about the work itself help highlight factors that may escape notice, and access to the latest cost data helps tie everything together. Features include: Discussion of current equipment, materials, and processes Means data for both residential and commercial projects Case studies that illustrate best practices Online access to the latest Means data for fast access on the job The book discusses specific situations as well as general practices, and provides comprehensive guidance to the creation of a true, current, estimation of costs. For electrical contractors and estimators, Electrical Estimating Methods contains must-have content that simplifies the estimating process.

Methods and tools for cost estimation IOS Press

Although technology and productivity has changed much of engineering, many topics are still taught in very similarly to how they were taught in the 70s. Using a new approach to engineering economics, Systems Life Cycle Costing: Economic Analysis, Estimation, and Management presents the material that a modern engineer must understand to work as a practicing engineer conducting economic analysis. Organized around a product development process that provides a framework for the material, the book presents techniques such as engineering economics and simulation-based costing (SBC), with a focus on total life cycle understanding and perspective and introduces techniques for detailed analysis of modern complex systems. The author includes rules of thumb for estimation grouped with the methods, processes, and tools (MPTs) for conducting a detailed engineering buildup for costing. He presents the estimating costing of complex systems and software and then explores concepts such as design to cost (DTC), cost as an independent variable (CAIV), the role of commercial off-the-shelf technology, cost of quality, and the role of project management in LCC management. No product or services are immune from cost, performance, schedule, quality, risks, and tradeoffs. Yet engineers spend most of their formal education focused on performance and most of their professional careers worrying about resources and schedule. Too often, the design stage becomes about the technical performance without considering the downstream costs that contribute to the tota1 life cycle costs (LCC) of a system. This text presents the methods, processes, and tools needed for the economic analysis, estimation, and management that bring these costs in line with the goals of pleasing the customer and staying within budget.

Estimating Software Costs Project Management Institute

This revision of the author's bestselling earlier work on cost estimating has been updated to provide currently applicable examples, data and techniques. Two new chapters have been added covering: computer tools and models for cost estimating, where to get these tools, and the features to look for; software cost estimating with special emphasis on the effect of CASE tools on software productivities and resulting software costs. A complete set of inflation tables is now included to permit conversion from any year dollars to any other year dollars from 1959 through 1997. Retains its comprehensive coverage of the elements needed to embark on a cost estimating task. Strengthened are the invaluable parts of the book which tell the estimator how to produce a competitive and credible cost estimate. Manufacturing standards for hardware and electronics are retained as are handy tables for determining the costs of engineering, design, documentation, drafting and testing.

Cost Estimation Transportation Research Board

So, you’ve been asked to manage a project. Not sure where to start? Start here. This is your ultimate one-stop, easy-going and very friendly guide to delivering any project of any size. Even if you’re a first time, never-done-it-before, newbie project manager, How to Manage a Great Project will get you from start to finish on budget, on target and on time. In just eight simple steps, you’ll learn to: Get things started: understand the what, why, where and who of your project Plan for success: co-ordinate what needs doing and who needs to do it Make it happen: get everything done – in order and on time Keep on track: monitor your progress to stay in total control Wind things up: review, report and enjoy the well-earned results How to Manage a Great Project is your roadmap to project perfection – first time, every time.

Project Management Penguin

"Software Cost Estimation and Sizing Methods: Issues and Guidelines recommends an approach to improving the utility and accuracy of software cost estimates by exposing uncertainty (in understanding the project) and reducing the risks associated with developing the estimates. The approach focuses on characteristics of the estimation process (such as which methods and models are most appropriate for a given situation) and the nature of the data used (such as software size). It describes risks in each of these factors in terms of symptoms and warning signs, and mitigation strategies for each." "The techniques described in this book are based on a literature review and on analysis of software estimation and risk, in addition to general lessons and guidance adapted from selected programs." "This book should be of particular interest to those organizations or agencies that use software estimates in the planning, budgeting, developing, or purchasing of software-intensive systems. It should also be of value to those involved in research and analysis of estimation models and techniques."--BOOK JACKET.

Economic Analysis, Estimation, and Management Springer Nature

Project cost escalation is a major problem for State Highway Agencies (SHA). This problem is evident in cost estimating procedures that may not promote consistency and accuracy of costs over the project development process. The research proposes that a relationship exists between applying good estimating practices and minimizing cost escalation from the initial planning estimate to the engineer's estimate at final design. The objective of this research is to develop a preliminary list of strategies, methods, and tools for project cost estimation practices aimed at achieving greater consistency and accuracy between the project development phases. A literature review was conducted that assisted in identifying factors that lead to the cost escalation of projects. The information from the literature was used to discover the core estimating assumptions that are the root causes behind cost escalation and lack of project estimate consistency and accuracy. After the cost escalation factors were determined, interviews with SHAs were conducted that lead to identifying unique and/or innovative approaches that will aid the SHAs in overcoming the cost escalation factors. The main methodology used to develop a potential list of strategies, methods, and tools was first focused on linking strategies to causes of cost escalation. Global strategies were identified by means of this approach. Methods and tools that would likely be effective in implementing the strategies are therefore directed at mitigating root causes of estimate problems in a focused approach. The strategies, methods, and tools are aligned with the project development phase where they would be implemented. Thus, a preliminary list of strategies, methods, and tools is provided in this study.

Cost Analysis and Estimating Rand Corporation

In today's hypercompetitive global marketplace, accurate costestimating is crucial to bottom-line results. Nowhere is this moreevident than in the design and development of new products andservices. Among managing engineers responsible for developingrealistic cost estimates for new product designs, the number-onesource of information and guidance has been the Cost Estimator'sReference Manual. Comprehensive, authoritative, and practical, the Manual instructsreaders in the full range of cost estimating techniques andprocedures currently used in the fields of development, testing,manufacturing, production, construction, software, generalservices, government contracting, engineering services, scientificprojects, and proposal preparation. The authors clearly explain howto go about gathering the data essential to preparing a realisticestimate of costs and guide the reader step by step through eachprocedure. This new Second Edition incorporates a decade of progress in themethods, procedures, and strategies of cost estimating. All thematerial has been updated and five new chapters have been added toreflect the most recent information on such increasingly importanttopics as activity-based costing, software estimating,design-to-cost techniques, and cost implications of new concurrentengineering and systems engineering approaches to projects. Indispensable to virtually anyone whose work requires accurate costestimates, the Cost Estimator's Reference Manual will be especiallyvaluable to engineers, estimators, accountants, and contractors ofproducts, projects, processes, and services to both government andindustry. The essential ready-reference for the techniques, methods, andprocedures of cost estimating COST ESTIMATOR'S REFERENCE MANUAL Second Edition Indispensable for anyone who depends on accurate cost estimates forengineering projects, the Cost Estimator's Reference Manual guidesthe user through both the basic and more sophisticated aspects ofthe estimating process. Authoritative and comprehensive, the Manualseamlessly integrates the many functions--accounting, financial,statistical, and management--of modern cost estimating practice.Its broad coverage includes estimating procedures applied to suchareas as: * Production * Software * Development * General services * Testing * Government contracting * Manufacturing * Engineering * Proposal preparation * Scientific projects * Construction This updated and expanded Second Edition incorporates all the mostimportant recent developments in cost estimating, such asactivity-based costing, software estimating, design-to-costtechniques, computer-aided estimating tools, concurrentengineering, and life cycle costing. For engineers, estimators, accountants, planners, and others whoare involved in the cost aspects of projects, the Cost Estimator'sReference Manual is an invaluable information source that will payfor itself many times over.

Basic Skills for Building Construction CRC Press

Cost Estimation and Management: A Practical Approach covers cost estimating with the goal of being comprehensive and suitable to both working professionals and students in undergraduate and graduate programs. It covers a wide variety of topics, tools, and techniques for cost estimating, brought together and developed through study, professional work, and experiences in the classroom.The subtitle, “A Practical Approach,” reflects an attempt to create a resource that works both in a classroom and “in the field.” The book offers practical tips and suggestions on how to apply these tools in a variety of situations.

Proceedings of the International Conference on Design Tools and Methods in Industrial Engineering, ADM 2019, September 9–10, 2019, Modena, Italy World Scientific

ABSTRACT: Effective software cost estimation is one of the most challenging and important activities in software development. The software industry does not estimate projects well. Poor estimation leads to poor project planning with resulting schedule overruns, inadequate staffing, low system quality, and many aborted projects. Research on software estimation is needed to build more accurate models of the key aspects of software development. The goals of research in this dissertation are to investigate and improve the modeling of team size and project structures in current software estimation methods. Mathematical models for estimating the impacts of project team size and three variations of project structure are developed. These models accept the outputs of the COCOMO II software estimation tool, allow variation in both team size and project structure, and produce more detailed project estimates. This new extended model of COCOMO II is implemented in a decision support tool for software estimators called PSEstimate. Following the design science research paradigm, the artifact is evaluated with an experiment with experienced software project managers. Three treatment groups: a manual (no tool) group, a COCOMO II group, and a PSEstimate group, completed two multipart software cost estimation tasks. The accuracy and consistency of the cost and schedule estimates, the participants' confidence in their estimates, and their satisfaction with and perceived usefulness of the cost estimation tool are measured. The experimental results support most of the hypotheses of the dissertation. For most tasks, individuals aided by computer-based decision support tools produce more accurate project effort estimates and are more confident in their estimates than manual estimators. There are no significant differences between the three groups on schedule estimation. A possible explanation is that experienced estimators in the manual group compensate for the inaccuracy of their effort estimates by adding time to their schedule estimates. The research contributions are new mathematical models for software estimation based on project team size and structure; a decision support tool (PSEstimate) that incorporates these models; and the experimental results that demonstrate improvements in software estimation by experienced project managers when the new models and tool are applied in practice.

Tools and Techniques Pearson Education

Having realistic estimates of effort at an early stage in a Web project's life is vital to the successful management of resources. The principles of the prediction process are identifying the influencing factors, gathering past project data, generating an effort prediction model, and assessing the effectiveness of such prediction model. Cost Estimation Techniques for Web Projects provides a step-by-step methodology to improving cost estimation practices for Web projects. Utilizing such techniques as stepwise regression modeling, case-base reasoning, classification and regression trees, and expert opinion, this book is a powerful tool for scholars, researchers, and practitioners in the areas of Web development, Web engineering, project management, and software engineering.

Next Generation Concurrent Engineering CRC Press

Expert judgment is a major source of information that can provide vital input to project managers, who must ensure that projects are completed successfully, on time, and on budget. Too often, however, companies lack detailed processes for finding and consulting with experts—making it hard to match the required know-how with the project at hand. In Expert Judgment in Project Management: Narrowing the Theory-Practice Gap, Paul S. Szwed provides research that will help project managers become more adept at using expert judgment effectively.

Cost Estimation Techniques for Web Projects John Wiley & Sons

A practical, hands-on guide to real-world construction estimating How to Estimate with RSMeans Data is the only instructional book on construction cost estimating that uses the most popular source of construction cost data, RS Means. This updated fifth edition includes new coverage on the role of Building Information Modeling (BIM) in the estimating process, and over 300 sample problems and exercises that show you how to apply cost data to your building project based on the

RS Means 2015 Building Construction Cost Data. The companion website provides access to RS Means CostWorks data, allowing you to use real-world numbers in your practice estimates, and the included Instructor's Manual provides step-by-step solutions to problems in the book. Focused on the practical aspects of estimating, this book emphasizes the application of estimating techniques—which are transferable to any estimating software—through problem solving and the ground-up creation of complete construction project estimates. Estimating skills are fundamental to the construction industry, and are applied by all parties at all levels throughout the industry. This book is a hands-on guide to the techniques and tools used to create a thorough estimate, with plenty of opportunities for practice. Apply cost data to all aspects of the building project Practice your skills on over 300 sample problems Construct a complete estimate using RSMeans Besides being an essential construction skill, learning estimating helps you become familiar with reading and understanding construction blueprints and how construction assemblies are built. Mastery of these vital skills is important to your future career, and How to Estimate with RSMeans Data is your ideal guide to a solid foundation.

Software Estimation Best Practices, Tools & Techniques ScholarlyEditions

The practical e-guide that gives you the skills to succeed as a project manager. Discover how to improve your project management skills by defining a project brief, identifying stakeholders, and building a strong team. You'll also learn useful tips for initiating projects, setting deadlines, and managing your budgets. Essential Managers gives you a practical "how-to" approach with step-by-step instructions, tips, checklists, and "ask yourself" features showing you how to focus your energy, manage change, and make an impact. DK's Essential Managers series contains the knowledge you need to be a more effective manager and hone your management style. Whether you're new to project management or simply looking to sharpen your existing skills, this is the e-guide for you.

How to Manage a Great Project Pearson UK

"Provides a step-by-step introduction to the need for cost estimation, the various applications, and the available resources for obtaining relevant data"--

Expert Judgment in Project Management Createspace Independent Pub

Offers coverage of each important step in engineering cost control process, from project justification to life-cycle costs. The book describes cost control systems and shows how to apply the principles of value engineering. It explains estimating methodology and the estimation of engineering, engineering equipment, and construction and labour costs

Cost Estimating Transportation Research Board

Understanding the cost ramifications of design, manufacturing and life-cycle management decisions is of central importance to businesses associated with all types of electronic systems. Cost Analysis of Electronic Systems contains carefully developed models and theory that practicing engineers can directly apply to the modeling of costs for real products and systems. In addition, this book brings to light and models many contributions to life-cycle costs that practitioners are aware of but never had the tools or techniques to address quantitatively in the past.Cost Analysis of Electronic Systems melds elements of traditional engineering economics with manufacturing process and life-cycle cost management concepts to form a practical foundation for predicting the cost of electronic products and systems. Various manufacturing cost analysis methods are addressed including: process-flow, parametric, cost of ownership, and activity-based costing. The effects of learning curves, data uncertainty, test and rework processes, and defects are considered. Aspects of system sustainment and life-cycle cost modeling including reliability (warranty, burn-in), maintenance (sparing and availability), and obsolescence are treated. Finally, total cost of ownership of systems and return on investment are addressed.Real life design scenarios from integrated circuit fabrication, electronic systems assembly, substrate fabrication, and electronic systems managementare used as examples of the application of the cost estimation methods developed within the book.

Means Mechanical Estimating Methods: Takeoff & Pricing for HVAC & Plumbing, Updated 4th Edition Cost EstimationMethods and Tools

The Project Management Life Cycle reveals the unique Method 123 Project Management Methodology by defining the phases, activities and tasks required to complete a project. It's different because it describes the life cycle clearly and prescriptively, without the complex terminology rife throughout the industry. Its comprehensive coverage, consistent depth and suite of tools will help managers to undertake projects successfully. Containing hundreds of practical examples to enhance the reader's understanding of project management, the book skilfully guides them through the four critical phases of the project life cycle: initiation, planning, execution and closure. Written in a clear, professional and straightforward manner, it is relevant to the management of all types of project, including IT, construction, engineering, telecommunications and government, as well as many others. An essential guide to improving project management skills for project managers, senior managers, team members, consultants, trainers or students. Additional resources can be downloaded from http://tinyurl.com/bq2dbuw by scrolling down to the 'Resources' section.

Guidance for Cost Estimation and Management for Highway Projects During Planning, Programming, and Preconstruction Asian Development Bank

Agile Estimating and Planning is the definitive, practical guide to estimating and planning agile projects. In this book, Agile Alliance cofounder Mike Cohn discusses the philosophy of agile estimating and planning and shows you exactly how to get the job done, with real-world examples and case studies. Concepts are clearly illustrated and readers are guided, step by step, toward how to answer the following questions: What will we build? How big will it be? When must it be done? How much can I really complete by then? You will first learn what makes a good plan-and then what makes it agile. Using the techniques in Agile Estimating and Planning , you can stay agile from start to finish, saving time, conserving resources, and accomplishing more. Highlights include: Why conventional prescriptive planning fails and why agile planning works How to estimate feature size using story points and ideal days–and when to use each How and when to re-estimate How to prioritize features using both financial and nonfinancial approaches How to split large features into smaller, more manageable ones How to plan iterations and predict your team's initial rate of progress How to schedule projects that have unusually high uncertainty or schedule-related risk How to estimate projects that will be worked on by multiple teams Agile Estimating and Planning supports any agile, semiagile, or iterative process, including Scrum, XP, Feature-Driven Development, Crystal, Adaptive Software Development, DSDM, Unified Process, and many more. It will be an indispensable resource for every development manager, team leader, and team member.