*One of the Department's Buildings*
*1 Victoria Street, London*

# The Department for Business, Innovation & Skills
## Swindon, United Kingdom

Department
for Business
Innovation & Skills



*Government Buildings, London*

*"BIS' ultimate aim of creating a comprehensive data solution to manage all aspects of property asset management has been achieved through working in partnership with ICONICS. Whatever the request 'no' or 'we can't do that' does not appear to be words in their vocabulary; the project team regularly go above and beyond to consistently exceed expectations in tight time frames. At all times ICONICS have been professional, solution orientated and forward thinking. The successfulness of the partnership had already led to further development of the original system solution. ICONICS and the data capture and management solution is central to the future plans of BIS."*

**Roger Taylor**
Property Director
BIS

## Introduction

The Department for Business, Energy & Industrial Strategy (BEIS), formally The Department for Innovation, and Skills (BIS) is the department for business, science, and innovation within the UK Government.

In November 2015, BIS began a journey with ICONICS that was going to allow them to build a scalable, Azure cloud based solution that would revolutionise the way Central Government would manage their property estate. The department invests in skills and education to promote trade, boost innovation and help people to start and grow a business. To this end there are 49 partner organisations that sit under BIS, each with their own estates and facilities related datasets and challenges. The Property Asset Management Team was created in April 2014 to manage a portfolio of estate across the partner organisations and BIS. A significant part of this was to ensure evidence based decision making and to optimise the performance of buildings across the office estate. With around 2,500 staff working for the core BIS Department alone, and in excess of 14,500 people working across the partner organisations, there are offices across London, Sheffield, Cardiff, Manchester, Nottingham and a variety of other UK cities.

Therefore, the estates and facilities management challenges that faced BIS were significant; plus the ever-growing need to rationalise and make financial savings meant that sound data management was needed to under-pin decision-making.

## The Aim

The Department's holistic aim was to rationalise their building portfolio and shrink their carbon footprint by reducing the number of buildings they own and introducing more flexible work hours for their staff. But, in order to have any chance of shrinking their footprint, BIS realised that they needed to be able to analyse the performance of

had aspirations to one day integrate more real- time/automated building and energy data into the system. The question was, what technology or system could unite, visualise and analyse all of this data and offer the flexibility of a future proof solution.

## Implementation

Maxine Oakey, Information Manager for BIS Property Asset Management Directorate, and her team did a lot of market research and whittled down a variety of organisations to a handful of potential software vendors and consultants.



*New System: Management Dashboard Screenshot*
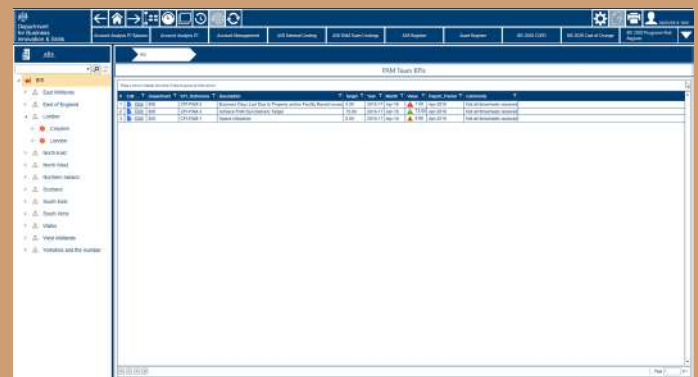


*New System: Property KPI Metrics*

their estate, detect trends and use data to drive proactive estate management. The challenge was that the data and reporting processes for their entire building portfolio was completely fragmented. BIS did make sure to monitor the performance of their buildings. However, their manual data collection processes were so complex that they didn't have the time or resources to digest the data and act accordingly. Imagine compiling hundreds of incongruent spreadsheets for 70 disparate data sources across 180 buildings. It was a data analyst's nightmare. So, BIS established a consistent data strategy and went to market to find a holistic business-wide system; a single "view of truth" to support the management of their properties. They knew they wanted to capture all sorts of operational data; everything from occupancy counts, energy statistics and meter readings to project information, financial reporting and lease agreements; but the Department also

In the autumn of 2015, ICONICS ran a short Azure-hosted proof of concept to demonstrate the capabilities of GENESIS64™ to Central Government. BIS chose three data sources and, within a week, saw that the dashboards that ICONICS had built, combined with the flexibility of visualising spreadsheets with different formats, were exactly what they needed. BIS took the 7 BIS partner organisations with the largest proportion of BIS office estate and decided to embark on a journey with ICONICS that, if successful, could potentially be rolled out across the rest of Central Government.

## Solution

The Azure-hosted solution provides an integrated view of all BIS building assets. The Property Asset Management Team (PAM), can now drill down to any building, by geographical area, and see over 70 different data types

> *"The Data Capture Management system, or DCM as we call it, collates all of our data into one place making analysis, presentation and management of our data much easier, saving us time and resources. We can see all of our data at once instead of depending on multiple spreadsheets, giving the team and our client's one true picture. We can create dynamic graphics giving an at-a-glance representation of our data and modify the system to suit our needs".*
>
> **Charlotte Tyson**
> Data Coordinator
> BIS

in building dashboard summaries within Azure. There's no longer a need to trawl through hundreds of different spreadsheets to see the buildings occupancy counts, energy consumption statistics, or lease agreements. This is data now accessible within a couple of clicks. BIS can manage all the data entry through a web upload interface, where they can upload their disparate spreadsheets; the solution offers a complete picture across multiple datasets and a single version of the truth.

In utilising Microsoft's Azure Table storage and Event Hub, ICONICS configured a truly scalable cloud solution, meaning that adding data sources in the future, and growing BIS' audience across the government, isn't going to be costly.

## Results

The results have been staggering. BIS can now see and prioritise the most underutilised and energy inefficient buildings across the 180 buildings that they're trying to rationalise. BIS estimated that the PAM team used to spend 75 percent of their data collating and validating data.

BIS foresee that this figure will drop to 15 to 20 percent. That's 55 to 60 percent of their resources freed up! The rest of the time will be spent on actually adding value to the data; analysing trends, making and testing hypothesises; truly taking data verified steps to improve underperforming properties.

The ICONICS visualisation and future PowerBI integration is expected to save BIS at least one full-time employee per year. Most importantly, BIS have seen that ICONICS' technology is powerful enough to interface with any other systems or data source when they're ready, ultimately giving Central Government a future-proof platform.

## Next Steps

BIS have an ambition to make the ICONICS system an industry standard across the whole Central Government, as well as to add real-time building automation data and push other data into PowerBI. For now though, ICONICS are already making steps to configure a 'browser light version' and a fully mobile responsive HTML5 version, built on ICONICS' commercial off-the-shelf product MobileHMI™.

ICO-CSS-090