

BUILDING INFORMATION MODELLING





WHAT IS BIM?

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Many people within the industry believe Building Information Modelling, also known as BIM, to be a tool or a software used in design. Although BIM leverages these aspects during a project, BIM goes far beyond this and should instead be seen as a series or combination of processes for creating, exchanging and managing information throughout a project lifecycle.

Adopting a BIM approach enhances collaboration within the project team and stakeholders, accelerates early stage design and coordination and therefore reduces risk. Through founding this approach on an information rich model, further benefits can be gained – not only through the extraction of information from this "single source of truth" to strengthen standard design and construction processes, but also by using the model as a visual platform to de-risk the construction programme. Upon completion of construction, this information rich as-built model can be handed over to the facilities management team to utilise and drive benefit throughout the operational phase of the assets life.

WHAT DIFFERENCE WILL IT MAKE TO ME?

- Whether you represent the client, the asset owner, the designer or another interested party, BIM has the opportunity and breadth to provide value to you. When facilitated correctly, BIM provides an enhanced design, better quality, a clearer view of project programme and an opportunity to see a greater return on your investment.
- 2 Many pain points exist within a standard design, construct and operate lifecycle. When facilitated correctly, BIM can reduce some of these pain points and convert them into strengths.
- 3 'Safe by design' is something all project teams must feel responsible for. When facilitated correctly, BIM can provide better visibility of safety risks (design, construction, operation) but also provide the digital record for use during the operational phase of the asset.

IS BIM EXPENSIVE?

The MacLeamy curve provides a visual illustration of how BIM looks to bring the design effort forward in a project programme to a more preferable position, where the ability to influence or impact the design is greater and the resultant costs associated are less. By 'shifting the curve', design maturity is reached at an earlier stage and through this better visibility of the previously unforeseen can be managed more effectively. As a result, cost and programme creep can be mitigated against.

Realising this can take many different forms whether this be encouraging coordinated visualisation of early stage design in the 3D environment, collaborating more effectively through the likes of a common data environment or perhaps simulating the construction process virtually to visually de-risk. All of the above must first be founded on a versatile, standard approach, committed to from the start and leveraging industry best practice of the BS EN ISO 19650 series.

MacLeamy curve



WHAT IS MY NEXT STEP? HOW DO I IMPLEMENT BIM?

Irrespective of where you sit on your own BIM journey, we believe there are some key steps to implementing BIM in a way that will drive value for you and your project teams. The strength and diversity of value opportunity within BIM means that there is a need to focus on specific BIM goals as opposed to trying to achieve 'blanket benefit' in all areas. The former should naturally align to business interest and service provision with an initial effort to construct a foundation to build on.

Plowman Craven can help you kick-start your BIM journey, supporting the thinking and design of how to implement BIM within your business. We will harness our industry experience to advise on the most optimal approach for you and your business.

WHAT DOES THE BIM IMPLEMENTATION JOURNEY WITH PLOWMAN CRAVEN LOOK LIKE?

We have developed a 4-stage framework to structure the implementation journey:



Assess – Getting to know your business to understand your current capabilities. Provide initial recommendations of how to progress.

- Align Aligning the BS EN ISO 19650 BIM standards to your current business approach.
- Adopt Ensuring your newly-aligned BIM process is adopted in practice on all projects.
- Adapt Reviewing your adopted BIM process and adapting the approach where required.

ABOUT US

Consult. Trust. Innovate.

Combining technical expertise with the latest equipment, Plowman Craven is one of the largest surveying companies in the UK, serving a broad client base that includes developers, architects, contractors, engineers, project managers, commercial agents, estate management, investors and government bodies. Our access to skilled and specialist resource allows us to respond effectively, no matter the size of the project or how challenging.

PC Monitoring is fully integrated into Plowman Craven's broader surveying and measurement services and is at the forefront of many major tunnelling and construction developments in the UK, working with clients to advise on and manage all structural, monitoring and engineering services requirements through a project lifecycle.







If you'd like to start or reignite your BIM journey with us, please contact:

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