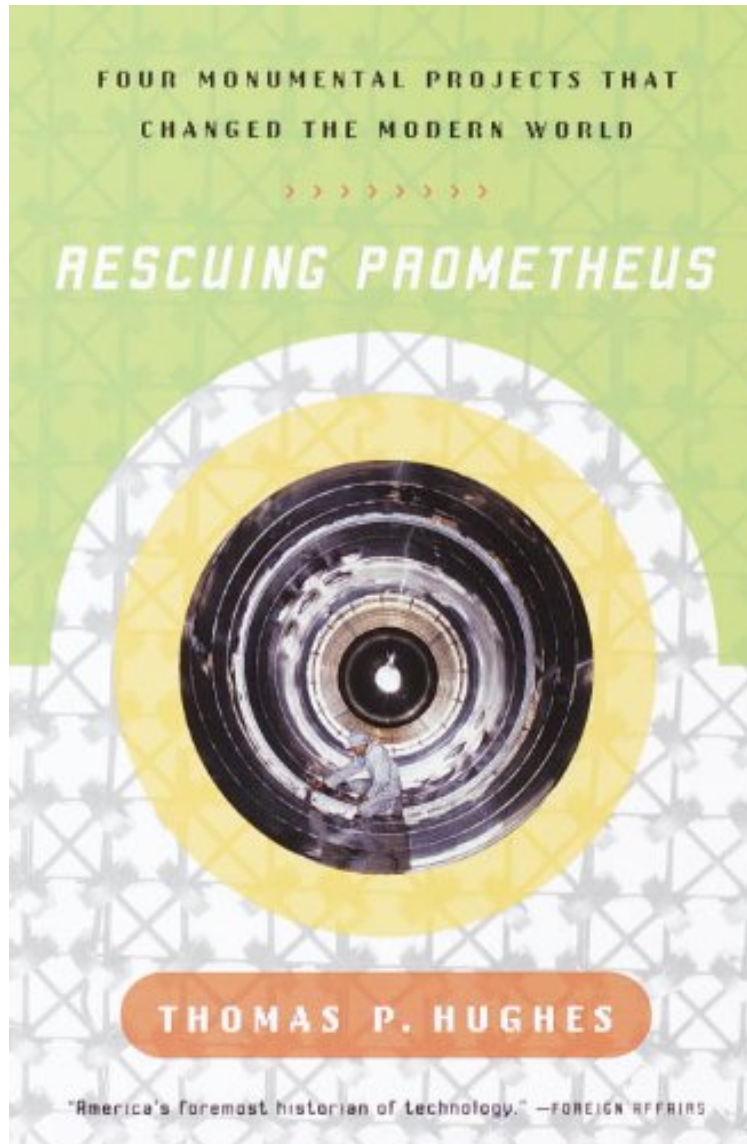


[Ebook free] Rescuing Prometheus: Four Monumental Projects that Changed Our World

Rescuing Prometheus: Four Monumental Projects that Changed Our World

Thomas P. Hughes

*ePub | *DOC | audiobook | ebooks | Download PDF*



DOWNLOAD



READ ONLINE

#1114692 in eBooks 2011-01-05 2011-01-05 File Name: B004FGMCOM | File size: 34.Mb

Thomas P. Hughes : Rescuing Prometheus: Four Monumental Projects that Changed Our World before purchasing it in order to gauge whether or not it would be worth my time, and all praised Rescuing Prometheus: Four Monumental Projects that Changed Our World:

6 of 6 people found the following review helpful. Precursor to software programming By A Customer Rescuing Prometheus provides eyewitness detail into the people, thought processes, decision highlights of 4 large, monumental projects in system engineering. Along the way, as a side-effect, these events created the world of software

programming. When reading this book in combination with other books such as "Digital Apollo" and the "History of the MIT Flight Computer", one gains a deep understanding of what is and why it is. If you need this grounding, this is an excellent book. I think its rating depends on what you want from the book. For example, I have read hundreds of books on the beginning of the Arpanet. This book goes 10 years earlier and tells the story that is never told. Is that helpful? Of course it is. 11 of 27 people found the following review helpful. Boring telling of an interesting tale By Douglas Turnbull Hughes has picked out an interesting subject to write a book about--namely the rise of large scale technological projects in the post WWII world. Unfortunately, I don't think he's enough of a writer to bring it off. The best popular science/history hybrids bring you a sense of the excitement of the technological advance, a new knowledge of the problems faced and solutions found, and an insight into the characters and personalities behind the science. Hughes doesn't really do any of this. The book is extremely dry and reads like a laundry list of facts rather than a compelling narrative. None of the characters ever come alive. And for the most part, I didn't feel he did a very good job presenting the technological challenges faced. I think he perhaps tried to do too much with the book, telling four stories instead of one or two in the depth required to really draw the reader in. I really wanted to like this book, especially as a former worker in operations research/systems analysis. But unfortunately, Hughes doesn't deliver on the promise that the subject has. 0 of 1 people found the following review helpful. and represents excellent value for the money By Customer Book was as advertised, arrived as forecast, and represents excellent value for the money. The book is a good addition to my reference library.

"A rare insight into industrial planning on a huge scale...Excellent." --The Economist Rescuing Prometheus is an eye-opening and marvelously informative look at some of the technological projects that helped shape the modern world. Thomas P. Hughes focuses on four postwar projects whose vastness and complexity inspired new technology, new organizations, and new management styles. The first use of computers to run systems was developed for the SAGE air defense project. The Atlas missile project was so complicated it required the development of systems engineering in order to complete it. The Boston Central Artery/Tunnel Project tested systems engineering in the complex crucible of a large scale civilian roadway. And finally, the origins of the Internet fostered the collegial management style that later would take over Silicon Valley and define the modern computer industry. With keen insight, Hughes tells these fascinating stories while providing a riveting history of modern technology and the management systems that made it possible. From the Trade Paperback edition.

.com Building the pyramids was child's play compared with designing the Internet and other highly complex 20th-century projects. So many individuals and organizations had to come together to successfully build these more recent monumental structures that new ways of managing complex undertakings had to be invented on the spot. Eminent technology historian Thomas P. Hughes explores the development of systems engineering in Rescuing Prometheus, which focuses on four projects that are bewildering in their enormity, yet were completed successfully. The SAGE air-defense project transformed computers from mathematical labor savers into decision-makers by proxy, and spawned the first elements of "postmodern management." Then, the Atlas missile program brought together the disparate elements of the military-industrial-university complex and demanded new, less hierarchical control over individual subprograms. This new way of thinking brought engineers such as Dean Wooldridge and Simon Ramo to prominence. Hughes follows these developments in systems engineering closely as they were applied to ARPANET and Boston's Central Artery/Tunnel Project. Along the way those projects encountered both the simplifying synergy and maddening political slowdowns involved with not just a handful of problems, but entire communities of messy problems. Readers discouraged by seemingly inflexible barriers to solving complex social and technical problems can take heart after reading Rescuing Prometheus. This book shows that while we still can't fix the world, we're building better tools to do so every day. --Rob Lightner From Publishers Weekly Hughes, whose American Genesis was a Pulitzer finalist, believes that between 1950 and 1970 the military/industrial/ university complex played a far more innovative and beneficial role than is generally acknowledged. In fact, the author likens America's "technological transformations" as a "second creation; the first was mythologized in the book of Genesis." He focuses on four massive cooperative ventures: The first, Semi-automatic Ground Environment (SAGE), a collaboration involving MIT and the U.S. military, built a computer- and radar-based air-defense system. Next, University of Pennsylvania professor emeritus and historian of science Hughes examines the Atlas project, which produced America's first ICBM; Boston's Central Artery/Tunnel Project, a traffic-unclogging system of highways, tunnels and bridges scheduled for completion in 2004; and the Defense Department-funded ARPANET, an interactive computer-based information network that paved the way for the Internet. In fact, this is not just about the evolution of contemporary technology; it's also about how complex coalitions of scientists, engineers, managers and others paved the way for changes in corporate management and development. Whether the culture of these very specialized projects could make the leap to the society at large seems debatable. But this detailed study highlights the underappreciated role of managerial prowess, rather than pure science or engineering, in determining the success of large-scale technological projects. Photos. Editor, Dan Frank. Copyright 1998 Reed Business Information, Inc. From Library Journal In the latter half of the 20th century, we have

grown accustomed to "bigger and better." Hughes (history and sociology of science, Univ. of Pennsylvania; *American Genesis: A Century of Invention and Technological Enthusiasm, 1870-1970*, LJ 3/15/89) shows that this was possible through systems engineering, which was an outgrowth of "the establishment" or, more formally, the "military-industrial-university complex." Here Hughes explores the development of systems engineering and its impact on management. To put some perspective on the modern engineering process, he uses the example of the ancient pyramids. Even today, their construction is almost unfathomable. Using contemporary systems standards, the pyramids would be fast-tracked, incorporating a vast array of mechanicals (plumbing, heating, cooling) and passing "go" with environmental impact statements and competing political pressures. Hughes's historical examples—SAGE, ISBM, ARPANET, and the Boston Central Artery/Tunnel—are worthy vehicles for demonstrating systems engineering and transdisciplinary involvement in bringing complex projects to fruition. This thoughtful and original book is appropriate for academic and larger public libraries.—Steven Silkunas, Southeastern Pennsylvania Transit Authority, Philadelphia
Copyright 1998 Reed Business Information, Inc.