Book Review

Managing Giga Projects: Advice from Those Who've Been There, Done That

Galloway, P. D .,Kris, P. E., Nielsen, R., and Dignum, j. L., ASCE Press, Reston, Virginia, 2013, ISBN 978-0-7844-1238-1 (Hard cover, 480 pp) USD 120, E-book (Forthcoming) ISBN 978-0-7844-7693-2 USD120.00 (PDF) .

The objective of this book is to discuss construction management aspects of expectations, complexity, risk and effective reactions to bad luck in "giga" projects ($10 billion+). The contributing authors represent financiers, owners, program managers, consultants, designers, contractors, and legal counsel who have extensive experience with these projects.

While most construction managers may never work with projects of this magnitude, the issues presented and the discussions that follow are applicable to any size project. It addresses how to minimize the negative consequences of uncontrollable events such as credit crises, governmental actions or latent ground conditions.

The book is comprised of twenty project case studies, from globally diverse places such as the United Kingdom, Brazil, China, Australia, and the United States. In the first part, lessons learned and best management practices are discussed. The second part of the book discusses specific projects gathered from these places.

Summary lists of strategies to adopt listed across chapters follow an intuitive flow. The first three chapters (of 19) discuss keystone issues of governance, risk management and finance. The last chapter discusses the ultimate "giga" project: Nuclear.

Critical management topics discussed in all the case studies, any of which could be the single reason for project failure, include:

1. The ricochet effect
2. Controlling non-participatory stakeholders' expectations
3. Controlling cultural differences
4. Controlling cost creep
5. Controlling schedule creep
6. Controlling information overload

Many other strategies are included, such as the crucial need to plan for most contingencies and ensuring that your staff has wide enough experience to trouble shoot most problems.

This book would be one to consider for graduate university courses in construction and civil engineering. Students mastering its lessons will be better prepared for a life's work in construction. Starting this learning early such as in undergraduate courses makes sense since it takes many years to gain the experience to manage projects of any size.

For any professional who will be managing a giga project, this book is one to study to refresh or expanding thinking.

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