Causes Of Cost Overrun In Construction

Cost and Revenue Overruns of the Olympic Games 2000–2018

The Construction Industry
Root Cause Analysis of Cost Overrun in Construction Projects Under Different Market Sectors
Cost Management Guidebook
Causes of Delay and Cost Overrun in the Omani Construction Industry
Decision Support for Construction Cost Control in Developing Countries
Can We Afford Our Own Future?
Case Study of Innovative Projects
An Analysis of Effective Risk Management

Cost and Revenue Overruns of the Olympic Games 2000–2018
The Heritage Lottery Fund has awarded £3.8 billion of funding to some 24,000 projects. This report looks at how the money has been spent, what has been achieved, and the effectiveness of the grant-making process. It is based on a detailed review of 30 projects, a survey of applicants and interviews with staff. The conclusion is that the Fund has been successful in supporting projects that are helping to preserve the heritage of the UK. Although its robust processes have led to better and more sustainable projects, more should be done to reduce the burden on applicants, speed the delivery of projects, and provide more support for those who need it.

The Construction Industry
The Cost Management Guidebook describes a number of tools that can be used to examine the cost structure of a business, including analyses for cost objects, constraints, and processes. The book also addresses how to reduce costs in all of the major areas of a corporation, including compensation, sales, production, procurement, and administration. There are extensive discussions of asset reduction techniques, as well as cost management reports and measurements.

Root Cause Analysis of Cost Overrun in Construction Projects Under Different Market Sectors
The aim of this research is to identify the major cost overrun factors in the construction sector of the Free State Province of South Africa and the effective remedial cost control measures, generate and recommend possible solutions.

Cost Management Guidebook
Causes of Delay and Cost Overrun in the Omani Construction Industry
This book covers various current and emerging topics in construction management and real estate. Papers selected in this book cover a wide variety of topics such as new-type urbanization, planning and construction of smart city and eco-city, urban-rural infrastructure development, land use and development, housing market and housing policy, new theory and practice of construction project management, big data application, smart construction and BIM, international construction (i.e., belt and road project), green building, off-site prefabrication, rural rejuvenation and eco-civilization and other topics related to construction management and real estate. These papers provide useful references to both scholars and practitioners. This book is the documentation of the 24th International Symposium on Advancement of Construction Management and Real Estate, which was held in Chongqing, China.

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causes of cost overrun using real data extracted from one of the largest general contractors in California and analyzing the data to find the main causes of change orders in the top three market sectors, and the key responsible parties for each change. The analysis showed that the contract amount of change orders. In addition, it proved that depending on the market sector, the underlying root causes for the cost overrun may vary accordingly. Furthermore, it provides legitimate data to help quantify the change impacts on project performance.

Global Construction Data ?Construction Project Management provides a thorough understanding of construction project management techniques with the help of various concepts, practical insight, real-life examples and skills to execute large and small projects. Broadly, this comprehensive book is organized in 5 parts:

1. Introducing Construction Project Management
2. Developing Project Plans
3. Planning and Budgeting Construction Projects
4. Controlling Construction Plan
5. Focusing on project planning, scheduling and controlling techniques, the 3rd Edition covers the practical application of the knowledge and skills required to plan and control construction project scope, time, resources, cost, risk and integration using project management technique.

A Study on the Causes of Cost Overrun in Telecommunications Projects in the Sultanate of Oman

Proceedings of the 24th International Symposium on Advancement of Construction Management and Real Estate
What are the reasons for cost overruns? Do reforms reduce the magnitudes of cost overruns in projects? Has the impact of cost overruns been analyzed? What causes cost overrun in transport infrastructure projects? What is the total value of project cost overruns? This powerful Cost overrun self-assessment will make you the reliable Cost overrun domain visionary by revealing just what you need to know to be fluent and ready for any Cost overrun challenge. How do I reduce the effort in the Cost overrun work to be done to get problems solved? How can I ensure that plans of action include every Cost overrun task and that every Cost overrun outcome is in place? How will the Cost overrun strategic and tactical options and ensuring Cost overrun costs are low? How can I deliver tailored Cost overrun advice instantly with structured going-forward plans? There's no better guide through these mind-expanding questions than acclaimed best-selling author Gerard Blokdyk. Blokdyk ensures all Cost overrun essentials are covered, from every angle: the Cost overrun self-assessment shows succinctly and clearly that what needs to be clarified to organize the required activities and processes so that Cost overrun outcomes are achieved. Contains extensive criteria grounded in past and current successful projects and activities experienced Cost overrun practitioners. Their mastery, combined with the easy elegance of the self-assessment, provides its superior value to you in knowing how to ensure the outcome of any efforts in Cost overrun are maximized with professional results. Your purchase includes access details to the Cost overrun self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows you exactly what to do next. Your exclusive instant access details can be found in your book. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF - The latest cost overrun special criteria Excel Dashboard - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation - In-depth and specific Cost overrun Checklists - Project management checklists and templates to assist with implementation INCLUDES LIFETIME SELF ASSESSMENT UPDATES Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books.

LifeTime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips.

Causes Effects and Remedies of Cost Overrun in Construction Projects in Oman

This thesis presents a literature research analyzing the cost overrun of the construction industry worldwide, exploring documented causes for cost overrun, and documented parties responsible for the inefficiency. The analysis looks at a comparison between the metrics of construction projects in different continents and regions. Multiple publication databases were used to look into over 300 papers. It is shown that although construction demands are increasing, cost overrun on these projects is not decreasing at the same rate around the world. This thesis also presents a possible solution to improve cost overrun in the construction industry, through the use of Value Performance Inspection System (BV PIPS). This is a system that has been utilized in various countries around the world, and has documented evidence that it may be able to alleviate the overrun occurring in the construction industry.

Mega-projects and Risk
An exploration of how the Olympics are organized in response to risk. This book looks at the tension between the riskiness of mega-events, attributable to their scale and complexities, and the societal, political and organisational pressures that exist for safety, security and management of risk – leading to changes in how the Games are governed.

Project Cost Overrun

Completing the “Big Dig”
This book presents the proceedings of CRIOCM_2016, 21st International Conference on Advancement of Construction Management and Real Estate, sharing the latest developments in real estate and construction management around the globe. The conference was organized by the Chinese Research Institute of Construction Management (CRIOCM) working in close collaboration with the University of Hong Kong. Written by international academics and professionals, the proceedings discuss the latest achievements, research findings and advances in frontier disciplines in the field of construction management and real estate. Covering a wide range of topics, including building information modelling, big data, geographic information systems, housing policies, management of infrastructure projects, occupational health and safety, real estate finance and economics, urban planning, and sustainability, the discussions provide valuable insights into the implementation of advanced construction project management and the real estate market in China and abroad. The book is an outstanding reference resource for academics and professionals alike.
An Investigation of the Causes and Extent of Delay and Cost Overrun in School Construction Projects in Yemen

Abstract: The construction industry, which can be in the form of residential building, commercial, public and utility buildings, or civil engineering building, has a huge influence on any nation’s economy. Its influence can be either manifested in its contribution to the economy or the service it provides to the community. In order to build any infrastructure project with a balanced cost, time, and quality, project managers search for approaches that can satisfy all three attributes. The traditional cost management approaches have been enhanced with the three-dimensional time-cost-quality optimization in the last two decades. The optimization is aimed to minimize the time and cost as much as possible while increasing the quality of the infrastructure to be built. The issue of financing in developing countries has been a bottleneck of success in constructing infrastructure like highway. Many researchers have concluded in their studies the causes of time and cost overrun in highway construction were, contractors’ financial problems, inflation, progress payments delay by owner, political issues, variations, lack of management skills, cost fluctuation of materials during construction, environmental issues, shortage in equipment, inadequate contractor experience etc. The number of studies in the literature that deals with financial optimization and cash-flow analysis to address the problem of financing and inflation are getting increased. The cash-flow analysis and maximum overdraft to be paid give a good indication to the main participants about the trends toward cost and time overrun. They can also help in making a proper decision right at the beginning. The purpose of this study is to deal with the optimization of time and profit of highway constructions taking in to consideration the amount of available credit and future value of the cost of each activity and cash-flow analysis in a comprehensive model. This type of analysis gives the contractor how its profit will be influenced with its allowable credits and the time associated with it. Besides, the model also generates a line of balance scheduling for the project as highways are among the repetitive projects. The cash-flow analysis gives extra information on the overdraft so that it can be optimized to find good combination of execution of the activities which will minimize the overdraft, interest paid to banks and most importantly maximize the profit to be gained by the project using GA approach. This type of analysis also gives alternatives for contractors how much profit they would like to gain by providing different amount of credits. At first the profit and time are optimized individually to get the maximum profit and minimum time for completing the project. Then the multi-objective optimization goal programming takes place which tries to minimize the deviation from the individual values by assigning importance weight to the individual objectives to find the near optimal solution. The model is tested for different allowable credits and its sensitivity analysis outcomes are plotted to see the relationship between the allowable credits and the profit. To validate the efficiency of the developed model, it is applied to a project from the literature that addresses scheduling and cost optimization of repetitive projects. It is found that the outcome of the model that maximizes the profit and minimizing the time outlooks the results of the literature with 4.65% and 0.38% improvement in duration and cost of the project respectively.


Sustainable Infrastructure: Breakthroughs in Research and Practice Anyone who has got a rework or renovation work done in their house can tell you what a troublesome activity it is. Not only that, it seems to take forever to be completed and is heavy on the wallet. Even an international icon like the Sydney Opera house, which has always been Australia’s pride, was delayed by 10 years with its budget shooting up by 14.5 times its estimated budget of $7 million. There are plenty of such examples available. It is very common for construction projects to get delayed and outrun their budget. This is a tough scenario faced by almost all projects around the world, with India not being an exception. Thus, the researcher has undertaken this research to investigate the factors responsible for delays and cost overruns. Both secondary research and primary research have been carried out and the barriers have been identified. Such barriers create problems that hinder the efficiency and progress of a project, making it lag behind its schedule. The factors identified in the secondary research are compared to the findings of the primary research to see if they hold true in the Indian context.

Construction Project Management Megaprojects and Risk provides the first detailed examination of the phenomenon of megaprojects. It is a fascinating account of how the promoters of multi-billion dollar megaprojects systematically and self-servingly misinform parliament, the public and the media in order to get projects approved and built. It shows, in unusual depth, how the formula for approval is an unhealthy combination of overestimated capabilities, undervalued environmental impacts, overvalued economic development benefits. This results in projects that are extremely risky, but where the risk is concealed from MPs, taxpayers and investors. The authors not only explore the problems but also suggest practical solutions drawing on theory, experience and hard, scientific evidence from the several hundred projects in twenty nations and five continents that illustrate the book. A must-read for students, scholars, planners, economists, auditors, politicians and interested citizens for many years to come.

Olympic Risks In a global world, where the acceleration of technological changes is happening in all industrial sectors, a special focus is forced on innovation and creativity. The book has gathered a small number of sectors where innovation is being the main vector to achieve the competitiveness that companies are
causing the motivation to choose these sectors has been preceded by a careful selection in which we wanted to pick up those in which innovation is a key today. Different aspects push to create and innovate: the environment in general and in particular climate change is forcing to rethink the natural and renewable energy, infrastructure, water, biotechnology, materials, defense, education, or health. Dear reader, in your hand is a work that reflects the same spirit of the human being: curiosity and eagerness to overcome have allowed humanity to have evolved and still continue today.

A Study of Causes of Delay and Cost Overrun in Office Construction Projects in the EThekwini Municipal Area, South Africa Program management and execution in the Aerospace & Defense (A & D) industry have always been an important critical success factor, but the stakes are getting higher. In March 2008, the Government Accountability Office issued a study of 95 weapons systems programs that showed an average schedule delay of 21 months and average budget overrun of 26 percent for 2007. In dollar terms, the combined cost overrun for all studied programs was $295 billion, up from $42 billion for a similar study conducted seven years earlier. To gain a deeper understanding of the problem, Deloitte conducted an extensive analysis of Major Defense Acquisition Programs (MDAPs), using cost and unit data published in the Department of Defense’s Selected Acquisition Reports going back to the early 1990s. The data shows that, over the past 15 years, the problem has steadily gotten worse. At the current pace, unless game-changing mitigations are implemented to address the root causes, the analysis forecasts that in 10 years the average cost overrun may exceed 46 percent, up from 26 percent today. What is behind this troubling pattern of cost overruns and schedule delays—and what can be done to address it? This study examines five root causes: Program management challenges, Technical complexity, Talent shortage, Supply chain challenges, Politics. It also offers specific solutions and practices that we believe can help tackle the problem caused by these root causes.

Heritage Lottery Fund

International Advanced Researches & Engineering Congress 2017 Proceeding Book This book offers a new way of thinking about the causes and consequences of cost overrun to firms and society. It is ideal for academic researchers in project management, management accounting and corporate finance, as well as for managers in the private and public sectors.

3rd International Conference on Innovative Technologies for Clean and Sustainable Development Global construction data is vital for contractors, governments, international organisations, policy makers, academic researchers and statisticians. As the global population of the world expands, the sustainability of the built environment raises the political agenda and the need to manage infrastructure and buildings in both urban and rural contexts becomes ever more pressing. How much can the built environment grow and how can it be managed sustainably? This edited volume addresses how we can find a possible way through the inconsistencies between national construction data sets to devise a consistent approach to national construction data to further the global sustainability agenda and inform policy making. This search begins in Part I, which looks at the methods and definitions used in construction statistics in different countries. Part II considers examples of different types of construction data from the cost of materials, measuring work on high rise buildings and existing stock. In Part III, the authors consider construction data internationally, beginning with the problem of comparing data in different countries using exchange rates and purchasing power parities (PPPs), comparing innovation processes in different countries and looking at the provision of building design internationally. In Part IV, the international theme is continued by comparing accounting practices and company performance in different countries and concludes with an international comparison of construction industries. This book raises awareness of the significance of the construction industry globally and the importance of data to measure it. It informs the discussion of the best ways of handling the consequences of policies affecting the built environment and the effect of the built environment on the rest of the economy and society. It is essential reading for international economists, construction industry consultants, policy makers, construction statisticians and academics.

Policy and Planning for Large Infrastructure Projects This basic text offers a comprehensive and fundamental description of the construction industry and the construction process, citing examples from several countries at various stages of development. It considers the features of the industry, describes factors influencing the demand for, and supply of construction, problems facing the industry and ways of planning for and managing its development. The book should be a basic source of information on the construction industry for undergraduate and postgraduate courses in architecture, construction management, quantity surveying, related engineering fields and estate management. It should also be of relevance to administrators of the construction industry.

A Study Investigating the Factors that Cause Delays and Cost Overruns in Construction Projects in India In recent years the construction industry has been criticised for lack of successful innovation compared to other major industries. The question of why the industry has not been seen to be innovative has created concern among many involved with construction and property. The driving concern is where the motivation for this innovation should come from. Although construction clients havemade an impact in this area, the industry itself seems devoid of innovation in general and in particular clients change in thinking. Clients driving Innovation brings together an international group of researchers and practitioners to investigate the role of clients in construction innovation. Written in three parts, it covers the context for innovation driven by clients, the client impact on the innovation process and how new ideas can be pushed through in practice. Numerous case studies illustrate the role clients can play and the key issues that need to be addressed. With increasing interest in clients’ role in the construction process, this book is a crucial guide for those working in the sector.

Cost Overrun A Complete Guide – 2019 Edition Cost Overruns are a common problem in technology, defense, and corporate capital improvement projects. This book explains the problem and what is at stake, the uncertainties and risks involved, and methods for improvement. The book proposes and provides methods for establishment and implementation of Cost Overrun Insurance Systems and improved Risk Management practices. A Strategic Decision Making Framework process is provided based on professional, objective analysis of the Status Quo and Alternative Courses of Action. The author addresses Psychological and Strategic Misrepresentation causes of Cost Overruns, calling for a return to Core Values and Integrity as the ultimate
solution to the Cost Overrun problem. The United States Federal Government is $14 Trillion in Debt. Estimates for future unfunded liabilities are 50-100 Trillion $, and new problems and liabilities are surfacing daily. The American Dream: How To Fix It: cost issues, and governments to relearn problem and requirements definition, planning, estimating, and solution execution, all in the interest of creating Greater Utility (Benefits) for all mankind. It is written from the perspective of an Analyst who has worked on these problems from many different angles: as an Air Force veteran, a Federal Civil Servant, Systems Engineer, Federal Government Consultant, and Quantitative Analyst. Further information is available on the YouTube Cost Analyst Channel: http://www.youtube.com/user/CostAnalyst featsure=uhm

Clients Driving Innovation In this open access book the cost and revenue overruns of Olympic Games from Sydney 2000 to PyeongChang 2018 from eight years before the Games to Games time are investigated to provide a better cost estimate for public authorities and organizing committees to operate the event, and the investment of taxpayers’ money for Olympic venues (non-OCOG budget). The study is based on data collected worldwide and is currently the most advanced study on cost and revenue changes of Olympic Games.

Proceeds of the 21st International Symposium on Advancement of Construction Management and Real Estate The continued growth of emerging nations depends largely on the development of their built infrastructures and communities. Roads, dams, bridges, hospitals, schools, and housing are all examples of the built environment that impacts economic improvements in the developing world. Decision Support for Construction Cost Control in Developing Countries explores how the construction industry contributes to a nation’s GDP and the related cost issues and proposed cost reduction solutions for construction projects and initiatives in developing regions. Emphasizing the role of decision support systems for reducing and managing the costs associated with construction projects, this title is an essential reference source for civil engineers, business and engineering managers, project managers, researchers, and professionals in the construction industry.

The Owner’s Role in Project Risk Management This book presents an analysis of why some large infrastructure projects are delayed or compromised and offers important insights into the better delivery of future projects. It provides an important reaction to the ambitious €115 billion investment plan devised by the European Union’s Seventh Framework Programme in 2007. Infrastructure is a key investment target. Germany is adopted as a focus, as Europe’s largest economy, and a nation that has seen significant delays and tensions in the delivery of key infrastructure projects. The contributions to this volume demonstrate various patterns for infrastructure assets and illustrate how factors such as poor project governance, early planning mistakes, inappropriate risk management and unforeseen technological challenges influence delivery. The in-depth case studies on the Berlin Brandenburg Airport, the Hamburg ElphiPhilharmonie, and offshore wind parks show how project delivery can face massive problems, and illuminating solutions are offered to these problems. Overall, the case of Germany also offers the opportunity to assess various new forms of project delivery, such as public-private partnerships (PPP), and the risks and opportunities of ambitious first-mover ‘pioneer’ projects. The book will be of great interest for scholars and upper-level students of human geography, business and management, as well as policy makers.

Time & Cost Overrun Analysis of Highway Projects Identifying Causes of Cost Overruns and Effective Cost Control Measures of Public Projects in the Free State Province The continued growth of any nation depends largely on the development of their built infrastructures and communities. By creating stable infrastructures, countries can more easily thrive in competitive international markets. Sustainable Infrastructure: Breakthroughs in Research and Practice examines sustainable development through the lens of transportation, waste management, land use planning, and governance. Highlighting a range of topics such as sustainable development, transportation planning, and regional and urban infrastructure planning, this publication is an ideal reference source for engineers, planners, government officials, developers, policymakers, legislators, researchers, academicians, and graduate-level students seeking current research on the latest trends in sustainable infrastructure.

An Analysis of Cost Overruns and Time Delays of INDOT Projects The causes of cost overruns in transportation infrastructure projects has been a topic that has puzzled academics for some time. The state of America’s infrastructure at lower costs than it has in the past. While studies exist that have provided the essential building blocks and frameworks for understanding cost overruns, the majority of studies have an international focus. In this study I aspire to provide greater insight into the potential causes of overrun costs in transportation projects in the United States. Empirical Model: This study uses two linear probability models and two logit models to estimate the relationships between the dependent variable, overrun cost, and two independent variables, implementation length and whether a project is part of a public-private partnership agreement. Models include variables that control for project characteristics and state economic factors. Data: This study draws on data collected by the Federal Highway Administration and state Department of Transportation. From these sources I created a dataset of 48 completed transportation projects. Results: My LPM model suggests every year of project construction increases project overrun costs by more than 7.3 percentage points. My logit model regression results demonstrate that every additional year it takes to implement a transportation project, the likelihood of overrun costs increase by 1.16 times and every additional year of construction length increase the likelihood of overrun costs by 1.45 times. Policy Recommendations: My results suggest the following policy recommendations: (1) reduce implementation length; (2) incentivize P3s; and (3) penalize inaccurate cost estimates.

Time-cost Trade-off Analysis for Highway Construction Projects Boston’s Central Artery/Tunnel Project, a 7.8 mile system of bridges and underground highways and ramps, is the most expensive public works project ever undertaken in the United States. The original cost estimate of $2.6 billion has already been exceeded by $12 billion, and the project will not be completed until 2005, seven years late. The Massachusetts Turnpike Authority (MTA), the public steward of the project, requested that the National Research Council carry out an independent assessment of the project’s management and contract administration practices, with a focus on the present situation and measures that should be taken to bring the project to a successful conclusion. This report presents the committee’s findings and recommendations pertaining to cost, scheduling, and transitioning from the current organization dominated by consultants to an operations organization composed
GCEC 2017 Construction industry is one of the most significant industries that grow rapidly to develop countries. These construction industries facing many problems the most common are delay and cost overrun. However, studies show that in Oman rarely projects are completed within stipulated budget and time. This study is focusing on identification of significant causes affecting construction cost and time in Oman projects. The data of delay and cost overrun factors were collected through questionnaire distributed among the construction experts who involved in the current construction projects in Oman. The survey was carried out by interviewing respondents from consultants, contractors and client’s parties. The collected data were analyzed by using Average Index method for each factor and these factors were ranked based on the index to determine its significance. The findings will help construction industry to avoid and reduce the delay and Cost overrun in future projects.

Large Infrastructure Projects in Germany The process of estimating the cost for the development and delivery of a product, service, or solution can range from simple to highly complex based upon multiple factors including: technology maturity, urgency, geographic location, quantity, quality, availability of resources, hardware and software, systems integration and more. This book provides a comprehensive discussion of cost estimating and contract pricing with extensive use of tools, techniques, and best practices from both the public and private sectors. Key topics of discussion include: Cost estimating methods Cost accounting standards Cost analysis Profit analysis Contract pricing arrangements Price analysis Total ownership cost Earned value management systems

Cost Overruns: What’s Wrong and How to Fix It This book gathers the proceedings of the 1st Global Civil Engineering Conference, GCEC 2017, held in Kuala Lumpur, Malaysia, on July 25–28, 2017. It highlights how state-of-the-art techniques and tools in various disciplines of Civil Engineering are being applied to solve real-world problems. The book presents interdisciplinary research, experimental and/or theoretical studies yielding new insights that will advance civil engineering methods. The scope of the book spans the following areas: Structural, Water Resources, Geotechnical, Construction, Transportation Engineering and Geospatial Engineering applications.

Understanding Infrastructure Project Costs: The Effects of Project Implementation Length and Public-Private Partnerships on Surface Transportation Project Overrun Costs The study presents an insight into the present scenario on Indian highways including cross continental comparison with the neighbouring China as well as developed nations such as USA and Europe. The poor quality of road infrastructure coupled with heavy congestion on important national highways has led to initiation of National Highway Development Project (NHDP) was discussed in detail in the sub section background of study. The wide prevalence of delays in the implementation of highway projects under NHDP has necessitated the present study on time and cost overruns. Regression analysis was carried out on the ongoing highway projects using SPSS computer program and mathematical equations were derived between various project parameters to portray the behavior of time and cost overruns. Delay Index model incorporating the various causes of delay was evolved for estimation of time overruns and for predicting the future outcomes. Certain innovative suggestions such as beneficiary participation and auctioning of highway projects were aired for the sound implementation of NHDP. Strategies for future implementation such as project packaging, appropriate mix of BOT were also deliberated.