

# FACILITY MANAGEMENT



## Maintenance 4.0 Machine learning and IoT adoption

### Our Client

One of the largest facility management companies in Europe with a turnover in excess of £5 million, 3,500 employees and managing over 900 concurrent projects across Education, Commercial, Retail and Health.

### Introduction

The business was struggling with the adoption of Industry 4.0 techniques within their education portfolio with manual activities to reduce reactive maintenance activities stalling and with several multi year contracts coming to a renewal the business needed to adopt a new approach to facility and maintenance management.

### Challenge

With two years remaining on a large portfolio contract, the organisation was struggling to 'shift the dial' with their existing maintenance practices. The client was in the process of issuing the tender for the next multi year contract and our client wanted to demonstrate that they were looking at the latest cutting-edge industry and technology practices to improve their reputation and increase the chance of winning the renewal.

The solution design was to analyse the existing CAFM data to highlight the most appropriate adoption cases for Maintenance 4.0 / IoT adoption across the portfolio. Due to the poor quality of the existing platform data we first had to cleanse over 100,000 lines of data from the maintenance management system.

### Solution

Once we had spent two weeks cleansing, classifying and prioritising the asset data we began the data analysis. Using a set of bespoke algorithms, we were able to segment the asset data. What this shows was the existing contract lacked control with excessive funds spent unnecessarily on some asset classes whilst others were not sufficiently funded.

This analysis led a direct correlation between the budget overspend and the reactive maintenance log. This information was presented back to the business along with an adoption plan to use remote monitoring and automation across the estate to improve the overall contract performance over a 6-month period.



### Result

The results were staggering.

Over £800,000 of annualised savings achieved without increasing any reactive works and without increasing the risk profile of the maintenance activities.

The Return on investment of the programme was in excess of 10:1 with a breakeven less than 12 months.