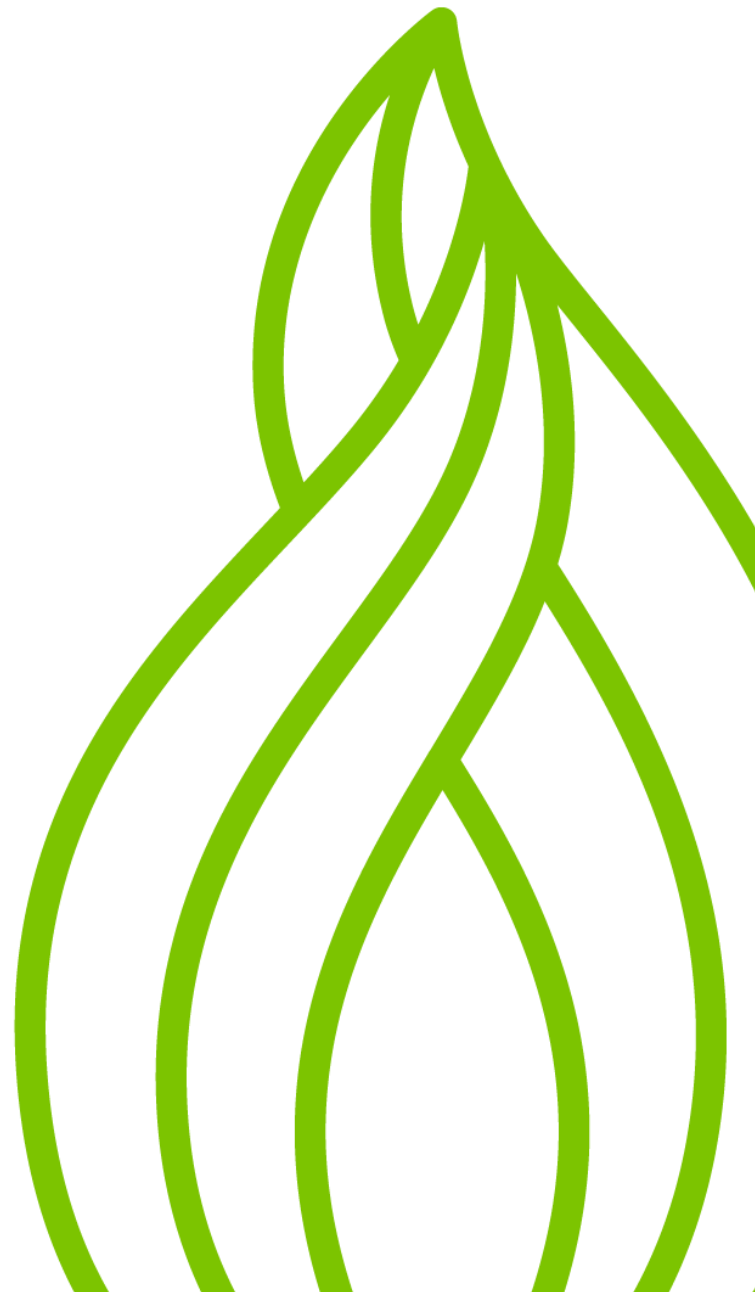




AIM (Asset Information Models)

Value Tracking Case Study



Aim (Asset Information Models)

Background

Following on from the BIM project, it was identified the 3D modelling created for the design of projects could incorporate automation, allowing for the accurate creation of up-to-date models of sites. Where BIM was used in design phase, this project incorporates non-BIM assets to model retrospectively. It is estimated this has the potential to be 25-50% more efficient than the current process for creating records for sites. A consistent interface is to be created, where asset records are captured, centrally updated, and interrogated by the asset owner/operator. Too often repeat site visits are required to capture individual data records; this proposal will reduce the abortive time to undertake this manual activity.

What's new?

Trial site scanning completed and identified opportunities/ benefits for the business. Robust workflows for data capture specifications have been produced to aid the consistency of scanning and data capture and the reliability of recognition. Effectiveness of the recognition and efficiency improvements was evident where good quality scans were used. Selection of data capture technology based on function and area of required scan has demonstrated performance improvements in terms of time and cost. For example, the use of photogrammetry and mobile scanners for discrete reality capture can be undertaken on site in minutes with little or no setup time and without the use of an expensive fixed scanner. This saving in time and the use of lower cost equipment can reduce capture cost by up to 50% whilst still providing a comparable output for recognition.

The benefits

AIM provides a consistent approach for data capture/ storage to avoid issues and improve usage by owner/ operator. It will also avoid repeat site visits to capture data which will not only save time collating information but effort from our Engineers in travel and planning.

Financial savings

Since the innovation project Premtech have applied this tool to more than 60 sites of various sizes. It is noted that many of the sites are small sites, where a 50% saving may only equate to £5K to £10K, but the larger sites such as Bacton and St. Fergus a 50% savings would be in excess of £100K per site. The saving achieved since the innovation project would be in the order of £1.8M.

Implementation

Outputs continued to be monitored whilst reviewing further opportunities with Business Leads.

Outputs documented and shared with IT Leads for usage across the business and has enabled other projects exploring asset information.

