

BIM Assessment Service

Overview

BIM Assessments can be seen as an expensive, long-winded and time-consuming exercise. We try to approach BIM Assessments from a practical viewpoint, by understanding what you want to achieve and concentrating specifically on your requirements, we deliver a streamlined and practical document to help you achieve your objectives.

Whilst the country waits for a true accreditation to an international standard from UKAS (United Kingdom Accreditation Service), our Assessment will help you establish a BIM strategy and BIM development program.

Our primary focus is to give you a good understanding of BIM Level 2 and what you need to do to comply with it. This might mean developing a BIM best practice technology, ceating a training program at company level, reviewing processes or redefining workflows. For example, we might review workflows on a specific project to establish how aligned they are to PAS 1192-2:2013. We would then make recommendations about how you can evolve your workflows and methodologies to achieve conformance to PAS1192-2:2013 (which is just one of the documents guiding the implementation of BIM Level 2 projects).



The Assessment Process

Our assessment will review your data, which will be provided through surveys and interviews with different business units or stakeholders, to identify opportunities for business improvement, to align to BIM Level 2 guidelines.

We look at various aspects of your business, specifically relating to your role in a BIM project. Typically the architect has a design responsibility, whilst a contractor is responsible for construction and completing the BIM handover, whilst a product manufacturer has to provide models that are aligned to the BIM Level 2 guidelines.

You will notice that we use the terms 'aligned to' and 'guidelines' in this document, as there is no BIM Level 2 standard at the time of writing. We are still waiting for ISO19650-1 and ISO 19650-2 (see later).

During the Assessment process, we will be looking for evidence of conformities to the guidelines, by reviewing your current documentation, workflows, business processes and data management standards. If the Assessment is the starting point in defining a BIM strategy for your company, then of course we will be looking at other areas such as BIM Policy, company and business strategy, management support and involvement, skills and capability matrices and so on.

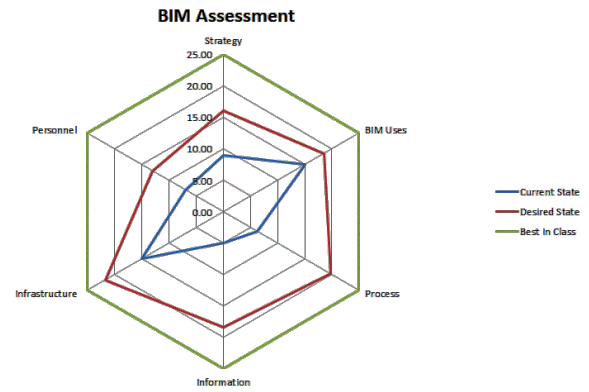
It is much more than a tick-in-the-box exercise. Our aim is to help you define how BIM might be used, not just in winning more business (although that could be a critical component) but also to improve processes internally. A valued output of any assessment might also include recommendations on ways to improve efficiency and business workflows within the organisation.

Assessment Output

During the assessment, an experienced Man and Machine consultant will come to your site to interview key stakeholders and look at various aspects of your business.

We focus on the six key areas:

- Business and BIM Strategy
- BIM Use Cases (applicable to your business)
- Process and Workflow
- Information Management
- Infrastructure
- Personnel



Assessments can be customised to focus on particular aspects of your business but all areas will be reviewed in some detail to ensure we can build a complete picture. The output of the assessment process includes a graphical representation of the findings. A written report accompanies this graph, providing a detailed analysis of each area that was assessed and recommendations (where applicable) on how to meet your pre-specified objectives (i.e. your desired state).

BIM Standards

If the scope of the BIM project is to become compliant to BIM 'Standards' or to BIM Level 2, it is important to recognise that there is not one standard but many, some of which are just guidelines.

They include but are not limited to:

PAS1192-2:2013	Specification for Information Management for capital delivery phase of construction projects
PAS91:2013	Construction Pre-Qualification Questionnaire
PAS1192-3:2014	Specification for information management for the operational phase of assets
PAS1192-4:2014	Collaborative production of information: Fulfilling employers information exchange requirements using COBie
PAS1192-5:2014	Specification for security-minded building information modelling
BS1192-5:2015	Collaboration Production of architectural, engineering and construction information
BS ISO16739:2013	Industry Foundation Classes (IFC) for data sharing in the and facility management industries
BS8541 1-4:2011-2012	Library Objects for architecture, engineering and construction. Code of Practice



It is also important to realise that these standards are evolving rapidly. At the time of writing (January 2018) we are currently still waiting for the release of updated versions of PAS1192-2:2013. At an international and accreditation level, we anticipate that the long-awaited ISO19650 standards will be significant. The initial releases are likely to be:

ISO19650-1:	Organisation of information about construction works - Part 1: Concepts and principles
ISO19650-2:	Organisation of information about construction works - Part 2: Delivery phase of the assets

Accreditation and Certification

Accreditation is a process in which a supplier (a 'BIM Provider') is assessed to demonstrate that its processes, procedures and competencies will deliver a consistent output in line with a scope of work defined in a BIM project. It would also need to demonstrate that it is delivering those competencies in accordance with industry best practice.



The challenge with such an approach is the fact that BIM standards continue to evolve and current certifications are merely an organisation's interpretation of what BIM Level 2 actually means (it is more than PAS1192-2:2013). PAS91:2013 or variants of it are used during the tender process to establish a suppliers BIM competency. It even goes as far as to suggest that those with an 'accreditation to PAS1192-2' will be exempt from having to fill in the questionnaire. However, that is rarely the reality and it lacks consistency.

Whilst gaining a certification could be of some value, it is very likely it will have to be re-done when UKAS provide more guidance on a BIM accreditation. Ian Ronksley, Accreditation Development Manager at UKAS writes a very good article on this in BIM Today on 30th June 2017, which can be found [here](#).

Whilst our assessment does not seek to provide certification, it will outline what you may have to do to meet different certification requirements. The certification body will generally be looking for you to be 'compliant' with PAS91:2013, PAS1192-2:2103, PAS1192-3:2014 and relevant BS1192 publications.

Assessment Summary

Depending on your needs, during the Assessment process we will meet with your Executives, Designers, Estimators, Project Managers, Product Developers and other relevant stakeholders. Typically we will review the following areas depending on the specific scope of work:

Organisation and Structure: Looking at company structure, documented roles and company policy statement and documents with regard BIM.

HR and Skills Competency: Evaluating personnel and training programmes.

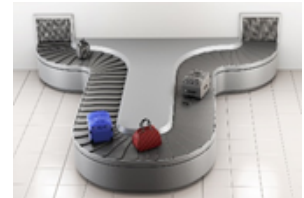
Project Workflows: Looking at project procedures, configuration and supply chain management to assess alignment to BIM Level 2 Guidelines.

Risk Management: Understanding the level of risk management and how risk is assessed in exposure to BIM projects.

Process Control: How are BIM models and projects coordinated and how are outputs controlled, authorised and managed?

Example Projects

Baggage Handling: We have helped a number of baggage handling companies evolve their systems and company procedures to ensure delivery of quality BIM projects at major UK airports.



Automated BIM Modelling: A client with over 20,000 possible variants of a single uninterruptable power supply, needed a solution to create BIM models automatically. We delivered a BIM 3D modelling wizard to solve the problem.

Building Services: We have helped a number of building services clients establish a competitive advantage in delivering mechanical and electrical services to main contractors.



BIM Training Courses

Would you like a BIM training course specifically designed to suit your role?

In response to customer demand, our BIM Ready Training Program has been developed to offer courses specifically to deliver the value our customers demanded. They include:

BIM Fundamentals
BIM for Project and Construction Professionals
BIM for Product Manufacturers
COBie & IFC Fundamentals

If you would like more information on training options please call our BIM experts on 01844 263700, email marketing@manandmachine.co.uk or visit our website here.

