

PM WORLD BOOK REVIEW ¹



Book Title: ***The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments***

Author: **Dr. Prasad Kodukula and Guz Vinueza**

Publisher: J. Ross Publishing

List Price: \$59.95 Format: Hard cover, 334 pages

Publication Date: September 2025 ISBN: 978-1604272055

Reviewer: **Anzar Hasan** Review Date: December 2025

Introduction

The integration of artificial intelligence (AI) has initiated a new era in project management, fundamentally altering how projects are conceived and executed. *The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments*, authored by Dr. Prasad S. Kodukula and Guz Vinueza, serves as an essential guide for project and portfolio management professionals seeking to leverage these tools. The book focuses exclusively on the practical applications of Generative AI (Gen AI), bridging the gap between theoretical capabilities and actionable implementation, thereby moving beyond the *what* of AI's possibilities to the *how* of its application in managing projects.

It provides a comprehensive roadmap for utilizing generative tools across both traditional waterfall and modern agile environments, addressing the most common industry practices. By presenting over 50 practical use cases and prompts, this resource demonstrates how Gen AI can streamline workflows, automate critical tasks, and enhance decision-making and project performance, making it an invaluable guide for both seasoned professionals and newcomers to the field.

Overview of Book's Structure

The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments, authored by Dr. Prasad S. Kodukula and Guz Vinueza, serves as an essential, practical guide for project professionals. The book focuses exclusively on the practical applications of Generative AI (Gen AI) in project and portfolio

¹ How to cite this work: Hasan, A.. (2025). The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments, book review, *PM World Journal*, Vol. XIV, Issue XII, December.

management, providing over 50 actionable use cases and prompts to enhance decision making, streamline processes, and automate critical tasks in both traditional waterfall and modern agile environments.

The comprehensive guide is organized into four main sections: AI foundations, AI in Portfolio Management (PPM), AI in a Waterfall Environment, and AI in an Agile Environment. Key concepts include the Generative AI Engagement (GAE) principles and the structured, five-step PRIME methodology (Prepare, Relay, Inspect, Modify, Execute), which provides a blueprint for effective interaction with Gen AI tools. The authors emphasize that while AI enhances efficiency in areas like risk management, cost estimation, and backlog creation, its outputs must always be treated as initial drafts requiring critical human oversight, and the accuracy of results is fundamentally dependent on providing high-quality, project-specific data, ideally using a Project Input Folder (PIF).

Highlights

The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments, authored by Dr. Prasad S. Kodukula and Guz Vinueza, stands out as an essential, practical guide for project and portfolio management professionals. The book's primary highlight is its dedicated focus on moving beyond the "what" of AI's capabilities to the "how" of its application, offering an indispensable roadmap for integrating artificial intelligence (AI) into daily project tasks. It provides a transformative perspective on how Generative AI (Gen AI) can enhance decision making, streamline processes, automate critical tasks, and elevate project management to new levels of efficiency. The resource is comprehensive, detailing how to utilize these generative tools across both traditional waterfall and modern agile methodologies. This practical approach is underscored by the inclusion of over 50 use cases and prompts aimed at boosting productivity and competence in execution.

A core highlight is the introduction of two proprietary frameworks designed to govern effective interaction with AI: the Generative AI Engagement (GAE) principles and the practical, structured PRIME methodology (Prepare, Relay, Inspect, Modify, Execute). The book systematically applies these frameworks across all major domains, dedicating sections to AI in Portfolio Management (PPM), detailing its application in strategic alignment, prioritization, and optimization, as well as its use in the sequential phases of the Waterfall Environment (initiation, planning, execution, and closeout) and the iterative practices of the Agile Environment (Scrum artifacts and ceremonies). Key applications demonstrated include automating the Work Breakdown Structure (WBS), refining risk management strategies, performing Earned Value Management (EVM) calculations, and streamlining Scrum backlog creation.

Crucially, the handbook is designed for a broad audience, serving not only seasoned professionals but also providing a primer on core project management essentials. By empowering project managers to delegate routine administrative tasks to AI (such as generating reports and planning documentation), the book facilitates a shift in focus

toward project leadership and strategic endeavors. However, the authors consistently stress that human oversight remains paramount: AI outputs must always be viewed as initial drafts requiring critical inspection and refinement by the human professional. The ultimate value of the tool, therefore, is determined by the project leader who wields it.

Highlights: What I liked!

The very unique perspective offered by *The Project Management AI Handbook* lies in its dual commitment to providing practical, actionable methodologies for leveraging Generative AI (Gen AI) while simultaneously establishing a formal, human-centric framework for engaging with this technology.

Instead of merely discussing the vast theoretical capabilities of AI, the book distinguishes itself by offering a bold focus on the "how"—showing real-world applications of Gen AI rather than just hyping its possibilities. This perspective is designed to transcend the theoretical, providing an indispensable roadmap for integrating artificial intelligence (AI) into daily project tasks across both waterfall and agile environments. This focus is manifested through the inclusion of over 50 practical use cases and prompts aimed at boosting productivity and execution competence.

Furthermore, the handbook introduces two proprietaries, interlocking frameworks for ethical and effective human-AI collaboration:

1. **Generative AI Engagement (GAE):** This is a new concept emphasizing a conversational, iterative, and ethical partnership between human intuition and AI's computational power.
2. **PRIME Methodology (Prepare, Relay, Inspect, Modify, Execute):** This five-step process serves as the practical blueprint for operationalizing GAE, ensuring that project managers interact with AI systems purposefully, critically evaluating the output, and iteratively refining prompts to achieve optimal results.

Crucially, the authors champion the concept of the Project Input Folder (PIF) as the cornerstone of effective engagement. Recognizing that generic Large Language Models (LLMs) lack project-specific context, the PIF is introduced as a structured repository of essential project documents (like risk logs, business cases, and stakeholder communications) that, when provided as input, transforms the AI from a broad information resource into a tailored, contextually relevant project tool. This addresses the challenge of Gen AI reliance on generalized training data.

Finally, the book's perspective is grounded in the non-negotiable principle that human oversight remains paramount; AI outputs must always be treated as "initial drafts" requiring critical inspection and refinement by the human professional. This mandate for critical evaluation, integrated directly into the Inspect step of the PRIME

methodology, ensures that decision-making remains balanced, blending AI's technological strengths with the irreplaceable value of human judgment and expertise

Who might benefit from the Book

The Project Management AI Handbook benefits a broad and diverse audience, including project and portfolio management professionals—from newcomers to seasoned experts—seeking actionable strategies for leveraging Generative AI (Gen AI). Business leaders and executives will find it a must-read to stay ahead in the AI-driven future and empowering managers to delegate routine tasks and focus on strategic leadership. Its detailed focus on daily applications means specialized roles like schedulers, cost estimators, planners, controls professionals, and team members will enhance their productivity. Additionally, the handbook serves as a primer on core PM disciplines, making it a valuable resource for academics, trainers, and students.

Conclusion

The Project Management AI Handbook: Leveraging Generative Tools in Waterfall and Agile Environments is a profoundly timely and essential resource that successfully addresses a critical void in contemporary project management literature. Authors Dr. Prasad S. Kodukula and Guz Vinueza masterfully deliver an indispensable roadmap by dedicating the book exclusively to the practical application of Generative AI (Gen AI), focusing boldly on the "how" of integration rather than simply enumerating AI's vast theoretical capabilities. The book's comprehensive utility, showcased through over 50 practical use cases and prompts, provides actionable strategies that are fully relevant across both traditional waterfall and modern agile environments.

The lasting relevance of this handbook transcends current technology trends through the introduction of two proprietary frameworks: the Generative AI Engagement (GAE) principles and the structured, five-step PRIME methodology (Prepare, Relay, Inspect, Modify, Execute). These frameworks serve as a durable blueprint for effective, ethical, and iterative human-AI collaboration, ensuring the content remains relevant as AI inevitably advances. Furthermore, the book provides strategic depth by applying Gen AI to Project Portfolio Management (PPM), enhancing decision-making in areas like strategic alignment, prioritization, and optimization. By automating administrative and quantitative tasks—such as generating risk registers, calculating Earned Value Management (EVM) metrics, and creating sprint backlogs—the handbook serves as a strategic blueprint enabling project professionals to pivot their focus toward crucial leadership and strategic endeavors.

Crucially, the authors continually and unequivocally stress that AI outputs must be regarded merely as initial drafts that require critical inspection and refinement by the human professional. This non-negotiable emphasis on human oversight and expertise ensures that strategic decisions remain balanced, reflecting the authors' core philosophy that AI is an ally and co-pilot, not a replacement, positioning the project manager as the undisputed captain. Ultimately, this book is an invaluable resource for

anyone seeking to harness AI's transformative power to enhance efficiency, drive innovation, and redefine project success in the augmented future.

For more about this book, go to: <https://jrosspub.com/catalog/business-default-category/project-program-management/project-management-ai-handbook/>

About the Reviewer



Anzar A. Hasan

Texas, USA



Summary: Human-in-the-Loop | Speaker | Author | IEEE Senior Member | Technology Leader Focused on AI Security & Governance

Anzar A. Hasan is a seasoned technology and cybersecurity leader with more than four decades of impact across telecom, energy, finance, and emerging technologies. His career spans national-level digital transformation programs, global banking security architecture, and cutting-edge AI governance initiatives that shape how modern institutions build trust in intelligent systems.

He has delivered keynote sessions at major international conferences, contributed directly to global AI standards such as ISO/IEC 42001 and 23894, and advised governments and Fortune 500 enterprises on secure, ethical, and resilient technology adoption. From modernizing Pakistan's national telecom backbone with World Bank programs to architecting quantum-resistant AI security frameworks in the U.S., his work consistently blends deep technical mastery with strategic foresight.

A former Vice President at Wells Fargo, he pioneered blockchain-based AI audit trails, enterprise AI risk quantification models, and large-scale analytics modernization. His leadership extends across academia, global policy circles, and executive boards—including IEEE, Gartner Peer Community, and the American Cyber Security Association.

Anzar is also an innovator at heart, holding a patent for a mobile AI-powered retinal diagnostic system and mentoring the next generation of cybersecurity and AI professionals through global workshops and advisory roles.

Above all, he stands out for bridging complex technologies with practical governance, helping organizations adopt AI responsibly, securely, and with measurable business value.

Email address, if desired: Anzar.hasan@arshi.ai

Editor's note: This book review was the result of a partnership between the PM World Journal and the [PMI Dallas Chapter](#). Authors and publishers provide the books to the PM World Journal's managing editor; books are delivered to the PMI Dallas Chapter, where they are offered free to PMI members to review; book reviews are published in the PM World Journal and PM World Library. PMI Dallas Chapter members can keep the books as well as claim PDUs for PMP recertification when their reviews are published.

If you have read a good PM-related book recently and would like to publish a book review, or if you are an author or publisher of a project management-related book, and would like the book reviewed through this program, please contact Editor@pmworldjournal.com.