Customer: Large UK Retail Banking Group

Predictive Delivery Assurance

Defining an innovative quantitative measure of project delivery status and using machine learning to predict when projects are likely to deteriorate, driving proactive interventions and saving millions on overspend and rectification.

Situation

"We need to move beyond RAG – it is subjective and coarse – and use data to drive assessment of both current and future delivery status"

RAG is the industry de-facto standard when it comes to reporting project status. However, it is subjective, biased – assessed by the Project Managers responsible for delivery – and tends to have just 3 levels. This drives poor behaviours – with projects remaining Amber for too long as PMs are scared to go Red – resulting in delivery inefficiencies. A Health Score gives an unbiased and objective assessment of project status, and as it is data-driven it motivates correct project data capture and regular updating.

Value Goal

To identify delivery risk under-reported by RAG within the customer's highly complex IT Change portfolio. To use data to develop machine learning models to predict when projects are likely to deteriorate enabling pre-emptive assurance interventions, improving delivery efficiency and avoiding unnecessary overspend.

Our Approach

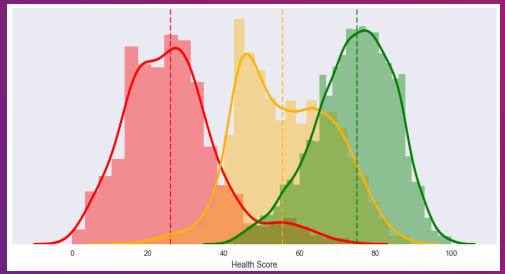
Combine and enhance data
We brought together data from financial, resource tracking and project reporting systems to form a consolidated view of delivery status. We enhanced the data set by crafting innovative metrics - objective measures of delivery vehicle's status that are standardized, transformed and input into our machine learning models to produce an evidenced-based Health Score.

Under-reported risk
Health Score was used to uncover delivery risk under-reported by RAG and the surfacing of project source system data in this way has driven a marked improvement in data capture and maintenance behaviours.

Predicting a downward trend
We fed historic project performance data into predictive algorithms, applying Natural Language Processing to reveal hidden patterns in PMs' textual status updates to generate project deterioration predictions that outstripped human forecasts.

Results

We created an innovative Health Score that complements RAG-based reporting of the delivery status of a multi-billion change portfolio. Project deterioration predictions are embedded into delivery dashboards to drive more efficient and better informed oversight and assurance.



Impact

We built a Proof of Concept to demonstrate our approach in just 6 weeks. The bank was initially skeptical but our team responded to this challenge by developing a prototype that impressed to such an extent that we were asked to not only productionise the models but also build up a permanent capability within the bank, transforming the way they are transforming change.