

BIM

Consultancy & Training Services

A unique range of consultancy services and training that will help you prepare for and make the most of BIM

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Why choose BIMSphere to help you implement BIM?

Amtech™ has been providing quality software tools into the construction sector for over 25 years. Its information service, Luckins™, has been a trusted supplier to the construction industry since 1966. With that pedigree you can be sure we understand the industry and how it works, very well.

In 2013 we launched our specialist BIM services division BIMSphere, having assembled a specialist team already widely recognised as one comprising high quality individuals. They possess great expertise in the many aspects of BIM, not just in construction but also in infrastructure, petrochemical, plant lifecycle, asset management and facilities management. Remember, we are also experts and trusted information providers and asset data providers which is at the very heart of everything to do with BIM.

There are two more fundamental things that distinguish us from other companies. The first is that we do not deal in "BIM Wash". Misinformation associated with this increasingly familiar term is one of the reasons why many do not understand what BIM is about. We are seeking to provide real world, practical answers and solutions to the realities of life in construction and facilities and asset management. Everything we do follows that ethos.

The second is that we understand your business and what you are seeking to achieve. Our consultancy services are tailored to your company's needs and how you can efficiently adjust to the new world of BIM. Our training is tailored to real world BIM and not simply running through standard courses covering standard functionality. Rather we provide practical sessions and courses that will enable you to achieve real results and therefore reap the greatest rewards from your BIM investment.



Our approach

Amtech will work with you to understand your needs and develop a plan to help you achieve your aspirations. If you do not know where to start or what you need to do, we will advise you. Together we will ensure you succeed and make the most of the significant opportunities that working within a BIM environment affords.

We offer two fundamental types of BIM support, consultancy and training. Consultancy covers BIM education, business change, operation and strategy planning. Training covers hands on sessions to get the most out of the BIM tools, in a pragmatic and realistic way.

All initial consultations and the development of your strategy will be carried out and overseen by a Senior BIM Director from our team. Think of us as your BIM partner - there whenever you need us throughout the whole cycle of a project. Please refer to page 11 to see the profiles of our senior team.

Our consultancy offering will typically follow the diagram opposite. Timescales shown are for a medium sized company working on a small to medium sized project, but these timescales will change depending on your business and project circumstances.

Firstly we offer a strategic BIM overview covering many years of BIM research and delivered in one afternoon to the senior members of staff at your company. We see this as a critical step towards the success of your business in BIM, as BIM is a whole company approach.

We then provide workshops and seminars to analyse your current business to find the most efficient fit for BIM. This is followed by BIM strategy set up, review and project shadowing throughout your first BIM projects to ensure your new BIM strategy best fits your business and your projects.



BIM Training is aimed at the proposed BIM authors, managers and facilitators in your business. We strongly believe that training the best people at the right time is key to your business progression in BIM and we can advise you of those people, steps and stages as part of our consultancy package.

For most companies, BIM training starts with basic practical user training which will show you how to apply the business BIM strategy to your projects in the most efficient and BIM enabled way possible

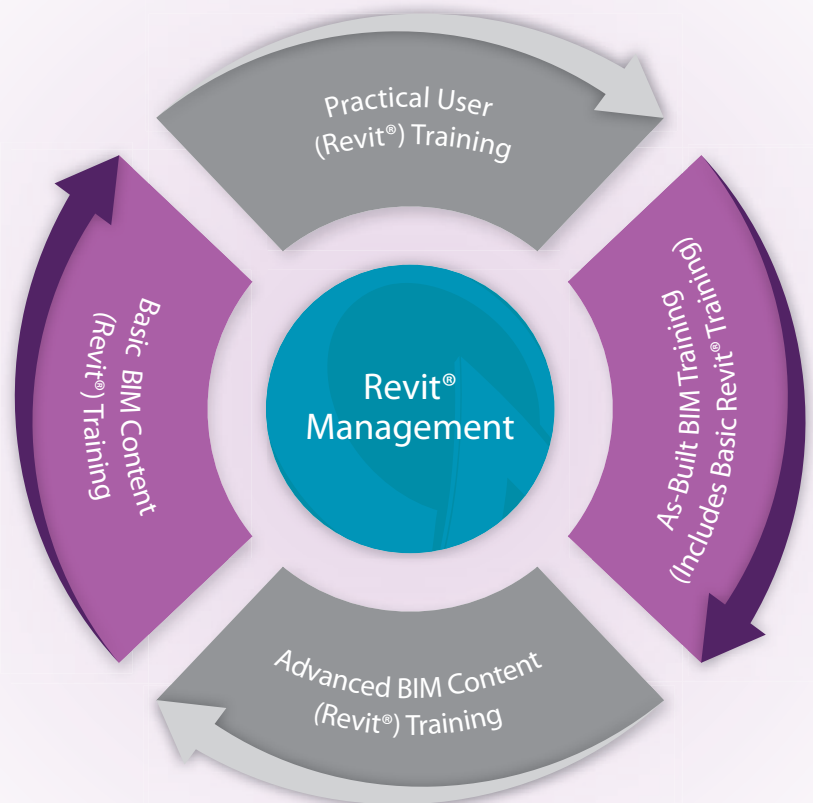
For some businesses simple BIM model creation is a good start, but what if you are working with existing buildings or creating “As-Built” models where no model existed previously? Many will tell you that BIM at this level is simply not possible but we have world leading experts in place who can demonstrate and train you in the methods particular to this type of work. Bearing in mind that the majority of BIM projects over the next ten years will be on existing buildings, and that every BIM project will require a model that reflects the true As-Built characteristics of the project itself, we believe this approach to BIM modelling to be crucial.

Basic BIM training therefore is a simple but essential step to becoming a BIM compatible business. To develop your business further and to be efficient in BIM delivery your business will also need to assign and up-skill individuals and groups to become BIM champions and managers.

As your business begins on the modelling of projects, the BIM authors will certainly need additional BIM content to that which is provided with your BIM authoring software. You can of course make use of BIM object libraries such as Sysque which contains thousands of BIM enabled, manufacturer specific BIM objects, all linked to our unique Luckins database which will form an integral part of the modelling, management and asset management of the BIM project.

There will always be times, however, when your BIM authors will need specific objects, notations or labels which are simply not available and we offer training sessions in both basic and advanced BIM content creation for this reason.

Finally there is the management of the models themselves. Where do you store your models? How do you name them and how can you apply a corporate look and feel to them whilst remaining BIM compliant? Our management sessions show you how.



Strategic BIM overview

1

Module one:

Strategic BIM overview

This half-day session is aimed at senior management who will not be hands-on with the software. The session will cover the business drivers for BIM and the reasons behind why and how BIM can be implemented.

Topics Covered:

- ✓ What BIM is
- ✓ Explanation of current Government strategy and industry trends
- ✓ Different levels of BIM
- ✓ Contractual BIM
- ✓ Winning BIM work
- ✓ Business change
- ✓ Demonstration of BIM in action
- ✓ IT requirements
- ✓ Future trends
- ✓ How to implement BIM well

2

Module two:

Developing your BIM implementation plan

With demand for BIM compliant projects growing at an exponential rate, it is important to understand where to start and how to go about getting involved in a structured way. In our experience some companies are going into BIM blind and they simply agree that they can deliver level 2 BIM and sometimes even level 3 on bids when they have no idea what is involved. This is costing them real money and business, due to inability to deliver. Commitment to involvement in BIM needs to be fully understood by all concerned to ensure you are not over-committing and that your entire business is operating in a BIM ethos without unnecessary risk.

We believe there are five key steps to success and these should be fundamental to your BIM strategy:

1.

Understanding where to start

The beginning is a great place. We understand the why, the how and the who. The subjects covered include.

- a. Better understanding of BIM and how it will benefit your business by
 - ✓ Reducing waste, therefore saving costs
 - ✓ Helping to complete projects on time
 - ✓ Improving your profits



2.

Planning your BIM strategy to get to level 2 BIM by 2015

The UK Government has set a deadline that all BIM projects should be BIM compliant by 2016 and research shows that this ethos is equally spreading to non-Government projects as the major constructors and clients begin to use the BIM ethos across their whole portfolio. To really get ahead of the game you need to plan ahead. We can help you do that by:

- a. Defining a company strategy
- b. Getting high level buy-in
- c. Developing cultural change – this starts with simple high level education
- d. Reviewing the technology currently being used
- e. Advising any additional technology that may be required
- f. Reviewing IT infrastructure capability and possible upgrade options
- g. Assessing your current and future business skill levels and up-skilling requirements

3.

Review your processes

As part of the BIM strategy you need to look at your company processes and QA and take the necessary steps to improve on those to help develop the true BIM ethos. BIMSphere will help you undertake this by:

- a. Reviewing your current processes and how well they are used
- b. Adjusting these to improve your business overall
- c. Re-aligning your processes to achieve BIM compliance efficiently

4.

Define what a successful BIM project is

To be able to really drive BIM forward in your company, you have to set measurable objectives that can show you the road forward by defining what has really worked, what has not and therefore what needs to work better for you and your clients. In our experience companies that measure success accurately and set and review realistic goals are those that are the most successful implementers of BIM. BIMSphere can use its combined experience of over thirty years to:

- a. Define how to measure success
- b. Agree objectives for the first projects
- c. Agree and plan to measure the strategic objectives for your company
- d. Review projects and stages to actively update your BIM strategy

5.

Identify a suitable trial project and get started

Identifying a suitable set of trial BIM projects can be tricky and costly if done incorrectly. BIMSphere will help you to evaluate which projects to tackle initially and help you progress as a whole business.

The simple keys to success are:

- a. Choosing a project that is not too large
- b. Choosing a project that is relatively straightforward (a known quantity)
- c. Remembering this is a learning curve
- d. Setting agreed, limited and well defined measures of success
- e. Defining how to review successes on your trial projects and how to apply these to future projects

Practical Training with Revit®

1 Programme one:

Practical Revit® user training

Practical, expert training will give your potential BIM authors a real advantage in making the best use of the tools they have.

This training gives the users the most practical way to get to their key deliverables in BIM, without the normal training ethos of having to know everything about the software to pass an exam. Users are shown in detail the specifics they need to get from A to B in the shortest time possible whilst being educated as to how to model to expected levels of detail - no more or less. Day one is Revit® fundamentals and applies to all users. Days two and three are split between disciplines if relevant, allowing the users to get the most out of their day without waiting while other disciplines learn about topics that are irrelevant to them.

To include:

- ✓ Initial project set up
- ✓ Collaboration principles
- ✓ Routes to BIM from various sources
- ✓ Allocation of BIM responsibilities
- ✓ "Just enough, but more than most" modelling principles
- ✓ Strategy drawings (RIBA stage C)/ CIC Stage 2
- ✓ RIBA stage D / CIC Stage 3 models
- ✓ RIBA stage E / CIC Stage 3 & 4 models
- ✓ Cost effective visualisation techniques.

In addition you may choose to take the option of having training delivered to suit existing or "As-built" projects or models. See below for more details.

Note that training materials will not be supplied - in our experience users' own notes are more valuable. User training is limited to maximum eight delegates per session.

2 Programme two:

BIM content creation basics

Following on from the pre-requisite Revit® user training, this session will cover the basics of Revit® content creation and management.

To include:

- ✓ Basic parametrics
- ✓ Introduction to the Family Editor
- ✓ Planning your content
- ✓ Naming conventions
- ✓ Creating basic families

At the end of this course, the delegates will be able to create basic families and also understand the importance of the quality and relevance of the data they are using to generate the families.

3 Programme three:

BIM content creation advanced

As your use of BIM objects becomes more familiar, you will find a need to create more advanced objects which make more use of the parameters assigned to them, both geometric and informational.

This session will cover advanced parametrics, libraries and custom family creation to suit your business needs.

4 Programme four:

Revit® management

Available to all who have taken the pre-requisite practical Revit® user training module, this session will look at the management of a BIM team and associated project duties.

To include:

- ✓ Template creation and management
- ✓ Title blocks and corporate image
- ✓ Collaboration techniques
- ✓ Work sharing in teams
- ✓ Model management

Note that training materials will not be supplied as in our experience users' own notes are more valuable. User training is limited to maximum eight delegates per session.

Practical Training with Revit®

5 Programme five:

As built and retro-fit using Revit®

BIM is just as relevant to as built and retro-fit as it is for new build. In fact 80% of the UK building stock which will exist by 2050 has already been built. The UK Government has stated that in the next 10 years, 70% of projects will be on current building stock. So knowing what to model and how to collect the data for these models carries huge importance for your business.

Surveying in all its guises has been around for millennia and this part of the construction industry is set to become even more relevant. In the Geospatial arena laser scanning has been around for over 15 years and it is only recently that it has started to become more widely used throughout the construction industry.

As a potential user of laser scanned data you need to understand what laser scanning can and cannot do. You need to know how to procure it properly and to ensure you actually get the deliverables you really need to achieve your end goals. Also you need to understand exactly what you need modelling. This informs the route you take so that the deliverable you ask for can provide a workable solution.

- ✓ What Laser Scanning is
- ✓ What it can and cannot achieve
- ✓ What as a client or procurement person needs to know

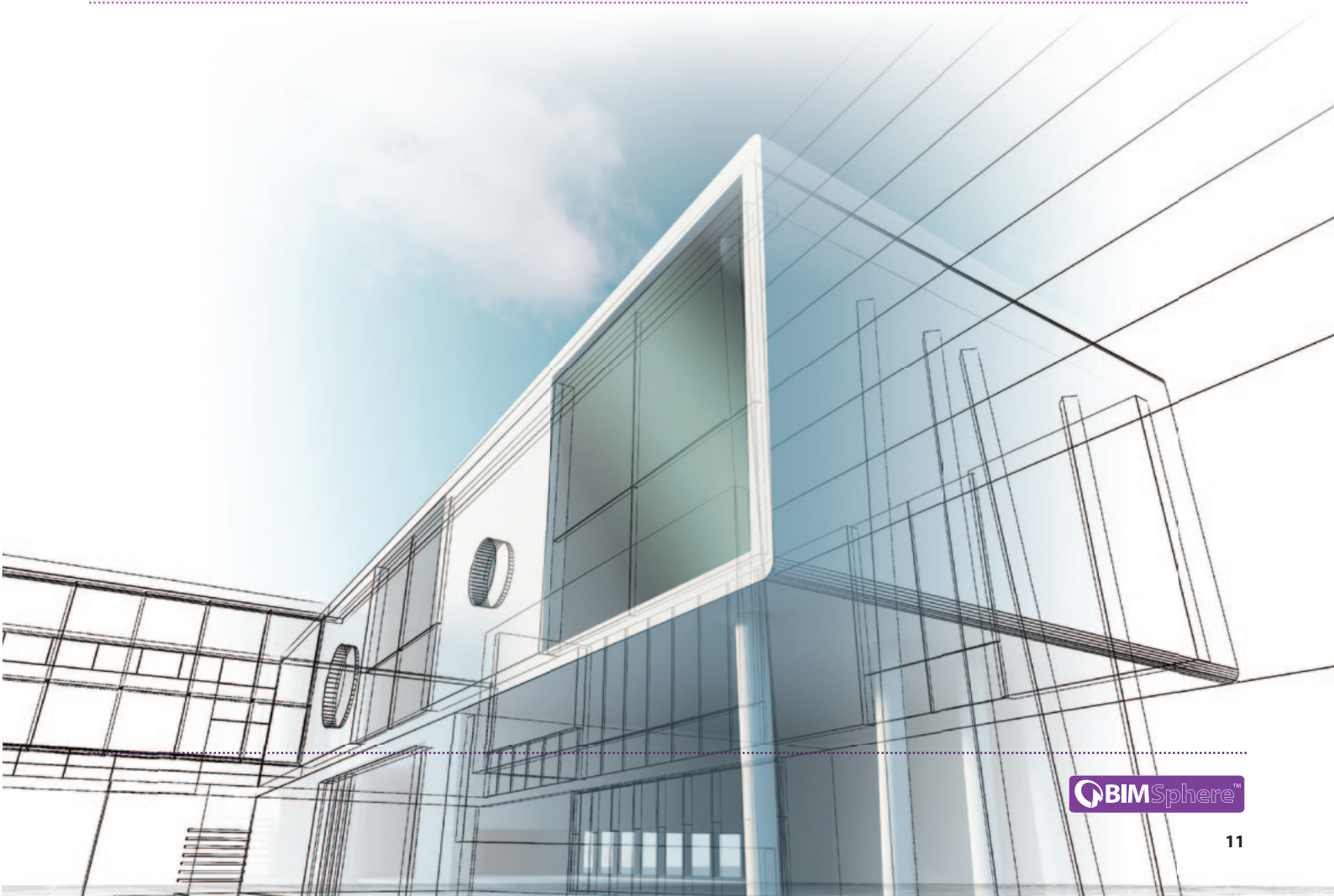
At Amtech, we can help you with our BIM specialist team, who have worked with Laser Scanning within the as-built arena for over a decade. So the pitfalls and requirements are well understood in using laser scanning for BIM.



Training and consultancy schedule

To discuss your training or consultancy requirements please call **0800 028 28 28**

Module	Key audience	Suggested pre-requisites	Duration
Strategic BIM			
Strategic BIM overview	Director/Management level – not hands on	None	Half day
Developing your BIM Implementation Plan	BIM Manager	Strategic BIM Overview	5 days
Practical training with Revit®			
Practical Revit® user training	Technical level – hands on	Training needs assessment	3 days
BIM content creation basics	Technical level – hands on	Revit® user training	1 day
BIM content creation advanced	Senior Technical level – hands on	BIM content creation basics	1 day
Revit® management	Senior Technical level – hands on	Revit® user training	1 day
As built and retro-fit using Revit®	BIM Manager / Technical level – hands on	Revit® user training	1 -3 days
On-going Support / Consultancy	All levels	Revit® user training	5 Day modules



BIM

The time is NOW

BIM is nothing short of a revolution for the Construction Industry. It is a global phenomenon but nowhere does it have more focus than in the UK right now.



“Government as a client can derive significant improvements in cost, value and carbon performance through the use of open sharable asset information”

“It will be mandatory for the use of BIM on all Government projects by 2016”

BIM Working Party Strategy Paper – March 2011

If you want to get started on BIM and need some help contact the BIMSphere team:

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