

Artificial Intelligence (AI) Influence in Project Management ¹

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ABSTRACT

Today, Digital transformation is disruptive in every aspect of life. It's not a wonder to see all the human intensive works are being replaced by robots. Companies are looking for various ways to enhance the performance, accountability, reliability and low-cost options. Artificial Intelligence (AI) has come a long way, and in most cases its helpful to solve the current needs of human being. Many industries have focused to build the AI enabled Project Management tools to help project managers to manage their project. Technical enthusiastic are looking ways to automate tedious task of management which is essential for project success. So far, it looks promising and looks like we are going forward to see other major initiatives in this area.

Keywords: Project Management, Artificial Intelligence, Digital Transformation, Agile

INTRODUCTION

Before AI enabled tools, it was nightmare for project managers to document everything and keep project on track. Co-ordination and doing alignment among the stockholders were difficult. Traditional project management require co-ordination, follow up and many meetings to update the stockholders on project status. One project required many resources to manage project. There used to be individual project manager to manage one module of the project. Lots of intervention/involvement needed from the PMO team to keep project on track.

The role of Artificial Intelligence has evolved in the recent past. Artificial Intelligence enabled tools coming handy for project managers to manage people and projects, it helping to keep the projects on time, on budget, and people on task. These tools are single source of truth and allowing you to manage, Resources, Timeline, Dependencies, Cost and send reminders to responsible parties as required to complete the task. It's helping in various ways to mitigate the project risks. AI has enabled the project resources to update their task status, change the status, post questions as required, which has minimized the co-ordination task significantly. Various studies as shown that Project managers spends more than half of their time on administrative tasks such as dealing with check-ins and managing updates.

Does it mean AI will replace Project managers (PM)? I don't think so. There are various ways AI can help reduce the project managers task for record keeping and sending reminders, updating status, and notifying stack holders. There are other tasks, like,

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influencing, negotiating and encouraging to work to achieve the common goal cannot be ignored. Work experience, human influence and encouragement plays a vital role in project success.

Advantages of using AI tools for Project Management

Integration: AI automation tools have enabled opportunity to integrate multiple platform tools for reporting and status tracking of the whole project. By using these tools, we can look the resource allocations, current status of task, and send notification if any risk occurs. It also helps us to send reminders to respective team members to mitigate risk. We can even integrate the project management tools to the source controls, so it can be tracked in real time.

Documentation: Driving projects requires lots of documentation. AI tools helps us to draft document templates, collect data from various systems and helps us to create documentations for successful projects. It also keeps some repetitive documentation handy to use as needed.

Reporting: Project management tools made reporting easy, we can check current status of the work on fly. As soon as we complete our task, it shows up in the report and we don't have to spend additional time to make reports. We can also customize reports based on individual needs.

Forecasting: We can use AI tools for the resource forecasting, budget, risk and allocation. Again, it gives us opportunity to use resources at optimum capacity. Ultimately it adds up to the company growth and profit sharing.

Predictive Analysis: AI tools enables us to create the future models, based on our learnings. Data is King to leverage AI. Data helps us to create right models. More the merrier. So, when we are working in the current projects, these tools are collecting all these data to make tool smarter and will help us in the long run to make decisions. It will enable us with data backup to propose the project plans based on our past projects.

Budgeting: We can use these tools for project budget and forecasting. This also helps to keep projects under budget, highlight if any risks on spending's. We can track whole project budget using he tool and can be useful for audit.

Resource Allocation: We can allocate resources and employees on the project using PM tool. It will save to from duplicate allocation. Also, we can track resources using these tools and find the right skillset based on the past projects.

Reminders and Notifications: We can set reminders and notifications based on our project criteria. It helps PM's to alleviate the pain of multiple follow up and task gets required attention.

Approvals and Workflow: It's easy to manage workflow and approvals for the project works inside Ai enabled tools. It sent notification and reminders for approval as well. Less error prone and faster way of communication channel.

Assets Management: We can manage all the digital assets as required in these tools. I also allow us to manage versions and don't require addition efforts to do it. Earlier we used to have various tools for managing all these and required different skillsets.

Risk Mitigation: Overall, it mitigates the risk and keep project on track. As soon as any discrepancies arises, we get notifications and has way to audit the system to fix the issues. It minimizes risk of failing project. We will know beforehand if any issues in the project.

Certain things Project Managers do better than AI tools

Influence: PM can influence the team to complete the task in various ways. He plays role of a leader. If you make influence in right way, you can make whole team agree to achieve common goal. No doubt, when whole team perform, we get better deliverables and successful project.

Negotiation: In certain point of time, you need to do negotiation to to get the work done. AI tools are good for reminders and follow up but certain points of time you need to have discussions to understand the challenges or learn about good things about project. Regular touch point will allow you to make modification in the plan if need to set up the right expectation and deliverables timeline.

Motivate: Good leaders motivate their team to get the work done. Its human thing, people need to see the bigger picture or output of the work they are participating on. If your team is motivated to achieve the common goal, you have half the battel.

Fill out Gaps: There are always some uncertainty when you start the project, PM fill out the gaps, as we make progress in the project, we figure out certain additional task or solution. PM plays that role to keep looking to figure out solutions while whole team has their dedicated task.

Human Touch: We cannot discount the human touch aspect when we are dealing with humans. Humans are social animal. We want to work with each other. A good PM help team to connect and find out solution in needs and bring whole team together for celebration after project closer.

Helping to Set the AI Enabled PM Tool: We need skilled PM to set up the PM tool first time to manage project on it. it's important to feed the system with right information to get right results. It's a tedious task. We may need a technical person to complete it but PM will be in-charge of it and responsible to provide all the information to setup the system before project start. Also, it will require adjustment if we are changing the plan. Some tools are getting advanced and doing self-correction if there is change in the plan.

Relative Analysis:

Characteristics	PM's Advantage	AI Tool's Advantage
Influence	✓	✗
Negotiation	✓	✗
Motivate	✓	✗
Fill out Gaps	✓	✗
Human Touch	✓	✗
Helping to Set the AI Enabled PM Tool	✓	✗
Integration	✗	✓
Reporting	✗	✓
Forecasting	✗	✓
Predictive Analysis	✗	✓
Budgeting	✗	✓
Resource Allocation	✗	✓
Reminders and Notifications	✗	✓
Approvals and Workflow	✗	✓
Assets Management	✗	✓
Risk Mitigation	✗	✓

CONCLUSION

Based on above theories, AI enables tools plays a vital role in current environment for project execution. We have proof that PM role is required to run the project smoothly. PM's are the driver. It looks like using AI tools PM can complete the job faster, its less error prone. PM's can learn from the past projects and look back in the historical data as required to set up new project plan. We can minimize the co-ordinations and meetings significantly to run the projects. As it will enable the PM's bandwidth, one PM should be able to manage multiple projects.

AI enabled tools have come a long way; it's more complicated to setup in the beginning and requires technical people to set it up right. Initial setup cost is high. In some cases, we need to buy the services year over year. Advantage is, it solves the long-term problem. It is more cost effective in long run.

We can foresee use of AI tools growing in the future; we will make the co-ordination job automated and PM's will be utilized more to drive projects based on domain experience. PM's will use more and more AI tools for all clerical work.

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