What Is BIM?

Building Information Modelling, depending on who you ask depends on the answer you get. But what is it really?

The RIBA, CPIC and BuildingSmart jointly proposed a definition of BIM for the UK construction industry:

• Building Information Modelling is a digital representation of physical and functional characteristics of a facility creating a shared knowledge resource for information about it forming a reliable basis for decisions during its life cycle, from earliest conception to demolition.

In practical terms, this means that a virtual building model is developed and information is collated from manufacturers or through a traditional decision-making process of design. This model is analysed, tweaked, tested and revised, before the real thing is built on site.

This cradle to grave physical and functional model workflow, whilst being new to the construction industry, has been widely adopted and very well established in the manufacturing industry as Digital Prototyping. Manufacturing companies due to expanding global competition were driven to adopt processes which delivered projects to far tighter timescales and at reduced cost, whilst at the same time needing to remain profitable.

The construction industry is now undergoing a similar revolution; projects are under pressure to deliver innovative and sustainable solutions, at far lower costs than ever before.

BIM in the Private and Public Sector

Building owners and operators are becoming increasingly aware of technology, and given the potential construction cost savings are increasingly starting to stipulate the use of BIM workflows and deliverables, not only for the construction phase, but for the buildings on-going life cycle and for forward management of assets.
The private sector is forging ahead with BIM adoption, but it is the UK Governments BIM mandate that is really accelerating the adoption of BIM across the UK.

**The Benefits of BIM**

**Better Outcomes through collaboration** – All parties involved in creating the project and living with it, will ideally be using the one single BIM model, which will encourage collaborative working relationships, greatly improve project coordination, and ensure all parties are working towards achieving the best value.

**Enhance Performance** – BIM models allow for quick and accurate judgment of different design options and ideas, enabling the development of more efficient, cost effective and sustainable solutions.

**Greater Predictability** – With the use of 3D BIM models the designers, contractors and owners can all visualise the project in its entirety, enabling them to see any issues that may arise, these issues can be resolved before entering the site, resulting in faster project delivery.

**Reduced Safety Risk** – The BIM model allows for such simulations as fire modelling and crowd behaviour, allowing all parties involved to use this information and create a safer environment for the public. Asset managers can also use the 3D model to improve the operational safety, and contractors can review complicated construction procedures before being onsite, therefore reducing potential accidents.

**Reduced Waste** – The BIM model has the ability to generate the exact quantity take-offs, which in turn means that materials are not over ordered, reducing waste and money, and enabling just in time delivery, reducing damaged materials from weather or accidents as they are not lying around for long enough.

**Whole Life Asset Management** – The BIM model has information integrated throughout the commission, operation and maintenance of that project. With this information you could take the building for example, apart and back together. This information allows for replacement parts, change of use etc to be done easily and more efficiently.

**Cadspec, your partners for BIM success:**

We can provide you with a full range of software, hardware, training and consultancy services to ensure a smooth and profitable move to BIM. However our customers will tell you that there is much more to us than just consultancy and/or training services. Our way of partnering with organisations to understand their requirements and aspirations stands us out from the rest. It’s this that has brought us and our customer’s complete BIM success. Having successfully worked with numerous companies to implement the move to BIM, we now have a highly developed and refined process that can be adapted to the individual needs of each company we partner with.

If you would like to explore how Cadspec can help your business grow and become more profitable, please give us a call on 0844 856 0701, drop an email to sales@cadspec.co.uk or visit our website www.cadspec.co.uk