

## Good Reads About Systems

*Recommendations from SERC leadership, researchers, and community*

Marcus Glowasz, [\*Leading Projects with Data: Overcome Behavioral and Cultural Barriers to Unlock the Hidden Value of Data in Projects\*](#)

In an era of rapid change and an ever-increasing flow of information, data is a highly-valued asset. The use of data and analytics significantly improves project performance, but it requires a cultural foundation that connects and engages people, enables evidence-based thinking, and facilitates new capabilities. Organizations are transforming business areas into data-driven practices to make better and faster decisions and respond accurately to fast-changing market behaviors and demands. Glowasz argues the need to employ data and analytics for improved project performance, including actionable insights to drive the behaviors and culture shifts necessary to successfully transition to data-informed project delivery practices.

Bent Flyvberg and Dan Gardner, [\*How Big Things Get Done: The Surprising Factors That Determine the Fate of Every Project, from Home Renovations to Space Exploration and Everything In Between\*](#)

Nothing is more inspiring than a big vision that becomes a triumphant, new reality. Think of how the Empire State Building went from a sketch to the jewel of New York's skyline in twenty-one months, or how Apple's iPod went from a project with a single employee to a product launch in eleven months. These are wonderful stories, but most of the time big visions turn into nightmares. In fact, no less than 92% of megaprojects – projects that are highly complex, engage many diverse stakeholder communities, and have a budget of over \$1 billion or more – come in late, over budget, or both. Why? Understanding what distinguishes the triumphs from the failures has been the life's work of Oxford professor Bent Flyvbjerg, dubbed "the world's leading megaproject expert." This book identifies the errors in judgment and decision-making that lead projects to fail and the research-based principles that will help you succeed with yours.

Irene Bratsis, [\*The AI Project Manager's Handbook: Develop a Product that Takes Advantage of Machine Learning to Solve AI Problems\*](#)

This practical guide to applied artificial intelligence will help product managers working with AI put their knowledge to work. This book covers the key points for driving product development and growth in the AI industry. From understanding AI and machine learning to developing and launching AI products, it provides insights on the strategies, techniques, and tools you need.

The book opens with a foundation of the concepts most relevant to maintaining AI pipelines, then expands to discuss building an AI-native product, and ends with practical advice on integrating AI into existing products. Key points covered include the types of AI, how to integrate AI into a product or business, and the infrastructure to support the exhaustive and ambitious endeavor of creating AI products or integrating AI into existing products. It contains practical knowledge of managing AI product development processes, evaluating and optimizing AI models, and navigating complex ethical and legal considerations associated with AI products. Enriched by real-world examples and case studies, this book will help you get ahead of the curve in the rapidly evolving field of AI and ML.

Carol Sanford, [\*No More Gold Stars: Regenerating Capacity to Think for Ourselves\*](#)

“From resistance to change to refining the art of leadership theory, the modern practice for motivating individuals has ensured that humans no longer think for themselves or question what they are told. The popular psychology of using rewards, punishment, and feedback undermines not just our personal growth but the very fabric of life and living systems.” Sanford proposes an alternative approach to unlock a future of profound creativity and success. Drawing lessons from First Nations cultures, ancient wisdom, and quantum science, Sanford offers how we influence everything from personal decisions to cultural change. This book challenges prevailing theories, promotes a holistic understanding of education and change, and redefines the way we approach our work and the results we seek.

Highlights of the book include:

- Six disciplines fostering independent thinking — many of which may be familiar to systems thinking practitioners
- An illustrative case that highlights transformative change in businesses, communities, and cultures
- Exercises to help readers explore innovative ideas
- Practices for effective change leadership
- A revolutionary approach to challenging and transforming the old system of conditioning and control

Institute for Apprenticeships and Technical Education, UK, “[Systems Thinking Practitioner](#)”

This standard from the IfATE in the UK provides a detailed description of what it means to be a systems thinking practitioner and the values that such practitioners provide, highlighting that systems thinking practitioners, “Support decision-makers in strategic and leadership roles to understand and address complex and sometimes even ‘wicked’ problems through provision of expert systemic analysis, advice and facilitation.” This provides insight from a professional society on the knowledge, skills, activities, and behaviors of effective systems thinkers, as well as a rubric for assessing these. As all systems engineers should be systems thinkers, this provides useful insight for all systems professionals to consider for themselves as individuals and for the teams they work on.