

The screenshot displays a web-based asset management interface for Slough Borough Council. The top navigation bar includes sections for Franchise, Asset register, Human resources, Tasks, Finance management, Operation management, Service management, and Administration. The main interface is divided into several key components:

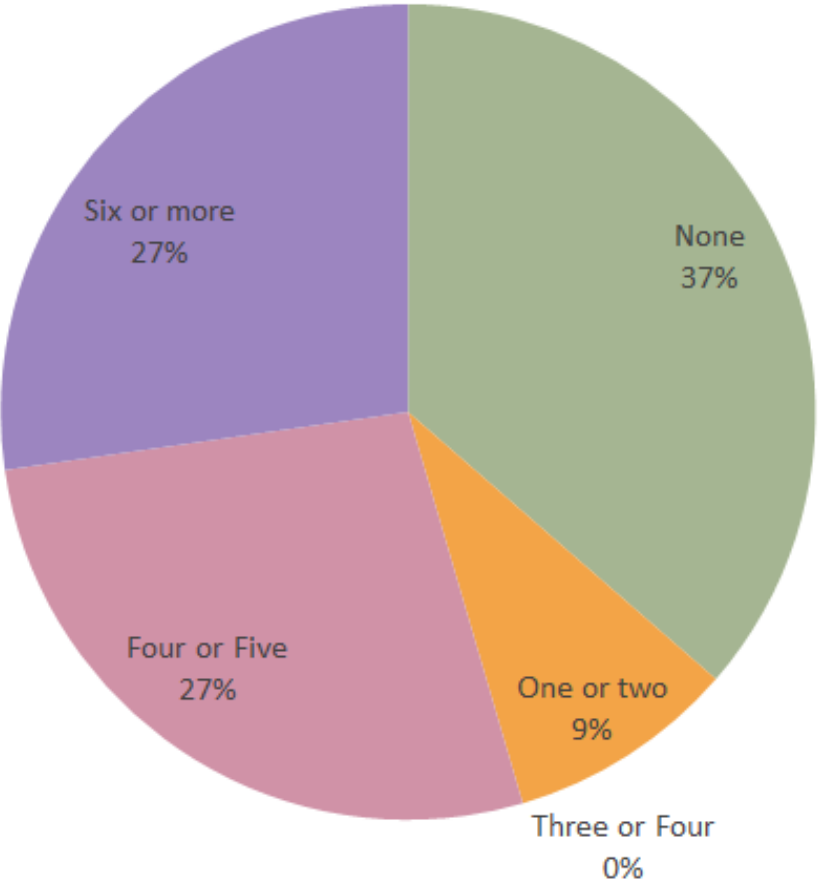
- Map View:** A 2D map of Slough, England, with a red location pin and a 3D BIM model of a building complex overlaid. The 3D model shows a large green-roofed structure with various internal and external components.
- Filter Panel (Left):** A sidebar with filters for 'Location', 'To', 'Task category', and 'Task subcategory'. The 'Task category' is set to 'Defects Report' and 'PPM'. The 'Task subcategory' is set to 'Nothing selected'.
- Table View:** A table listing work orders with columns for 'W/O No.', 'Phases', 'Site', 'Location/Object', and 'Account ma'. Three work orders are visible: 5107, 5104, and 5103, all associated with 'Pendean Court'.
- Charts and Dashboards:**
  - W/O Type Split - Using finish by date:** A pie chart showing the distribution of work order types: Defects Report (5.9%), PPM (33.3%), and Reactive (0.8%).
  - W/O Performance - Using finish by date:** A pie chart showing performance metrics: Finished on time (88.3%), Open/On Time (5.7%), Overdue (13.2%), and Open/Overdue (11.8%).
  - W/O Priority - Using finish by date:** A pie chart showing priority levels: P1 Emergency (0.2%), P2 Urgent (0.9%), P3 Routine (5.7%), PPM W/O - Respond within 1 month (58.6%), and PPM W/O - Respond within 7 days (33.6%).
  - W/O Count Trend - Using finish by date:** A stacked bar chart showing the number of work orders per month from January to December 2019. The bars are color-coded by status: Open/Overdue (red), Overdue (yellow), Open/On Time (green), and Finished on time (dark green).
- Floor Plan:** A 2D architectural floor plan of a building, overlaid on the map view.

# NACF Local Government BIM Survey

# Background

- Eleven telephone interviews
- Covering NACF Regions
- Each interview 30 – 60 minutes
- Fantastic engagement and willingness to discuss

# Number of BIM projects over 4 years



The sample had relatively high levels of experience in BIM. In total, two thirds (63%) of participants had conducted a BIM project.

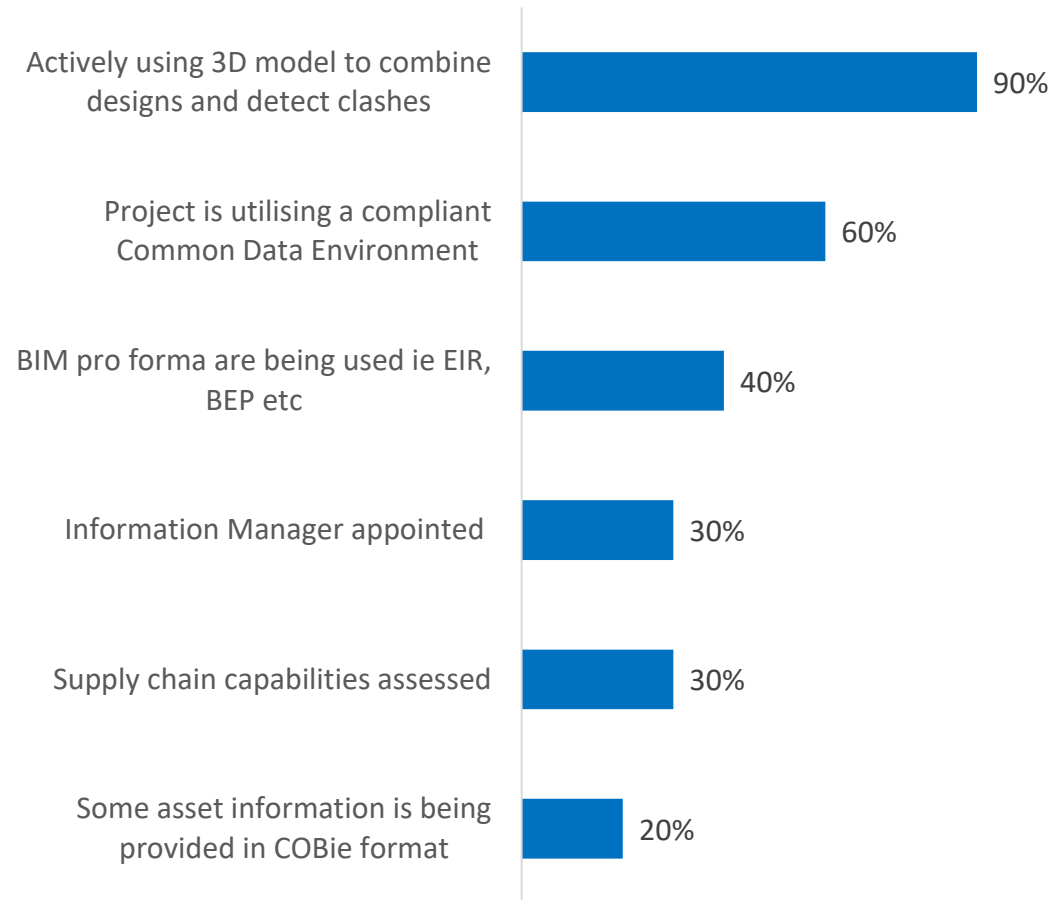
While a third (37%) of the sample had not conducted a BIM project, this group had a good understanding of BIM with all but one looking to initiate their first BIM project.

Over half (54%) had done four or more.

# Structure of Report

- Description of BIM and Requirements
- Benefits of BIM
- Obstacles to BIM
- Client Segmentation
- Tools Available
- Requests for the Future
- Next Steps

# Unprompted awareness of key requirements of a BIM Level 2 project



While the participants had a good understanding of the benefits of BIM, several had a perception that there are misunderstandings in the industry about what BIM is.

There is a perception that many simply see BIM simply as a software modelling tool rather than an information tool that covers the whole lifespan of the asset:

- The opinion was expressed that this perception had to change and a wider understanding of BIM is required in the industry

The principal area of perceived misunderstanding (or lack of knowledge) is the use of BIM as a Facilities Management Tool.

# Unprompted Benefits of BIM

Information was a key theme with benefits falling into two main categories of responses:

- *Quality of information*: information is accurate and up-to-date and holistic
- *A single source of information*: all information being kept in one source

BIM was also seen as a tool which allows clients to optimise the benefits of their asset. However, some mentioned that this is the key area where BIM is not utilised to its full advantage. As a result of this, for some the benefits mentioned were potential benefits and not necessarily seen in practice.

| Design Stage                      | Build Stage                        | Operate Stage                        |
|-----------------------------------|------------------------------------|--------------------------------------|
| Better co-ordination of teams     | Speed of build can be increased    | Common dataset in one place          |
| Reduce carbon emissions           | Management of change               | Better quality data                  |
| Reduce errors                     | Understanding of health and safety | Standardise materials - cost benefit |
| Ease of making changes            | Ability to visualise the build     | Better information flow              |
| Improved communication            | Cost benefits                      | Run building more effectively        |
| Clash detection                   | Risk reduction                     | Better cost control                  |
| Better engagement & understanding |                                    | Health and safety benefits           |

# Obstacles

**Culture** - This was seen as a barrier to some organisations. For success, BIM needs to be embedded as an integral part of the culture of the organisation with endorsement from all stakeholders with buy-in from senior levels of management being of particular importance.

Not all stakeholders are at the initial BIM planning stage so their requirements are not fully represented (e.g. Facility Managers). Facilities Managers were mentioned as being a major cultural obstacle to getting the most out of BIM.

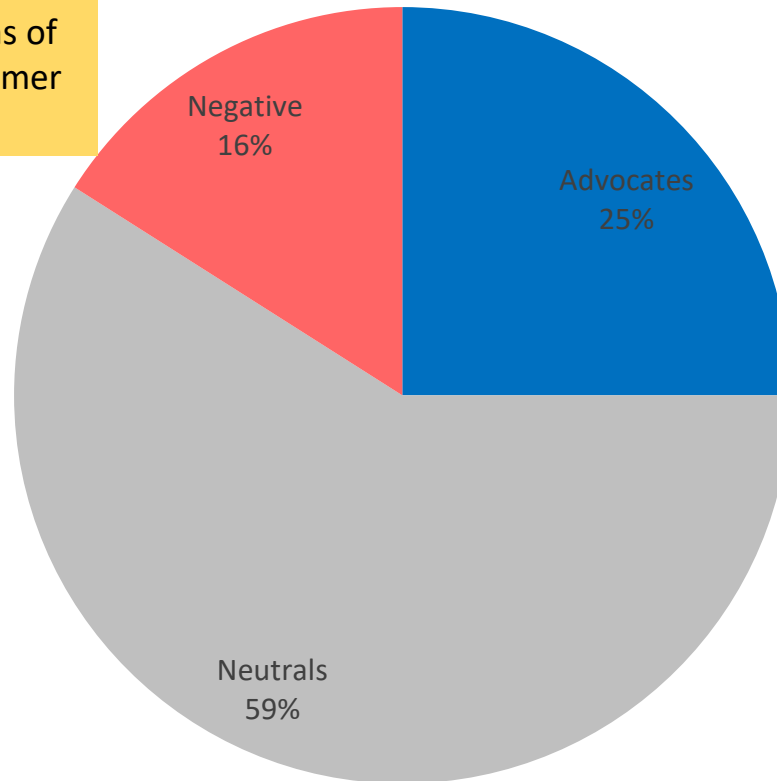
**Supply Chain** - Some contractors are not set up for BIM, which means that it has not been universally adopted across the whole supply chain.

**Size of project** - BIM is perceived to be more appropriate for large scale projects and not for smaller projects or refurbishments.

# Client Segmentation

Data refers to participants' perceptions of their customer base.

Allocation of customer base



ADVOCATES : they understand BIM and proactively want it  
NEUTRALS: they don't have a strong opinion of BIM  
NEGATIVE: they do not want BIM

While participants were able to describe the type of organisations that fitted into each segment, the key driver was more related to the client's knowledge of BIM and their wider understanding of the benefits (not the type of organisation).

Having such a low level of client Advocates suggests that the benefits of BIM are not widely understood and that an education exercise is required to communicate the benefits of BIM and move neutrals and negatives up the adoption ladder towards being Advocates.

Explored the reasons for the segmentation in the survey



# Toolkit

Do you have training material

Do you have solutions on how asset data can be delivered in a cost effective manner

Do you have access to simple BIM menus (activities and corresponding benefits/outcomes) to select project objectives at the briefing stage

33%

**Toolkits** - Varied answers given to which Toolkits would be of use, examples include: simplified versions, pro-forma documents and information delivery manuals.

Data suggest that more work is required to ensure that users of BIM have comprehensive toolkits available to them.

**Measuring outcomes** - None of the participants formally recorded outcomes and benefits for BIM. However, many participants did make the point during the interview that BIM needs to be driven by CEOs – being able to demonstrate positive outcomes would be a way to enable adoption amongst senior management.

Recording outcomes at the Operational stage may be a driver for recording these as it would allow them to demonstrate efficiencies

**Benchmarks** - None of the participants had benchmarks and some mentioned the difficulties of establishing these.

# Requests for the Future

| What needs to be done differently   | Who needs to be targeted  |
|---|---|
| <ul style="list-style-type: none"> <li>• Training is required</li> <li>• Bring Facilities Managers into the process as soon as possible</li> <li>• Education that drives awareness and understanding of benefits among: 1) non-technical departments and 2) among people responsible for buildings 3) non-users of BIM</li> <li>• Communicate that BIM is not just a 3D design tool</li> <li>• Common data environment</li> <li>• Need to share information with supply chain without compromising asset security</li> <li>• Keep up-to-date with technical developments</li> <li>• More guidance on ISO</li> </ul> | <ul style="list-style-type: none"> <li>• Senior people in the organisation/Chief executives/Senior Management Teams – they need to buy into BIM and demand it as standard</li> <li>• Facilities Managers</li> <li>• Supply chain</li> <li>• End users/clients</li> <li>• Organisations run by Local Government</li> </ul> |
| Where are the areas of focus  | When do actions need to be  |
| <ul style="list-style-type: none"> <li>• Benefits of BIM</li> <li>• Consolidating BS 1192/ISO</li> <li>• Using simple/non technical language</li> <li>• Compiling common datasets</li> </ul>  | <ul style="list-style-type: none"> <li>• ASAP</li> <li>• Common Data Environment (in 12 months)</li> </ul>  |

# Next Steps

## **Form strategy Q1 2020 and proposed fundamentals in response to survey;**

- Agree statement on the use of BIM - Create new term for BIM
- Create FM focus group
- Set out key requirements of Level/Stage 2
- Form a basic level of requirements and standard data sets
- Capture number of BIM projects from NACF using simple definition
- Communication and marketing plan, including case studies from projects
- Create menu of outcomes and benefits at design, build and operate phases, to aid briefing of projects
- Form toolkit, including workflows and processes
- Metrics and benchmarking projects
- Routes for training and support

# Questions / Discussion