PM World Journal *(ISSN: 2330-4480)*
Vol. XIV, Issue VIII – August 2025
www.pmworldjournal.com

Advisory

How AI can help project managers improve project performance: Part 1
by Yogi Schulz

How AI can help project managers improve project performance: Part 1 [1]

Yogi Schulz

The work of project managers is challenging because they must juggle many varied responsibilities. Artificial Intelligence (AI) is a new tool that creates many opportunities for project managers to improve their performance and that of the teams they manage.

AI helps project managers improve project performance by:

- Freeing project managers to focus on sensitive tasks that require tact and diplomacy, such as issue escalations and stakeholder negotiations.
- Automating documentation tasks, which often receive insufficient attention because they are boring, to reduce effort without sacrificing quality.
- Identifying patterns to illuminate risks for mitigation before they become expensive realities.
- Performing more extensive technology research than the team has the capacity to conduct.
- Forecasting budget and schedule variances early enough that interventions can be successful.
- Reducing uncertainty in effort estimates to produce more accurate schedule and cost projections.

View AI not as a replacement for human leadership but as an augmentative force—enhancing, rather than supplanting human judgment, creativity, collaboration, and ethical responsibility.

AI presents a fantastic opportunity for project managers to lead both the transformation of the project profession and the digital transformation of their industries.

Because AI is a shiny new tool with a lot of promise, it's receiving a lot of attention, hype and enthusiasm. It's easy to overlook that AI is no more than an additional tool in the project

---

[1] How to cite this article: Schulz, Y. (2025). How AI can help project managers improve project performance: Part 1, *PM World Journal*, Vol. XIV, Issue VIII, August.

PM World Journal (ISSN: 2330-4480)
Vol. XIV, Issue VIII – August 2025
www.pmworldjournal.com   Advisory

How AI can help project managers
improve project performance: Part 1
by Yogi Schulz

manager's toolkit. The use of AI should never supplant human accountability for final decisions.

The work of project managers can be described in many ways. This article examines how project managers can leverage AI to enhance their performance, particularly in terms of speed and accuracy, across the following aspects of their role:

1. Creating documents
2. Managing scope
3. Estimating and monitoring the schedule
4. Managing the budget
5. Supervising resources
6. Simplifying procurement
7. Managing risks
8. Overseeing communication
9. Engaging stakeholders
10. Achieving quality

This month's article examines the first five topics. Next month's article will discuss the remaining topics.

Creating documents

Project managers and the teams they manage create numerous documents throughout the project lifecycle. Documents are an inescapable part of sharing information and achieving a consensus on the multitude of topics every project encounters. Examples include:

- Status reports.
- Management presentations.
- Requirements documents.
- Design documents.
- Test result reports.
- Issue and risk analysis reports.

The challenges associated with creating and managing documents include:

- The significant effort consumed by writing, editing and proofing documents.
- The irritation caused by problems with spelling, grammar, sentence structure and word choices.
- The effort required to verify facts and compile citations is substantial.

PM World Journal (ISSN: 2330-4480)
Vol. XIV, Issue VIII – August 2025
www.pmworldjournal.com   Advisory

How AI can help project managers
improve project performance: Part 1
by Yogi Schulz

- The risk of mismanaging versions of documents, especially when multiple authors and reviewers are involved.

AI can help manage documents by reducing the effort to:

- Produce lengthy, detailed drafts based on short text prompts.
- Check spelling, grammar, punctuation and sentence structure.

Managing scope

Project managers carefully manage scope to ensure the project delivers on its goal and objectives.

The challenges associated with managing scope include:

- Minimizing the ambiguities that are associated with describing scope.
- Preempting scope creep that will inflate costs and extend the planned schedule.
- Recognizing and reconciling the diverging scope interpretations that stakeholders hold.

AI can help manage scope by reducing the effort to:

- Define the scope in greater detail.
- Suggest out-of-scope functionality and features so these can be agreed to explicitly.
- Document and estimate scope proposals comprehensively with minimal effort, as they will be deferred for future consideration.

Estimating and monitoring the schedule

Project managers monitor the estimation and performance of tasks to ensure that the planned project schedule is achieved to the greatest extent possible.

The challenges associated with monitoring the project schedule include:

- The risk that many minor delays will extend the planned schedule, disappoint stakeholders, and increase project costs.
- The likelihood that underestimated task effort, misunderstood task relationships and unplanned tasks will create a schedule overrun.

AI can help manage the schedule by reducing the effort to:

PM World Journal *(ISSN: 2330-4480)*
Vol. XIV, Issue VIII – August 2025
www.pmworldjournal.com   Advisory

How AI can help project managers
improve project performance: Part 1
by Yogi Schulz

- Support the estimation of task effort.
- Track actual task effort, percent complete and effort to complete estimates to calculate variances.
- Calculate the project completion date regularly.
- Forecast a realistic range of project completion dates based on the distribution of error terms in the effort-to-complete estimates for each task.

Managing the budget

Project managers monitor expenditures to ensure that the approved budget is adhered to as closely as possible.

The challenges associated with managing the project budget include the risk that one or more of the following events will increase the actual project cost beyond the budget:

- Unplanned spending.
- Estimating inaccuracies.
- Supply chain disruption.
- Inadequate subcontractor performance leading to cost overruns.

AI can help manage the budget by reducing the effort to:

- Track detailed actual expenditures against the budget to calculate variances.
- Calculate the project cost at completion on a regular basis.
- Forecast a realistic range of project cost at completion based on the distribution of error terms in the budget amounts for each budget line item.
- Project when long lead time items must be ordered more accurately.

Supervising resources

Project managers supervise project resources. On most projects, the cost of staff is the largest cost item. Therefore, project managers allocate a significant amount of time to leading the project team to maintain performance and quality.

The challenges associated with managing resources include:

- Unplanned staff turnover.
- Insufficient skills and experience relative to the required work.
- Significant variation in productivity across individual team members.
- Calming annoyed or frustrated team members.

PM World Journal (ISSN: 2330-4480)
Vol. XIV, Issue VIII – August 2025
www.pmworldjournal.com   Advisory

How AI can help project managers
improve project performance: Part 1
by Yogi Schulz

AI can help manage resources by greatly accelerating:

- Researching solutions to problems.
- Developing draft designs, documents and software.

AI creates numerous opportunities for project managers to enhance their performance and that of the teams they manage, ultimately delivering projects more successfully.

About the Author

Yogi Schulz

Calgary, Alberta, Canada

Yogi Schulz has over 40 years of experience in Information Technology across various industries. Yogi works extensively in the petroleum industry, selecting and implementing financial, production revenue accounting, land & contracts, and geotechnical systems. He manages projects arising from changes in business requirements, leveraging technology opportunities, and mergers and acquisitions. His specialties include IT strategy, web strategy, and systems project management.

Mr. Schulz regularly speaks to industry groups and writes a regular column for IT World Canada and Engineering.com. He has written for Microsoft.com and the Calgary Herald. His writing focuses on project management and IT developments of interest to management. Mr. Schulz served as a member of the Board of Directors of the PPDM Association for twenty years until 2015. Learn more at https://www.corvelle.com/. He can be contacted at yogischulz@corvelle.com

His new book, co-authored by Jocelyn Schulz Lapointe, is "A Project Sponsor's Warp-Speed Guide: Improving Project Performance."