

BIM FOCUSED SUPPLEMENT

BIM Training and Education

In this issue

How has BIM Education evolved between 2019 and 2020?

What is the difference between education and training?

A New Modular Approach to BIM and Information Management Learning

The power of the customer

Meet the Author



Daryn Fitz has worked within the construction sector for over 35 years, providing extensive experience in the management, application and integration of digital information technologies whilst employed within Design Consultant, Main Contractor, Developer and Employer Organisations.

Today, Daryn is predominantly an advisor to Employer Organisations, provides information management services directly, leads the Lloyd's Register BIM Certification scheme on behalf of Symetri, is an Associate Lecturer at Middlesex University supporting its MSc BIM Management programme, guest lecturer at other Universities and is currently researching a PhD in data quality within Asset Management. As an educator, Daryn is known for his pragmatic and impartial approach, building on and reinforcing concepts by using real-world application and examples.

Editor's Comment

Welcome to this BIM and Information Management education focused supplement.

As a society we all know education is beneficial, provides opportunity, helps us make informed choices or better understand our mistakes, supports richer conversation and wider interests, and enriches lives and our interest in the world around us. I am personally confident that some of the statements above would have resonated with you, or maybe you have thought of many more you would have preferred me to have included. Whatever your point of view, let us for now move forward hopefully in full agreement that education in one form or another is a positive thing.

I will go that step further and talk about the importance of continued education and the importance of it within a company or organisation.

I firmly believe in the importance of education because without it we cannot adapt to industry change, technological advancement, better working practices or simply evolve, and using a well-used business cliché, 'deliver a sustainable business for the future'.

This supplement offers a selection of articles on how you can be empowered, rethink your career, consider the differences between virtual and classroom based education and maybe make you smile along the way. Because I firmly believe education should not be boring, we of course can learn from our mistakes, but we often learn best when we are interested, engaged, and having fun.

"If you are planning for a year, sow rice; if you are planning for a decade, plant trees; if you are planning for a lifetime, educate people"

– Chinese Proverb

Daryn Fitz
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In this issue:

- 4 How has BIM Education evolved between 2019 and 2020?
- 6 What is the difference between education and training?
- 10 A New Modular Approach to BIM and Information Management Learning
- 12 Why BIM education and training must change and mature
- 14 Even older super-spies like 007 can learn new technology
- 16 BIM Consulting - The Power of the Customer

How has BIM Education evolved between 2019 and 2020?



2020 will always be recorded within history as a very significant year for humanity as the COVID-19 global pandemic directly impacted every part of society and challenged what went before. If we consider business and delivery of our projects, we all had to adapt to remote working, transition from face to face meetings to online video conferences, and focused far more on the health and wellness of all our colleagues and friends. For me personally, I saw so much compassion, understanding and consideration within those online meetings. It was okay if someone had to disappear briefly to answer a door or focus on a child who desperately needed their mum or dad, and we can all laugh and relate to those now so common phrases, “Can you hear me?”, “Can you hear me now?” or “Can you see my slides?”.

The shift of BIM education

There was also a shift in learning. Our BIM Fundamentals and Management courses have always been popular since their introduction in 2013, and 2019 was no different, the interest in the new ISO 19650 series provided new content, perspectives and learning opportunities for our customers. The courses had always been delivered onsite in customers offices, at local venues such as hotels, or at our training centres, but as we moved into the latter parts of 2019, we started to provide more and more services internationally and predominantly virtually. So, when we were forced early in 2020 to think of new ways to continue to deliver services, our BIM and ISO 19650 Management course offerings had a good foundation. I also personally had no issues as a facilitator and educator moving to online delivery, I was very confident moving forward. However, it would be very amiss and unprofessional not to evaluate the change, the customer experience, apply any lessons learned and look for continuous improvement. Of course, that is exactly what we did.

Our findings and impressions

When delivering education virtually we needed to consider the comfort of all delegates and their trainer, so quickly concluded that two hours of education plus a fifteen-minute break midway was the perfect length of time for our BIM Management courses. The move away from delivering full day courses did mean the equivalent virtual course had to be delivered in mornings or afternoons. The feedback from customers was that they loved it, it was convenient, they did not lose a full day away from projects and knowledge retention was vastly improved. This was because learning was provided over several sessions and not compressed within a single day, plus they had time to use their new skills right away.

We also had to consider the customer experience and technologies, whether delivery was via Adobe Connect, Microsoft Teams, WebEx, or another platform. These courses are facilitated, not pre-recorded, and therefore we always encourage conversation, debate, and questions. It is this part that makes the experience and drives engagement. We concluded that twenty delegates were a manageable number, and this has proven to be a good decision and number to facilitate and support.

To enrich the experience, the use of other functions such as online polls, quizzes and whiteboards are being tested because virtual engagements are likely to be our preferred method of delivery moving forward.

Of course, we still may hear “Can you hear me?”, “Unmute, you still have mute on.”

The following table shows the shift of BIM Management Education from 2019 to 2020.

2019	2020
A full day session	2hrs virtual sessions with a 15min break midway
Intensive learning	Learning provided in smaller bite sizes
Not all knowledge retained	Improved knowledge retention
Delegate numbers limited to accommodation size	Up to twenty delegate places
Customer needed to book or hire a room	Virtual classroom / seminar space
A full day needed to be scheduled	Scheduled around other activities, e.g. projects
Delegates need to travel to a central location	Delegates can join from their normal workplace
Separate courses required for multiple offices	All offices can join the same session

Summary

The move from face to face seminars or classroom sessions to virtual has been a resounding success for BIM Management education, and there have been far more positives than negatives. For me personally, virtual facilitated courses with lots of delegates, and good open questions and conversation will be my new normal moving forward.

What is the difference between education and training?

When considering employee capability development, have you ever stopped to think whether is it education or training you need to invest in?

I do a lot of academic reading and one publication that interested me was by James C. Georges (Georges, 1996), who stated that:

Education is to increase intellectual awareness

and that,

Training is to make someone proficient at a given task.

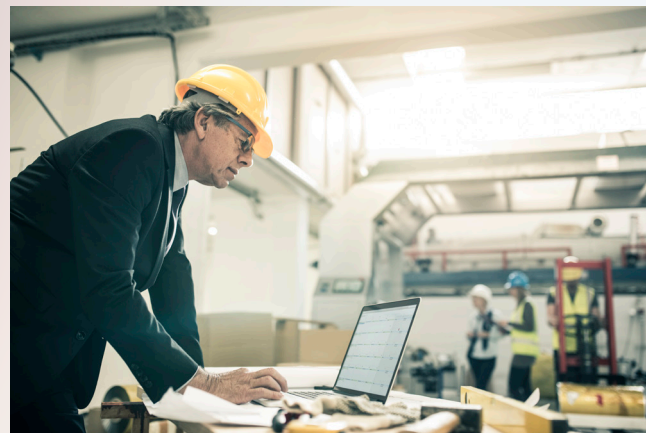
He also suggested that training should consider four components:

1. Define the measure of skilfulness required
2. Define the measurable outcome desired
3. Educate quickly and precisely
4. Train until the measurable performance level and desired result are consistently achieved

You may have noticed that although Georges was discussing training specifically, he included the word educate within his four key components, and this is an important observation. If we are not educated to a level where we know why training in new processes or technologies is required, the personal benefit, or for the company, the result is often a lack of engagement or interest. We all know we learn best when we are interested and fully engaged.

When considering Information Management and BIM, we would always recommend that education should be the starting point so there is a fundamental knowledge of the subject and aligned understanding across a business or organisation. Ensuring a management team understands that Building Information Modelling is far more complex than simply moving from 2D CAD to 3D modelling is often a customer requested outcome from BIM Awareness education.

We also should be conscious of the amount of new education and training a company subjects its employee's to. We do not want it to be resented or feel like a waste of time. With today's working environment changing rapidly. Companies, its management and employees must adapt and learn so they are not left behind.



There has been no era where change across the Construction sector has been so prominent. The digital era is here, moving at breakneck pace and the technological advancements are exponentially accelerating. From new modular construction methods, robotics, digital recording and capture, mobile and sensor data capture, artificial intelligence, there is change happening at every juncture, which can be both exciting and concerning for management and employees alike.

Component one

Returning to Georges' four training components, it is always beneficial to first understand what level of skilfulness (or competency and capability) is required. Your management team may need a good understanding of information management concepts but not the actual technical delivery for example, so in this situation education is needed. You may need some individuals to obtain advanced technical skills so they can train others within the organisation, so in this case education and subsequent training is required.

Component two

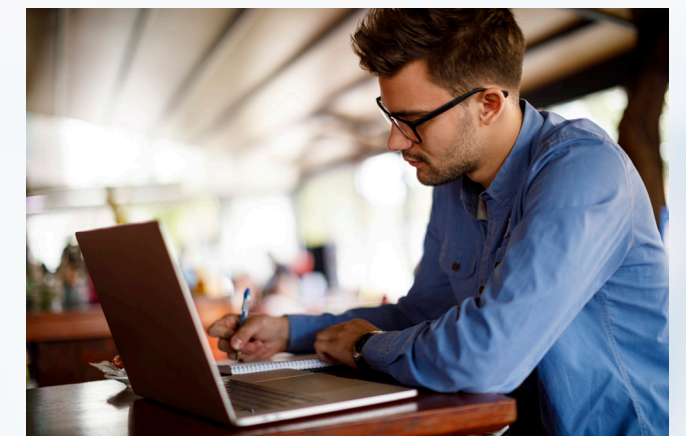
Defining the required outcomes from education and training is a good recommendation. In most cases when we consider investment in education the required outcome or objective is to help support better business decisions, inform the development of future strategies, support cultural change and change perceptions, or aligning teams to understand collectively new processes such as information management or BIM. The focus for training is much more on technical delivery and the outcomes can be far more easily defined and measured.

Component three

The recommendation to educate quickly and precisely may be debated because education could be considered a continuous activity. However, if a company is investing specifically in an education or training programme, knowing that all delegates will complete the activity with an agreed level of education and understanding is not an unreasonable expectation. When we consider Information and BIM Management processes this is important because it is such a vast subject. It may be new to many and can often challenge current working practices which can be very concerning for some individuals. We fully appreciate this and firmly believe empathy should be part of any education or training course. This is one key advantage of facilitated face-to-face or virtual courses when compared to canned video or online training, there is a real person to talk to, receive encouragement from, provide confidence and confirmation that the individual is doing things right and is understanding new concepts or workflows.

Component four

The fourth component is focused on training and not specially education. Training is defined when the measurable performance level and desired result are consistently achieved. For many of us I would divide this into two parts, the initial training and then the application of that training. For example, an individual may attend a course to learn how to develop content in Revit and then within the working environment apply the new skills learnt. Familiarity is a very important aspect. Not everything is 'like riding a bike', if you don't write formulas in Excel for an extended time, you forget and it takes time to re-learn those skills. This would equally apply to writing BIM Execution Plans or designing using Autodesk's Revit once the training has been delivered, familiarity through repetition and application is required and should be considered within any training plans.



In summary, there is a subtle difference between education and training, but often they do complement and support each other. We firmly believe that the education services we offer provides that often needed management knowledge, understanding and awareness, and our training courses deliver the capability, confidence and efficiency required in delivery, a winning combination in any scenario.

Did you know?

We provide Information Management and BIM education and training globally.

Here are just some of the locations we have delivered courses into:

- Australia
- Bangladesh
- Brazil
- India
- Malaysia
- Oman
- Singapore
- Sri Lanka
- Sweden
- Thailand
- United Arab Emirates
- United Kingdom
- USA
- Vietnam

If you work within an International Organisation or are based outside the United Kingdom, we are ready to help and support you.

Contact us today to find out more:
info@symetri.co.uk

SYMETRI
ADDNODE GROUP

Services to support your BIM journey

BIM Certification is becoming more prominent across the industry, which has resulted in an increase of requests by client organisations from their suppliers. Therefore, we adapt and adjust our services to help guide you in the right direction.

Training

We host scheduled and private training and education courses to provide you with the skills and knowledge your organisation needs.

BIM Fundamentals Processes and Procedures

This training course is designed to provide delegates with an understanding of the BIM Management process. It includes insights into the key aspects of the current Information and BIM Management standards, specifications and guidance and develop an understanding of how information should be managed, delivered, and used through the capital, delivery and into occupation.

ISO Workshops

This event spans the gap between theory and practice, giving delegates exposure to real world applications of ISO 19650. We aim to give delegates the understanding and knowledge necessary to start applying international best practice on new projects.

Modular BIM Learning

We have established several modules which covers everything you need to know about BIM and Information Management. However, we want you to learn only what you need to. Our modular approach empowers you to select the modules you and your colleagues need to understand more about, and gives you control over your budget and time. Find out how it works on pages 10 and 11.

Surgeries

We run regular surgeries throughout the year focusing on different areas of the BIM process. Join one of our session with any questions you have, and we will provide you with suggestions and guidance to help you make an informed decision. Ask us when our next session is scheduled and book a 30-minute appointment with one of our BIM experts to ask any questions you have.

They focus on:

- **BIM Certification** - If you have an interest in understanding the Lloyd's Register scheme, this session is for you.
- **ISO 19650 Standards** - We will focus on different areas of the standard and are here to help you understand it better and adopt best practice.
- **Winning new work** - Bidding or tendering for new projects is never easy or straight forward. We will provide you with suggestions and guidance to get it right.

A New Modular Approach to BIM and Information Management Learning



We are very excited to present to you our new approach to delivering our virtual management courses to organisations. The transition to this new format has been a progressive one over the last year, and it will continue to evolve and expand, with much of it being influenced by the very latest industry standards, good working practices and our customers and their direct business needs.

The main take-away is we now empower you to choose the content of your course. You are in total control and select what you and your colleagues need to learn and understand more about.

You can of course decide to choose a pre-selected recommended learning path, for example maybe one suitable for an Architect undertaking Information Management roles. However, even if you feel you understand some of the course content, you can replace this with a different subject to make sure you get the very best value from your course.

You can even configure a course from scratch and select every single subject you want to learn more about, so it is tailored just right for your organisation and colleagues.

Regardless of the content, every module is facilitated by a subject matter expert, no pre-set videos and canned delivery, a real person-to-person experience via virtual delivery, enabling questions and conversation enriching the experience.

So, how does it work?

1. Select the modules you would like to include in your course, from learning about CDE's, the latest standards, contractual considerations to COBie, the choice is yours.
2. The number of modules you select will determine the number of sessions that will be scheduled. For a 12-module course this would be three sessions, delivered in the morning or afternoon, or a mixture of both.
3. The facilitator(s) of the course will configure the agenda based on your selected modules and send a copy of the course agenda to you for approval, this will also include a formal proposal and method for booking the course.
4. Once we have received your confirmation, our scheduling team will offer a range of dates and times for you to select from and request a list of delegates and their contact emails.
5. Once course dates have been confirmed the course facilitator will email all delegates an introduction, diary invites and a link to downloadable resources ready for the course to commence.

Are there any limitations?

There are a few configuration rules that do have to be applied to ensure the structure and flexibility works for all customer and organisation types. Some modules are mandatory such as 'Introduction and System Checks' to ensure you gain essential information before progressing and you must pick a minimum of twelve modules. If more modules are required, they must be selected as blocks of four. The course is limited to 20 delegates, this ensures the course can be facilitated and engagement maximised.

Each session is approximately 2.25hrs, this includes a 15-minute break midway. We do insist on these breaks for the comfort of all delegates.

The course is delivered in spoken and written English only.

What modules are currently available?

We have tabulated the current modules below and add new ones on a regular basis.

Module	Content
Module 1	Introductions and System Checks
Module 2	What is BIM?
Module 3	Why BIM is being adopted?
Module 4	BIM maturity around the globe
Module 5	BIM Dimensions
Module 6	BIM Maturity Levels and Stages
Module 7	LOD and LOI
Module 8	Container Naming
Module 9	Introducing the standards
Module 10	The CDE
Module 11	The key documents
Module 12	The Information Cycle
Module 13	Asset Data (ISO 19650-3)
Module 14	Exploring COBie
Module 15	Roles, Responsibilities and Functions
Module 16	Security-minded building information modelling (ISO 19650-5)
Module 17	ISO 19650 Walkthrough
Module 18	ISO 19650 Walkthrough (continued)
Module 19	ISO 19650 Walkthrough (continued)
Module 20	ISO 19650 Walkthrough (continued)
Module 21	Contracts, Accreditations and Certifications
Module 22	Asset Management (ISO 55001 & 2)
Module 23	Digital Twins
Module 24	Next Steps and Course Close

We can also add additional modules on request.
Module 25 Level of Information Need (BS EN 17412-1) will be available January 1st 2021

FAQ's

This sounds great but I do not know which modules to choose. What do I do?

This is not a problem. We have a set of preconfigured sessions we can recommend to you. These are designed for each organisation type, so if you are a Client/Employer Organisation, a Main Contractor, Architect, Engineer, Manufacturer, etc., we can provide a course that is tailored to the services you provide. Even better, you can still swap out modules if you feel your company is very experienced in any specific area.

Will you still be running scheduled courses for individuals?

We fully understand that some companies may only wish to send one or two individuals on standard training courses. Therefore, we will still be offering scheduled courses, BIM workshops, fundamentals and ISO 19650 training for individuals to attend, in addition to the private courses shown above.

How do I start configuring my companies' course?

We can set up a virtual meeting with one of our representatives to show you our course configurator tool and help you choose the modules that would be best for your company. At the end of the brief meeting, a copy of the selected modules can be emailed to you, and if you are happy to proceed after the meeting, one of our facilitators will arrange the modules into logical running order and a full proposal for the course provided for your consideration.

We believe that this new format is empowering, improves knowledge retention, and provides more choice and flexibility, which is convenient for you.

Why BIM education and training must change and mature



“Education is the most powerful weapon which you can use to change the world.” - Nelson Mandela

One of my primary roles is to help customers understand the wider impacts of BIM beyond the technologies. It is rewarding work and provides me with a platform to explain BIM management processes, emerging workflows and good working practices, provide insight into the key aspects of the standards and specifications, and explore contractual responsibilities and project risks in an interactive and open forum. However, the world never stands still, and the way we work is changing and evolving very quickly in this new digital age. As a result, our companies approach to Building Information Modelling (BIM) and Information Management education and BIM training also must evolve to stay relevant.

2019 has already been significant for the continued world-wide adoption of BIM via the publication of the International standard ISO 19650. I will take this opportunity to personally congratulate all of those who supported this industry transition, significantly led by the original development of the UK standards and specifications, but also by those who added valuable insights on social media and at the many industry events by generously sharing their knowledge and experience.

Prior to the release of ISO 19650 and the associated PD 19650-0 UK Transition Guidance, we had already observed and identified two industry trends during the previous six months and a fundamental shift across the industry in both maturity and a focus on BIM and alignment to contractual frameworks.

Trend one: The importance of the BIM management process

The first trend seemed to emerge from a realisation by organisations that the overall BIM management process is as important as technical ability. As a result, we have noticed a significant increase in the number of organisations requesting assistance to update and sometimes rewriting their current BIM Standard Method and Procedures (SMP's) to improve the overall management process. As the industry transitions over the next few years to working towards ISO 19650, this provides a great opportunity for organisations to review and improve their current standard method and procedures to significantly advance their own BIM journey and maturity.

Trend two: Aligning EIR's and BEP's

The second trend we have observed is the discussion and efforts being made to aligning Employers Information Requirement's (EIR's) and BIM Execution Plans (BEP's) to specific contracts and roles and responsibilities. The industry is fast realising that the BEP is a contractual document with a key contributor to project success and increased collaboration that must be specific to the project and the contractual framework.

So, how does this relate to BIM education and training?

We have been running the **CPD Accredited BIM Fundamental Workshops** for nearly six years, which was originally developed for Employer organisations. This course continues to be popular as a starting point to help develop a BIM strategy or transitional thinking away from just the technologies like Revit or Navisworks, into wider and new management concepts. However, there is also a need for more detailed BIM management training. This is not just because of the publication of ISO 19650, but through a desire to make processes easier to understand, provide clearer instruction and ensure they are more relevant to project specific requirements. Our Consultants are able to support you with this, but I believe there is another approach that can be taken.

Introducing the BIM writing retreat

Our new facilitated **BIM writing retreat** provides attendee's with that much needed thinking time away from project work, enabling individuals to author a BIM Execution Plan, respond to PQQ's, and develop Master Information Delivery Plans. During the retreat, one of our Consultants is available to answer any questions you have, and provide instruction and guidance specifically related to your project. We have described this as a Retreat on purpose because we want everyone who leaves this course brimming with confidence and assured of their approach. We believe you can only achieve

this by taking a step away from daily work and life pressures, offering you the time to focus.

Another advantage of this type of approach, is that instead of being handed a BIM Execution Plan and being told to work to it without any further instruction, individuals would have personally authored the document and will fully understand every paragraph, sentence and word written within it. This type of education empowers individuals and makes BIM far more personal and relevant to them, increasing adoption within organisations. Documents are therefore written clearly and concisely, and key questions are answered such as: who, what, when, how and the often forgotten why for each process. This new course is configured for groups of up to eight people over two days and intended for Design, BIM, or Information Managers. This is not an exclusive club and should add value to anyone who needs to understand or author a BIM Execution Plan or ancillary documents.

The ISO Workshop

The third BIM and Information Management education course is very much focused around ISO 19650. Our approach has always been to try to ensure that attendees understand all the concepts and not just some parts, so we have taken our time to develop a clear and concise step-by-step approach through an ISO 19650 compliant project lifecycle with an **ISO Workshop**. It includes everyone's roles, responsibilities, and perspectives whether you are a client, employer, designer, or contractor. Attendee's take on a project role and we lead you through the project from start to finish. We explain each requirement, what management tools or templates you may need, and also providing pragmatic advice gained from over thirty years of extensive industry experience.

I hope this blog has given you a small insight into the types of BIM training courses we have developed in order to support your own BIM journey.

Our BIM training courses will continue to evolve and mature with the industry and your needs. By providing you with that powerful weapon, you can change your business now and into the future.

The referenced courses are now available and facilitated virtually.

Even older super-spies like 007 can learn new technology



I laugh out loud when I hear those earlier in their careers state that those more advanced in their careers find it difficult to move to new technologies and workflows, that many don't even want to, or are thought of as being resentful of making any changes to the way they have always worked.

This is unfortunately a common perception, and I am sure I must have made the same assumptions earlier in my own career when I was that young gun moving from drawing boards to the new world of CAD, not understanding why my older colleagues were not so keen or excited to embrace the latest offerings from fledgling technology companies like Autodesk.

But let's just stop for one minute, aren't we referring to the same individuals who are now tied to their smartphones, use satellite navigation to get from place to place, buy products online and in many cases purchase the very latest technology available? At the age of 50, Daniel Craig is about to play James Bond 007 once again, which portrays a spy using the latest technology and the most advanced cars. Are cinema goers going to say that he is too old to learn any new technology provided by Q? Okay, yes, I am being slightly flippant, but my point is, we may assume that those further in their careers cannot, or will not, learn new technologies and workflows. This is simply wrong.

So, let me try to back up the above claim. It is well established in academic research that older workers are less likely to participate in training (Rosen and Jerdee 1976; Chiu, Chan, Snape and Redman 2001; Maurer 2001; Posthuma and Campion 2009). Ageism is considered very discriminatory but is still evident and can potentially have a negative impact on organisations. When management adopt a stereotypical view of the learning attitudes of older

workers, companies are less likely to invest in training or development opportunities for older employees. This will result in older workers become less confident in their training abilities, their skills rapidly become out-dated, and their productivity is adversely affected (Maurer 2001; Van Vianen, Dalhoeven and De Pater 2011). This doesn't help anyone. I personally believe that another factor should also be considered; older workers benefit from years of experience based on equal measures of success and the resolution of difficult challenges. In my experience, they will typically question things based on past experiences when compared to those earlier in their career, who often see opportunity at every juncture. If you are still reading, get ready for a big shock. Research suggests that the age when companies consider investing in employee's as less desirable is not 60 or 50, but actually just after your 40th birthday! There are different research results but typically it falls between 40 and 45 years of age. If you are at, or approaching 40, and reading this, do you feel that you've had less training and development opportunities recently? Or do you feel resistant to change, obstructive or unable to learn new technologies?



To further support this, the following referenced research study stated that companies begin to invest less, including in terms of training and development opportunities, when workers reach the age of 45 years. This is frequently viewed as the beginning of the final stage of the worker's career (Schein 1978; Maurer 2001; Van Vianen, De Pater and Preenen 2009). I would personally challenge this, because people in the UK potentially work until the age of 67, which means there is 22 years of someone's career that could be undeveloped and left behind. Let's compare that to a University graduate entering the workforce at say 22 years of age who would potentially work for at least

45 years. Doing the maths, at 45 years of age you would still have 47% of your career ahead of you, I would not consider that a final stage.

Let's get back to my normal enthusiastic writing style. I started this blog saying I laugh when I hear ageist views that those more advanced in their careers cannot learn new technologies. The 007 films, with Daniel Craig, are based on a changing world where James Bond is considered out-dated and a dinosaur in a modern constantly changing world, but of course he always succeeds and wins. In the real world of construction, we see in the press constant reports of skills shortages, a need to keep expertise in the industry and of course individuals working for longer and having extended careers. At the same time, the Construction sector is embarking on rapid change, a digital transformation and change management process that is both disruptive and collaborative at the same time. Can we afford as an industry to allow one of our greatest resources to fall behind due to a lack of investment in training and support? For employers, the investment in staff over the age of forty, is investment in employees who are typically less transient and will fully commit to organisations. They are widely experienced but let's all be honest; this demographic of staff are often not the first ones to shout out they need training in the latest processes or technologies. Yes, I am blaming employees and employers equally here.

First of all, employees, you have many work years ahead (sorry) and just think how much has changed in the last 10 or 20 years of your career, you need to start shouting out and not assume you should naturally know about all the latest technologies and workflows. With the increased importance of BIM, this hasn't slowed up. Over the last few years, we have watched the industry seek to understand what BIM is beyond 3D modelling, and how it can help them. The best way to learn many of the aspects is to attend BIM training sessions.

Even if you've been using CAD or BIM systems for many years, you are probably working inefficiently not realising that the software has moved on and there are quicker ways to achieve your goals and deliver outputs. Quite often in our BIM training courses, delegates' feedback indicates this, which provides real value and increased efficiency from attending a BIM training course.

Employers shouldn't assume 'Janet or John' isn't capable of moving to new technologies. Don't allow them to sit quietly passing a small part of their wealth of knowledge and experience to those newer in their careers, but at the same time wrongly accepting that they cannot be more efficient, embrace new technologies or assist in their implementation.

One of my many mottos is "if something adds no value to you personally, for your organisation, for your projects or your Clients, just don't do it". When it comes to investing in BIM training and support for those staff later in their careers, I can only see a Win-Win for everyone. On a personal level it allows employees to build upon or update existing skills and feel motivated. The organisation will benefit from increased productivity. The projects will benefit from staff who are able to apply years of industry delivery experience, and manage new technology assisted workflows. And most importantly, the Client will benefit from projects delivered by experienced individuals embracing the very latest technologies and leading a digital collaborative environment. Let's be honest, if your more senior staff don't understand BIM, Revit, Navisworks, BIM 360, etc. even at a fundamental level, are they going to drive adoption on projects? And those young guns who are early in their careers will not be able to drive adoption and change on their own.

After everything I have discussed within this blog, consider me, the author. I am a Consultant working towards joining the grey brigade and have worked for over 35 years in the construction sector. I have a passion for technology which has never faded; at home I converse with Amazon Alexa which controls my lighting, sound system, etc., I use a robot vacuum cleaner, I'm a PS4 gamer, and I'm researching a PhD in Data Quality in Facility Management. My career has transcended Drawing Boards, CAD, 3D Modelling and BIM, and I will continue to look forward but knowing we can always learn from the past.

BIM Consulting - The Power of the Customer

“The more you engage with customers the clearer things become and the easier it is to determine what you should be doing.”

- John Russell, President at Harley Davidson.

Building Information Modelling (BIM) and Information Management is a huge subject area, and once individuals understanding and thinking moves away from 3D modelling and embedded data, it expands into understanding new legal frameworks, insurances, risk management approaches, projects and change management.

At the beginning of 2020, we migrated our consultancy services to a virtual delivery format, and as part of this process we defined the services we offer. My focus was the BIM consulting services. During this process it was evident how many had been introduced directly because of, or influenced by, customer requests and conversations. We of course continually monitor industry trends, software development and industry requirements, but I firmly believe customer engagement is equally, if not more important.

As an example, we have introduced BIM Management Consultancy as a new service, where customers can get direct access to subject matter experts to review and provide guidance on any aspect of BIM management that requires improvement or attention. This service was heavily influenced by an increasing number of our customers direct requesting help and confirmation that the procedures they were planning to implement within their organisation or on projects were appropriate.

The challenge for BIM Leads in many organisations is they are often working in isolation and sometimes they are the only ones that have a good understanding of BIM within their workplace. What they often require is that 'Phone a Friend' facility to assist and sometimes help build confidence in their own abilities, and that's where BIM Consulting comes into play. What was important for these services during development was to empower the customer so they have full control and flexibility to select their focus areas, whether it is the development of BIM documentation, current project challenges and concerns, how to complete a PQQ in the best way, aligning to ISO 19650 or developing a BIM strategy.

We felt compelled to ensure there were no BIM Management topics that could not be explored.

Personally, I believe these services work best virtually. We have found if conversations move into software specifics rather than management process, we can pause the session and reconvene with an application specialist. We can source reference material from our knowledge banks and pass these directly to customers within the session to continue conversations. We can also split sessions to allow multiple consultants with specific industry experience to support a customer who may have different design disciplines such as MEP and Civils or is working in a specialist sector such as aviation. This flexibility was often difficult to provide so easily or in such a cost-effective way via full day on-site engagements, and the convenience that conferencing platforms such as Microsoft Teams and equivalents provide, continue to challenge and change the way we all work. It seems our industry has rapidly moved from 'that frustrating technology' mindset to 'I am completely reliant on Teams, BIM 360, Virtual Meetings, etc.' It is of course unfortunate that a global crisis was the catalyst that drove such a rapid and significant cultural change.

I started this blog with the title 'The Power of the Customer' I want to end by asking you to continue to influence the services and support we provide to you. Every time you attend one of our training courses, a BIM Workshop, or any other engagement, we ask you to complete a feedback form. It is part of our quality assurance and improvement process and does influence how we provide future support to you. So please ensure you provide us with your feedback.

If there are any services you think we should consider or want us to provide, let your Account Manager know or get in contact directly with your suggestions. It may be a service we already provide, or you could be that customer who directly shapes the way we provide future support to the industry.

About our BIM experts



Daryn Fitz

Daryn is the author of this brochure (his profile is on page 2) and is our Lead Consultant for BIM and Information Management.



Dave Bosworth

As a Civil Engineering Surveyor, Dave worked for many years on construction projects across the UK where he gained unique experience in the use of design technology in both infrastructure engineering and GIS/mapping. Dave is currently the sector lead for Infrastructure solutions, and has helped many organisations develop and implement digital transformation strategies that support the adoption of BIM for infrastructure projects.



Rob Clark

From his original career as a Structural, Architectural and Civil profession, Rob has worked in partnership with many major UK AEC and Owner Operators, including Heathrow Airport, Capita, the MOD and Buro Happold as well as numerous SMEs. Rob's current focus is Common Data Environment (CDE) including Data Management process, concentrating on Fire Safety and Protection disciplines and is the Architecture and Engineering sector lead for Autodesk BIM 360.

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