AI in the project profession:
Examples of current use and roadmaps to adoption

MIGSO-PCUBED: Predicting project outcomes with new AI capability, Intelligent Project Prediction

Introduction

Disruptive technology and accelerating change are now the norms within business. Advancements that feel relatively recent are already becoming embedded into business-as-usual activity. AI is one such advancement; it is already being used and having real-world impacts across the project profession. To help project, programme and portfolio management (P3M) professionals understand the implications of this change, Association for Project Management (APM) has produced a series of case studies showing how organisations are adopting and using AI in their operations. This case study focuses on global project management consultancy, MIGSO-PCUBED.

About MIGSO-PCUBED

MIGSO-PCUBED, a leading global consultancy in project, programme, and change management, excels in transforming concepts into realities across various sectors like aeronautics, defence and energy. Known for their project management expertise, they blend experience, proprietary knowledge and execution skills, tailoring strategies to client cultures and utilising advanced technologies.

Their methodology has evolved to include an array of capabilities ranging from traditional products and Power BI data visualisation to the innovative use of AI in project and programme management. This shift towards AI-focused strategies is crucial in addressing the persistent challenge of project success and mitigating common pitfalls such as planning errors, financial limitations and resource scarcity. MIGSO-PCUBED's Intelligent Project Prediction capability, developed in partnership with tech experts, exemplifies this approach. Launched in early 2022 after beginning development in 2018, it leverages AI to enhance project success rates significantly.

Approach

From traditional products and dashboards to Power BI data visualisation capabilities, MIGSO-PCUBED has a philosophy of identifying, testing and adopting innovative new technologies that are proven to enhance services and results. For many years, a core part of its strategy has centred on the increasingly vital question: how do you apply AI to project management to increase project success?

After all, despite best efforts, projects can often fall short of their goals, whether that's due to for example poor planning, financial constraints or lack of resources. It's therefore essential for project professionals to understand the reasons behind project failures and to take proactive measures to increase the chances of success. By being aware of the root causes, they can make informed decisions and reduce the risk of costly mistakes.

How MIGSO-PCUBED is using AI

MIGSO-PCUBED, with its development partner, has created its new Intelligent Project Prediction unique capability that uses AI to provide executive insights to increase project success.

The capability, which began development in 2018 and launched in the first quarter of 2022, is system agnostic and integrates easily into existing project and programme management project data sources, such as Planview or even Microsoft Excel.

It uses advanced analytics and machine learning to examine past performances of similar projects at speed, to identify underlying reasons for failure and predict likely project outputs.

The strategic insight can be used for new projects or overlaid onto live projects, helping project professionals to focus on risk management, improve planning and inform resource management plans – resulting in better informed decisions and better outcomes.

MIGSO-PCUBED states the Intelligent Project Prediction has an accuracy success rate of up to 96% for predicting project outcomes when based on quality data input. This helps to prevent project overspends and ensure projects are delivered on time.

"As a society, we don't fully trust AI yet. We are nascent on this evolution of technology. When Wi-Fi first came out, you had little Wi-Fi badges to show trust. When was the last time you checked for that? There is resistance to change but I think AI will follow a similar path. Its implementation is inevitable and you need to start preparing with a data strategy now."

James White, Head of Nuclear, MIGSO-PCUBED

How does it work?

- Based on the Microsoft Azure cloud platform, the capability integrates with existing data sources including all project and programme management capabilities.

- A specific data model is designed to optimise client project data relationships.

- Analytics engine analyses patterns hidden in historical data.

Benefits

- Efficiently produces predictions with high confidence levels of up to 96% when based on quality data input.

- Rapidly provides the reasons why projects are likely to be delayed.

- Identifies delay and overrun trends across a portfolio.

- Drives project data maturity.

- Pinpoints project and portfolio interventions to increase project success.

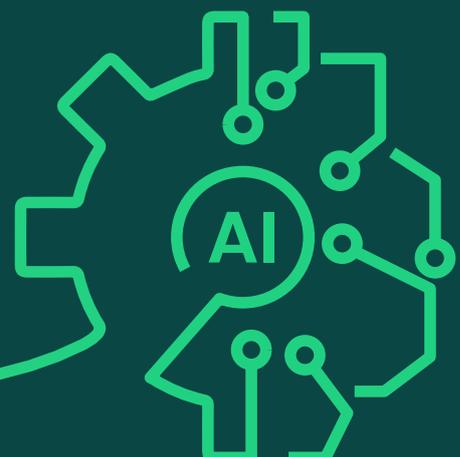- Supports transformation to increase project maturity.

Outcomes

AI-driven predictions are just one side of the coin. It is then up to the human to act on the data insights and analyse to drive change management and project transformation.

For one global-based company in the Fast-Moving Consumer Goods (FMCG) industry with which MIGSO-PCUBED is working, the Intelligent Project Prediction capability has been superimposed on 300 projects, made up of 220 completed projects and 80 lives projects, and has estimated cost savings of 18% worth millions of pounds if its recommendations were acted on.

For example, they could have swapped one supply chain partner for another, or they could have switched production base, to generate cost savings. It can also be applied at pre-project stage, taking historical data from the database and advising on bidding costs and estimated lead times.

> "It's about leveraging and unlocking existing technology and data. It's about augmenting human decision-making, at a rapid pace, making you more informed and leading to better outcomes. But you still need a human in control and making decisions."
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> **James White, Head of Nuclear, MIGSO-PCUBED**
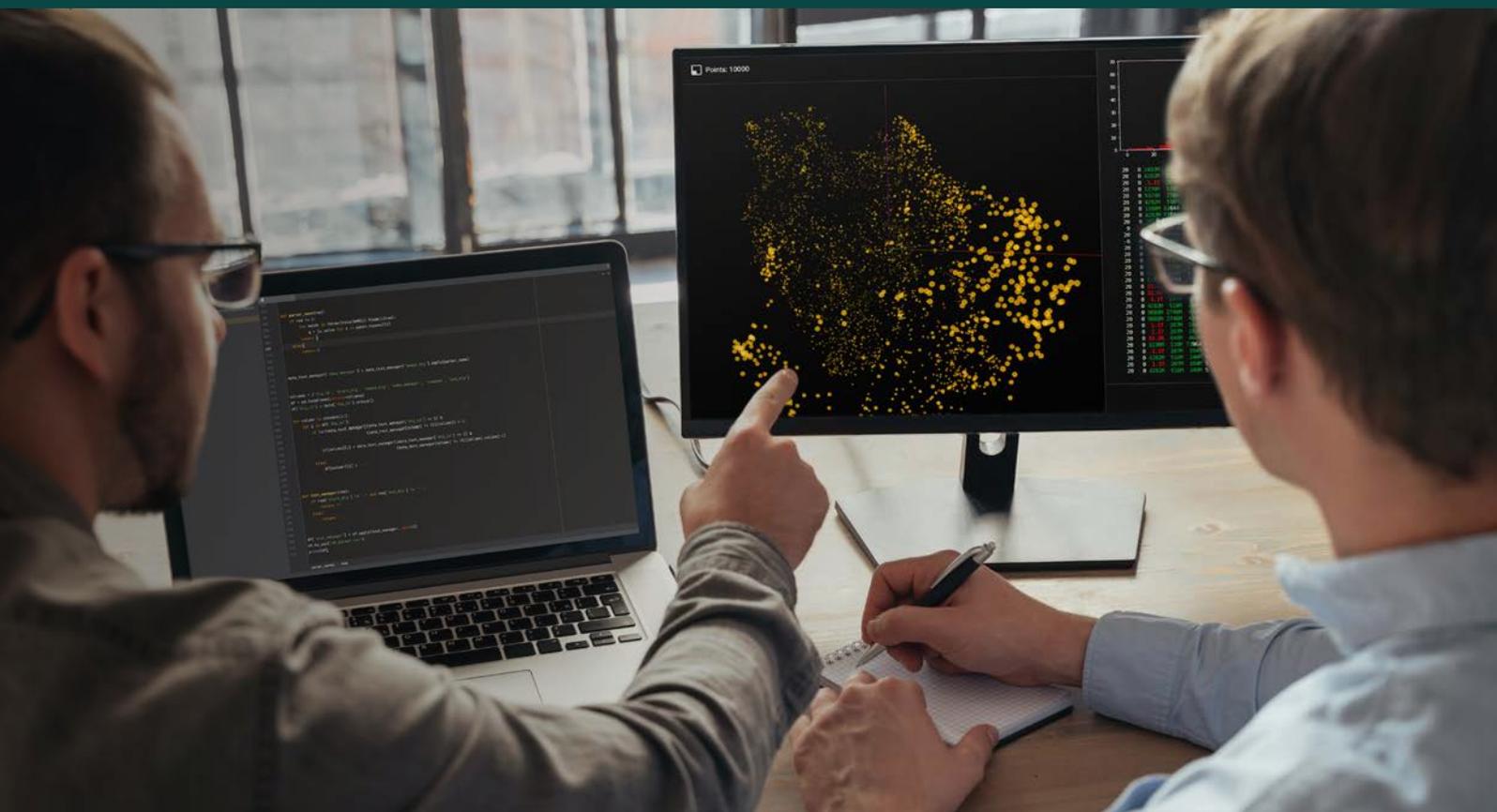
Concluding thoughts

What is AI replacing? It's an interesting question and no one knows the exact answer.

However, it is all about efficiency and effectiveness. From a project management point of view, it's about knowing with confidence right from the outset about the likelihood of budget overspends and timescale delivery, and taking the right action before you get started.

AI is not replacing anything from a technical perspective but it does take out the admin burden of manually checking historic projects when it comes to data gathering - which is complicated and time-consuming - and giving the best advice to your teams.

It's ready to revolutionise our way of working in project management: constantly capturing and regenerating that feedback loop, and being able to look back and ask: 'Did we learn the right lesson at the right time?'

We're at the start of a voyage of discovery with AI. The best consultants in project management, and the best companies, are getting ready now with data strategies and becoming early adopters of promising new tools.

Because when projects succeed, society benefits

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