

Practitioners' Use of AI & Emerging Tech in an Organizational Setting

This research was conducted by CX Lab @ PMI between October 2nd and November 28th, 2023. It encompassed a diverse group of 34 PMI community members who engaged in qualitative interviews. Additionally, we administered a digital intercept survey in three iterations, garnering over 8,000 responses, including more than 1,000 valuable open-ended contributions. This methodology was designed to capture a broad range of perspectives within the PMI community, ensuring a comprehensive understanding of the subject matter.

Project Lead, **Justin Jackson, CX Design Lead, PMI** Lead Researcher, **Adam Matossian, CX Research and Design, PMI**



Acknowledgments

Special thanks to our team members

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Special thanks to Adam Matossian and Justin Jackson for their pivotal roles in this research. Adam Matossian, our Lead Researcher, brought invaluable insight and expertise in CX Research and Design. Justin Jackson, as the Project Lead, skillfully guided the project with his expertise in CX Design, ensuring the project's success.

Special thanks to our participants

We extend our sincere appreciation to all participants who generously contributed their time and insights for deep discussions about AI in the realm of Project Management. Your invaluable input has been fundamental to the success of this study, and we are deeply grateful for your involvement.

Voluntary Participation

This research was conducted with the utmost respect for the autonomy and preferences of all participants. We affirm that participation in this study was entirely voluntary. Each participant was informed of their right to withdraw from the study at any point, without any obligation to provide a reason for their decision. This principle of voluntary participation was upheld throughout the research process, ensuring that participants could freely express their views and disengage at any time if they chose to do so. Our commitment to this ethical standard underscores our dedication to conducting research that is not only insightful and comprehensive but also respectful and considerate of individual choices and privacy.



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Practitioners' Current Use of Al in an Organizational Setting

Practitioner use of AI tools is limited to ChatGPT & basic administrative tasks.

Across 34 in-depth interviews, less than a handful of respondents mentioned an AI tool other than ChatGPT. Additionally, we didn't hear uses of LLMs or AI, in general, that extended beyond content creation or editing (e.g., documentation, summarization, brainstorming, content refinement, etc.).

Project professionals see the promising future of AI tools but lack faith that their organizations will undergo the transformation necessary to truly harness the power of this emerging technology.

Though most practitioners attribute this resistance to change to leadership, some point to organizational culture amongst colleagues as a reason for maintaining the technological status quo.

"AI is very data-intensive, and while you can employ GenAI without integrating applications into your data stack, you won't get the most out of AI without an enabling data strategy."

- Gartner's Al Strategy for Business Guide



"AI is used [in my company] for coding applications for verification but cannot be used with customer data. My organization is looking at internal AI applications to address this."

- Practitioner, USA 🗾

"We are really keen to experiment, to innovate with AI technologies but the security teams are reluctant because they believe it will expose the business to unnecessary risk" - Practitioner, New Zealand 🌌

"I have seen other project managers use Excel spreadsheets to maintain and track project plans while there are many online low cost tools available which are far more efficient."

- Consultant, India 🜌

"The most important factor is the acceptance and adaptability of management and how they think AI will benefit their P&L and effectiveness on daily processes. Change comes from the top and even if it's used on an individual level, usage would be limited and non-beneficial on an organizational level " - Mid-Level Manager, Saudi Arabia 🗾





Basic uses of AI will be an integrated layer of features in everyday tools.

The common thread in nearly every organization's tech stack is Microsoft 365. Project professionals spend much of their time collaborating, conducting, and connecting within this suite of productivity tools.

With LLM capabilities built into everyday tools, we'll likely see a shift from the use of standalone tools to a much more streamlined use of Al within tools like Teams, Outlook, PowerPoint, and Excel.

Does this impending shift in software capabilities mean the current use cases for standalone LLMs will be engrained in practitioners' day-to-day workflows?

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'My day is primarily filled with meetings, alongside tasks like documentation in OneNote, managing emails through Outlook, and creating visualizations in Excel. I also use PowerPoint to summarize project statuses and seek approvals in larger meetings. In essence, my role heavily revolves around utilizing Microsoft tools for effective communication, collaboration, and presentation.'

- Process Leader at a Major Manufacturing Company, USA 🗾



70%

Microsoft's operating system market share (2023)

[source]

90%

of Fortune 500 use Microsoft Dynamics 365 (2020)

[source]

of Fortune 500 use Microsoft Azure (2023)

Microsoft's productivity software market share (2023)

[source]



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Practitioners want PM knowledge in AI tools, but lean toward workflow efficiency.

Having the ability to use a generative AI tool that provides project management knowledge on demand is something our community strongly desires.

For execution-oriented tasks, practitioners are beginning to shift away from standalone AI tools in favor of integrated AI features in the tools they're already using to complete these tasks.

More product-focused research is needed to fully understand the relationship between practitioners and their preferred AI solutions.

At a high level, we're seeing project professionals stay close to the tools they're already using. An Al tool that infuses PM knowledge & best practices into a practitioners' existing workflow—meaning their organization's integrated tech stack—would check the boxes of both efficient knowledge delivery and operational excellence.



ChatGPT doesn't point to specific PMI standards & best practices:

'Ideally, when asking [ChatGPT] about PM processes, it would be great if it can provide a more comprehensive response, incorporating PMI standards and protocols. Right now, the AI's training might not fully encompass the specifics of PMI documentation.'

- PMO Leader, Guatemala 🗾

Integrated AI features are starting to reduce the need for standalone AI tools:

"I haven't tended to go back to our internal ChatGPT interface-the default one-too often because I can do the same things within Teams [with Microsoft Copilot]."

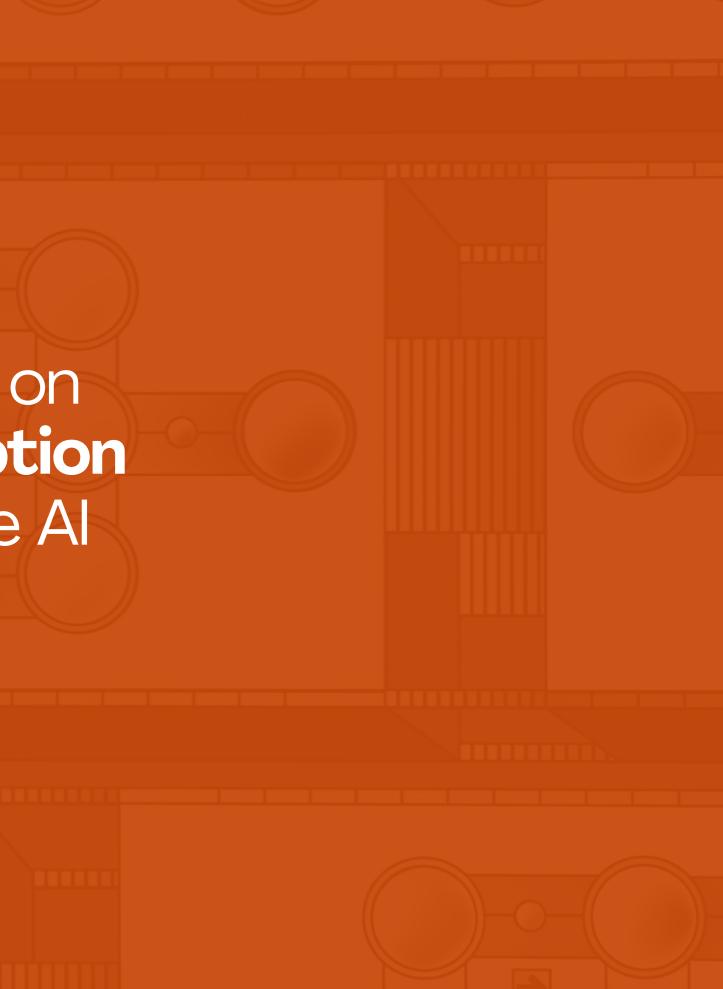
- Senior Director of M&A at a Large Communications Corporation, USA 🗾

'Our company has a pilot group, including me, to test new products like Microsoft's GPT before rolling them out to everyone. I've been comparing it with ChatGPT, which some of us already use. We use a host of Microsoft products, so there's a preference for Microsoft's GPT, but they want us to test it first.' - Senior HR Director, USA 🗾





Practitioners' Views on Organizational Adoption & Use of Generative Al



A third of practitioners' organizations have adopted AI in at least a moderate capacity.

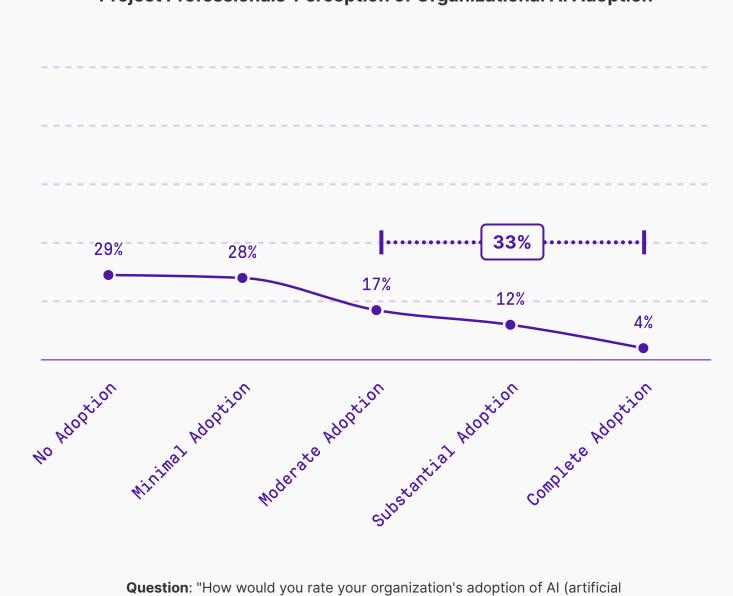
Despite a relatively high number of respondents indicating that AI is being used at their organization, we have heard from only a few individuals in our community who have experienced organization-level integration of AI into project management processes.

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"I'm currently managing several AI projects but our project management systems are not yet a priority for the organization as I work in healthcare."

- Senior Manager, USA 🗾

"AI has been successfully adopted to automate integration of business processes in the [client's] company as seen in the seamless running of month-end reports in our finance department."



Question: "How would you rate your organization's adoption of AI (artificial intelligence) for project management tasks and processes?" n=2074

- Consultant, United Kingdom 🎇

Project Professionals' Perception of Organizational AI Adoption



Organizations that are integrating AI are already wellversed in new tech adoption.

Unsurprisingly, organizations that have little difficulty adopting new technology (in general), have higher rates of integration of AI technologies into their organizations' tech stacks.

The reasons for this aren't limited to sound implementation strategy, though. While digital transformation willingness and strategy is a required skill for Al integration, the foundational data to make Al worth the investment of time and resources is the ingredient most organizations lack.

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"The newly introduced Generative AI application platform on our service management platform saw widespread adoption across various departments, including non-technical ones like HR. The project team excelled in its implementation and in equipping everyone with the required skills."

- Mid-Level Manager, United Kingdom 💥



Tech-forward organizations are 8x more likely than laggards to have achieved "substantial" AI adoption.

4%

of respondents at techlaggard organizations said they have experienced "substantial" adoption of Al

34%

of respondents at techforward organizations said they have experienced "substantial" adoption of Al

Questions: "How would you rate your organization's effectiveness in adopting emerging technologies for project management?" [n=2740] & "How would you rate your organization's adoption of AI (artificial intelligence) for project management tasks and processes?" [n=2092]



Barriers to AI adoption are not exclusive to AI.

Organizations without a sound tech adoption & integration strategy often struggle to connect systems & data between functions. Like most tech implementations, success comes down to a few key factors that are top-of-mind from our community.

Data

Well-structured, organized, and relevant data is the most necessary component of successful AI implementations.

"The biggest challenge I see in this space is you have to have good data intake to be able to mine the data for AI. Having been in data warehousing, database marketing, and similar, I'm very sensitive to data quality and project management in general, has very poor data quality. So I'm not yet seeing the opportunity to mine the data in any meaningful way."

- PMO Leader at a Major International Retail Corporation's Technology Division, USA 🗾



Infrastructure

Data delivery and integration with Al tools is a critical component in the ability to use this technology effectively.

"The challenge for me and my industry always lies in acquiring enough data, particularly data that reflects reallife situations. While we can generate computer-created data and images to some extent, these are produced in a controlled environment. This limitation restricts our training capabilities. So, obtaining a real, live stream of day-to-day data continues to be a significant hurdle for my company."

- R&D Project Manager, Science and Technology Solutions Company, USA *Solutions*

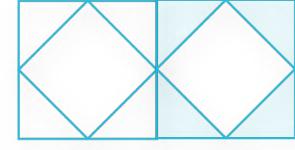
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Talent

Having the right people, across functions, is vital to effective implementation of AI technology across an organization.

"Our program managers have to first get their five to seven years of core software engineering and release experience. Once they've gained that experience as an individual contributor releasing software, then they can go into people management of engineering, they can become a technical lead in that space, or they go into program management to manage delivery of product."

- PMO Leader at a Major International Retail Corporation's Technology Division, USA 🚝





Culture

Organizations willing to embrace change and face digital transformation head-on are most successful in tech adoption.

"There's so much [technology] at our fingertips but if nobody's going to help push it to [the organization], no one's going to use it. We can't get out of our own way with technology. There's a hesitation to spend the big bucks to update systems because we're still getting the job done. But if all of these people who have been here for 25 years start retiring and you bring in a younger workforce, they're going to be like, 'we can't work under these conditions.'"

- Project Manager, Equipment Manufacturing Company, USA *三*



Many organizations aren't prepared for AI implementation.

The groundwork laid by the past decade of emerging technology adoption through data management, infrastructure additions, recruiting, and shifts in corporate culture—puts tech-focused organizations at a huge advantage in the adoption of Al.

When discussing AI adoption and integration with industry leaders at major retail, technology, and software corporations, we encounter an optimistic perspective. In contrast, with companies that are less focused on tech and those in tightly regulated sectors, the narrative often revolves around challenges and the necessity to rapidly adapt to keep pace.

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"I work for a company that is heavily invested in technology ranging from cloud computing and to incorporating AI. New technologies are constantly evolving and being woven into our work processes." - Practitioner, USA 🗾

"IT knowledge is very limited in the company and most have a closed mindset towards emerging AI solutions or are completely unaware of what is available. It is difficult to implement anything if you do not know it exists or cannot understand the potential behind it."

- Senior Manager, Malta 🔟

"The company I am with is reluctant to [try] anything that can better their processes and procedures. [That's] one reason I seek to depart and find a new employer that welcomes change and the advantages of new technology."

- Mid-Level Manager, Bulgaria 🚄

"Whilst the organization has only recently made tools available, it has not built capacity or discussed use cases for AI. AI is also not integrated into reducing the monotony of business processes"

- Mid-Level Manager, Ghana 🗾

"[P]rojects that are impossible to accomplish with available technologies and data aren't worth pursuing regardless of the apparent business value."

- Gartner [source]





The **practitioner's role** in organizational digital transformation.

Project professionals are in a position to drive digital & organizational transformation.

With the organizational barrier to more powerful uses of AI in project management, practitioners will have to be the drivers of digital transformation within their organizations to work toward advancements that enable the use of AI in project management tasks.

> Project professionals can be the drivers of change that help overcome these barriers to innovation \rightarrow

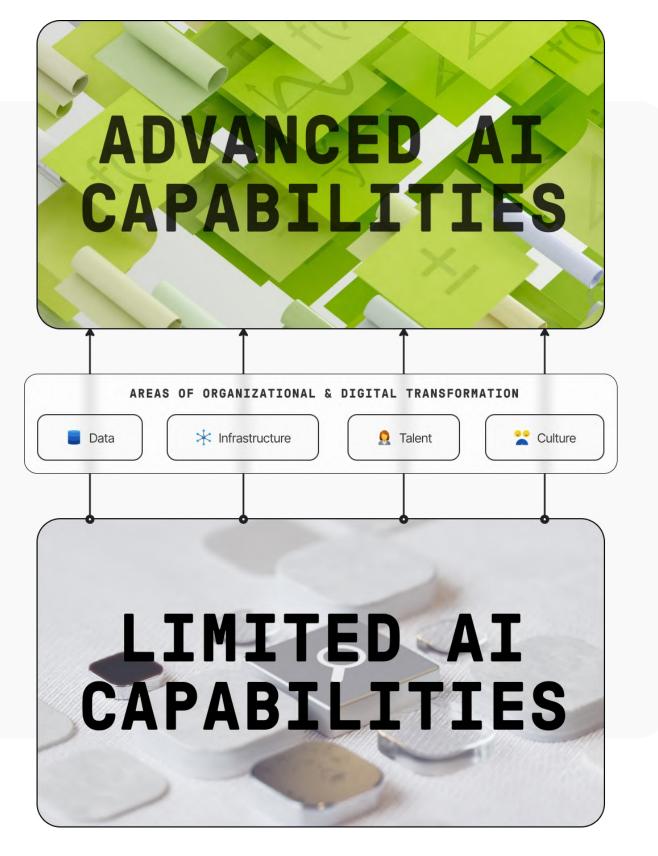
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"We tend to use Excel and Word documents for project management tools/artifacts. Every 4-5 years we change project management systems and only utilize maybe 30-40% of the functionality including portfolio, program and project management tools, and resource and document management and reporting."

- Practitioner, Major Healthcare Provider, USA 🗾

"Our IT Leadership is overly cautious regarding AI, and historically take a long time to make transformational decisions."

- Practitioner, USA 🗾





Practitioners' functional domain knowledge is a key driver of involvement in Al integration.

Effective AI integration hinges on practitioners' deep understanding of their specific fields.

Whether in IT, data science, or engineering, this domain expertise enables seamless collaboration across different organizational functions.

Success in implementing AI requires practitioners to skillfully blend project management, strong interpersonal abilities, and technical knowledge.

Our interviews with project professionals highlight this blend:

- A Financial Controller at a major airline had a thorough understanding of how satellite communications break down when aircraft pass through international borders.
- A R&D Project Manager at a major security company discussed how his knowledge around x-ray technology and border security helps him successfully lead a group of PhD-level engineers.



