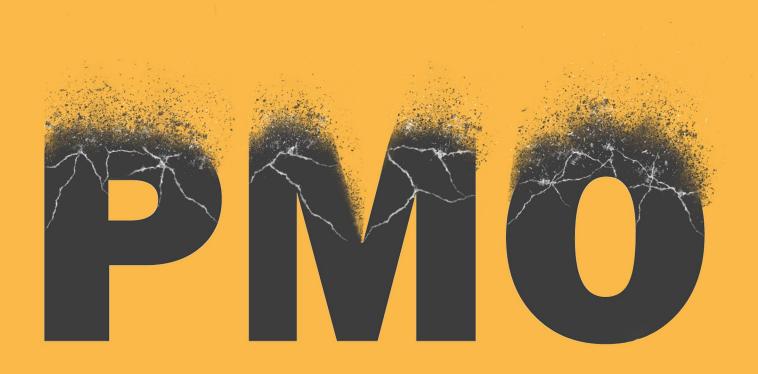# AI in Project Management
AI and the Future of Project Management Offices

Project Management Offices (PMOs) are an important focal point across companies. The PMO's overarching objective is to deliver enhanced results for their company's projects. Perhaps, the aspect of a PMO that can be addressed to increase effectiveness is digital disruption and most notably, AI.

Roles and Application of PMO

According to the Project Management Body of Knowledge (PMBOK), the PMO is the body that regulate processes and enables resources and project management methodologies for the project. The basic role of the PMO is to assist in the development of strategic projects and establish alignment of projects with the organisational strategy. It looks to establish links among different departments to support a smooth transaction of projects throughout the project lifecycle. PMOs enable project success by assimilating methodologies, mitigating risks, and ensuring efficient delivery aligned to project scope. Although PMOs are useful to organizations, Simon Philbin from Imperial College London, mentions in 2016, that there is a general lack of frameworks (i.e. role, structure and processes) that can specify the proper functioning of the PMO.

To get benefits from the PMO, it is imperative that it functions properly and is significantly matured to lead projects towards success. To evaluate PMO maturity, certain levels gauge the quality of PMO and there are **5 levels of PMO maturity**.

PMO plays an important role to facilitate in achieving strategic implementation of organizational goals. It may be possible that a PMO is mature but remains unable to produce considerable value for organizational outcomes. The Project Management Institute (PMI) believes that one of the measures of a PMO maturity is the value it is creating for its clients and the organization as a whole. So, it makes sense that the maturity model is continuously improved and its strategic alignment towards attaining organizational goals is consistently monitored. This could in turn result in an improved PMO efficiency as well as the project success rate.

CENTRE OF EXCELLENCE

Stage 5

Strategic Alignment
Manage continuous improvement and cross-department collaboration to achieve strategic business goals

ADVANCED PMO

Stage 4

Business Integration
Apply an integrated and comprehensive project management capability to achieve business objectives

STANDARD PMO

Stage 3

Project Support
Establish capability and infrastructure to support and govern a cohesive project environment

BASIC PMO

Stage 2

Project Control
Provide a standard and repeatable PM methodology for use across all projects

PROJECT OFFICE

Stage 1

Project Oversight
Achieve project deliverables and objectives for cost, schedule and resource utilisation

Future PMOs & Digital Disruption

Changing trends after the inclusion of digital systems in the working environments are likely to amend the way projects are being carried out. Furthermore, an organization that does not stay current with changes, risks being left behind. The PMO is no different to the rest of an organization's departments and should also stay digitally relevant.

The idea of digital disruption is that technology is changing how people and departments within the organizations collaborate at work. A 2018 PMI document writes that disruptive technology is the new reality for organizations across diverse sectors. Artificial intelligence (AI), digitalization, block-chain, etc., offer infinite possibilities for the organizations to renovate themselves and the businesses. PMI's *The*

C-Suite Outlook report states that 80% of the organizations significantly transformed with the use of disruptive technologies. However, only one-third of those organizations can meet their desired project goals.

These stats suggest that there is a vacuum somewhere between the strategy and operations. The PMO can play a central role in this regard. *The C-Suite Outlook* report further suggests that both the PMO and the project leader need to collaborate to sync with the digital age and replace traditional project delivery methods. It is important that the PMO takes a leading role so that projects come in line with organizational strategy and tasks are completed accordingly.

PMO, an Evolving Entity

However, PMOs are not necessarily performing as visioned, and lack the efficiency and effectiveness in delivering the goals that organizations require. Kutsch, Ward, Hall, and Algar in their research say that PMOs are established to achieve various objectives including process, user and value. However, PMOs also avoid the change needed to adapt to the changing world and persist with conventional project delivery methodologies. Furthermore, they lack the interest of top management. PMI's The Next Generation PMO aligns poorly performing PMOs with increased numbers of project failures and states, they must change or risk being part of history. These factors make the PMO stagnant which results in creating a risk to achieving project success.

Organizations need to empower PMOs to coordinate across an organization and drive full value. Aubry in a research paper suggests that the PMO needs to play a facilitating/supportive role rather than a controlling one. It can be determined by an organization what role they want the PMO to play but organizational

authorities need to back them to execute projects with better project deliverables. Digital transformation can then be used to enable the true value of the PMO and to reach the highest maturity level. Therefore, there is this demand for corrective measures to validate the importance of the PMO.

AI as a Technological Disruption

Perhaps, the aspect that can be addressed, is the digital technology disruption and most notably, AI. If AI is integrated in the PMO, performance becomes more streamlined. **It will enable PMOs to divert focus from the administration of collecting and configuring data to a more analytics mindset**. They can utilize their energies to other critical processes including sensitizing stakeholders and critical decision making. Villanova University in their 2019 research that PMOs using AI increases the likelihood of projects delivering on time.

Indeed disruptive technology is slowly being incorporated in project management and the PMO. AI can augment decision making and PMOs should embrace the change in order to grow and reposition themselves. AI is all about data and if there is one thing that the PMO works a lot with, it's data. **AI enriches the efficiency of the PMO with its deliverables to become more data-driven which increases**

productivity and predictability with data. It also improves consistency and certainty in the information and repeated tasks are handled with better accuracy. AI systems can gauge the performance of the PMO and notify the weaker links for improvement.

A major concern that dilutes project performance is risk management. A project can encounter a series of risks and uncertainties that can cause failure throughout the project life cycle. As there are multiple projects running, the project team or the PMO may fail to register all the relevant risks, which can cause failure. But **AI risk scoring algorithms can be utilized to identify and rectify upcoming vulnerabilities and escalate performance**. So, the PMO can become more proactive rather than reactive. MIT Sloan Business Review 2017 confirms that 63% of company leaders are moving towards AI technologies to reduce business costs. Villanova University 2019's research article further elaborates that the organisations using AI technology are seeing almost absolute project success in nearly 70% of their projects. Hence, AI not only allow PMOs to perform efficiently but can also reduce the number of failed projects and save costs.

Conclusion

Although there is increasing discussion regarding the inclusion of AI, Quay Consulting in 2019, suggests that AI benefits are still to be realized in project delivery. AI, however, can hold a special place in the PMO as data can be shared from different places within an organization. The Next Generation PMO also confirms that AI is not yet a widely used disruptive technology in the PMO and its application needs to be encouraged. Experts believe that adopting a data-driven approach is essential for increased efficiency of projects and AI is the key that PMOs need to realize to achieve success. Organizations

may be reluctant in adopting AI technologies but many PMO managers are starting to see the real advantage.

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Haris Jaswal is an electronics engineer and a project management professional from the University of Sussex. His expertise and work revolve around emerging technologies especially, Artificial Intelligence and Data Analytics. Haris is passionate about exploring innovative ideas to bridge the gaps within project management portfolios with the help of disruptive technologies. He has also worked as a researcher on the application of intelligent systems in the digitised society in reducing carbon emissions.

About us

Greyfly has experience in successfully delivering full life-cycle, benefits led, multi-million pound transformation projects. We are a preferred supplier to the BBC for programme management. Our underlying drive is to apply AI to Project Management in order to improve delivery, tackle the real project delivery problem and to make cost savings for our clients.

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