Case Study

A Data-Driven Approach
to Project Management

Background

The Environment Agency (EA) is a non-departmental public body, established in 1996 and sponsored by the UK government's Department for Environment, Food and Rural Affairs, with responsibilities relating to the protection and enhancement of the environment in England.

The Environment Agency is responsible for flood management, regulating land and water pollution, and conservation.

Methods have worked closely with the Bespoke and Emerging Projects (BEP) team within EA's Major Projects and Programme Delivery (MPPD) portfolio. BEP are interested in identifying opportunities for step change within the project management space.

Challenge

The need for the EA to respond swiftly to climate risks is growing, creating a pressing demand to expedite the delivery of project outcomes and benefits to both the EA and the communities it serves.

The EA desired a significant transformation in their project delivery approach that would modernise traditional project management activities, such as lessons learnt, by exploring these through the lenses of data and innovation. They sought to achieve quantifiable benefits by leveraging automation, data-driven decision-making, and streamlining the manual effort required for data processing and analysis, with the expectation of realising resource and cost savings.

Whilst they had no well-defined processes or established ways of working, there was a noticeable lack of ownership in this area. The project teams often grappled with issues related to availability and engagement. Whilst the EA possessed a good level of in-house skills and knowledge to achieve their goal, their primary limitation was the availability of resources. This is why they enlisted the assistance of Methods.

The EA operates within a complex business model and technical environment.

Solution

Methods comprehends the intricacies of the EA's operations and the broader context in which they operate. We recognise and understand the need to do as much as we can for the public purse. Our ability to introduce specialised skills and expertise enabled the EA to look at business problems in a different way.

We supplied a multi-disciplinary team including Business Analysts, Delivery Managers, Engagement Leads, Junior Consultants, Tech Architects, and Data Engineers.

The discovery approach encompassed a combination of interviews and workshops, to review three projects to understand the approach to data capture and lessons learnt (bottom-up). Additionally, we engaged with numerous individuals and teams within the EA, spanning reporting, architecture, and system administration, to develop an understanding of the data capture process and the overall system landscape across EA (top-down).

We conducted a discovery exercise aimed at evaluating lessons learnt for capital programmes and formulating recommendations for future implementation. The primary objective of this discovery was to identify opportunities for transforming lessons learned into a data-driven 'live' activity, steering away from manual and retrospective practices. By doing so, the EA will be equipped to consistently gather insights throughout the project delivery cycle, thus optimising outcomes for climate, nature, and the communities they serve.

Once we understood the root cause of the underlying issues affecting data utilisation in EA Major Projects, we developed an actionable set of recommendations designed to address these issues. These recommendations were crafted with a thorough comprehension of the end-to-end data capture lifecycle for lessons learnt.

Results

We successfully completed the project on schedule and within the allocated budget. In the process, we seamlessly integrated specialist data engineering resources from the Technical Delivery and Solution Engineering portfolio at Methods. These Data Engineers played a pivotal role in establishing productive collaborations with their technical counterparts on the client's side, thereby enriching the depth of our discovery efforts.

During the discovery phase, we uncovered numerous opportunities for the EA to adopt a more data-centric approach to project management. This includes the utilisation of advanced AI techniques like Natural Language Processing (NLP) and Machine Learning, which have the potential to significantly enhance their practices.