



PEOPLE

OVERCOMING RELUCTANCE TO BIM IS THE KEY TO CONSTRUCTION'S FUTURE

1 Comment

11 DECEMBER 2017 | BY JASON RUDDLE

Jason Ruddle, managing director of Elecosoft, looks into why uptake of BIM seems to be waning after the fanfare of the government mandate in 2016.

Interested organisations in construction and engineering have been tracking BIM adoption for several years. Generally, this has revealed steady uptake. Although penetration remains deepest at the design end of the value chain, we see clear evidence via our customers that it is gaining real traction in the build stage too.

Overall, there has been broad confidence that BIM would reach everyone eventually, due to the impetus of the government mandate. Yet, this confidence now appears to be waning slightly.

A recent industry [study](#) reports a slight decline in contractors' use of BIM, and the [NBS reports](#) disillusionment among 50% of construction product manufacturers.

The [BIM+ 2017 survey](#) suggested that even clients might be feeling jaded, with the proportion of central government clients requiring Level 2 BIM falling from 23% to 20%.

Despite the mandate, only 38% of central government departments make BIM mandatory, and just 17% of other publicly-funded clients. It was suggested by Edinburgh Napier University at a CIBSE symposium that uptake is "plateauing, and has not penetrated the supply chain" as hoped.

Behind the hype

IT experts have some theories that may shed light. Gartner analysts believe new technologies go through a "hype cycle" and there are some apparent parallels. The model suggests a "Peak of Inflated Expectation" follows an initial trigger, then a "Trough of Disillusionment".

Such terms may resonate with many. Despite BIM reaching an "early majority" of the market, as Geoffrey Moore terms it in another IT adoption model, it seems to be struggling to "cross the chasm" into the mass mainstream, as companies move from early enthusiasm to encountering practical barriers and pitfalls.



"TO THRIVE, CONSTRUCTION NEEDS NOT ONLY TRADE SKILLS, BUT RECRUITS WITH NEW IDEAS AND DIGITAL FLUENCY TO INNOVATE AND INTEGRATE NEW TECHNOLOGIES. MANY OF OUR CUSTOMERS HAVE RECRUITED MOTIVATED MILLENNIALS, WHO ARE ALREADY ACTING AS CHAMPIONS OF CHANGE."
- JASON RUDDLE, ELECOSOFT



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TAKING BIM BEYOND CONSTRUCTION

Q&A - PFTFR

It is also not enough simply to regard BIM as "a technology" because it depends on cultural and organisational change, including creating new information management roles, and requiring companies to recognise a new role for data within projects, contracts and client relationships.

It forces a modern, collaborative, and open model on firms which have worked in a traditional, linear and commercially insular way. Reluctance to take up BIM is a symptom of a wider reluctance to change, to embrace digital thinking, and to shift cultures.

Overcoming reluctance

That there are a few sector issues is no surprise. The Farmer report didn't exactly pull its punches, neither in the title - "Modernise or Die" - nor in its contents, citing a "deep-seated cultural reluctance to change" and acknowledging a major transformation challenge.

Transformation is tricky in any sector. Construction has been working hard to modernise, but this quite traditional industry must deal with it on both digital and cultural fronts. Consultant McKinsey believes there are **three steps** on the path to digital transformation:

- Recognising that there is an issue to resolve;
- Altering your definition of success and how you measure it;
- Taking actions to drive change.

Motivating benefits lie beyond BIM: modern digital systems and tools can enhance processes, drive efficiency, and increase the visibility and ability of decision-makers. They can empower individuals to work collaboratively on everything - not just projects. The unlimited nature of digital can help established companies create innovative new services, and engineer additional value in customer relationships as well as buildings.

Bringing in the new

To resolve its ongoing productivity crisis and remain viable and relevant, even construction traditionalists must dive into digital modernisation, embracing cloud, mobile, social and collaborative tools. It means modernisation in the physical world too, via modern methods of construction (MMC), before economic realities and skills shortages create critical failures.

There are clear drivers for both. Contractors already feel some pressure to embrace BIM to secure future public sector jobs. The government has now formalised, within the recent **Industrial Strategy**, that it will have a "presumption of use" of MMC, such as offsite manufacturing and prefab, across all capital and infrastructure projects in the public sector, which represents around a quarter of all UK construction output.

Policy focus is moving towards supporting a future Britain featuring intelligent buildings, smart infrastructure and sensor-enabled environments, able to support autonomous vehicles and other aspects of modern operation. Meanwhile, innovations such as AI, the Internet of Things, 3D printing and robotics will all influence construction significantly.

To thrive, construction needs not only trade skills, but recruits with new ideas and digital fluency to innovate and integrate new technologies. Many of our customers have recruited motivated millennials, who are already acting as champions of change.

Modernising construction employment for them, and their successors in "Generation Z", is vital. They will certainly be targets for the "Construct" disruptors that are predicted to emerge.



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KEEPING THE BIM FLAME BURNING



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THE HOW, WHY AND WHEN



IN DEFENCE OF THE TERM 'BIM'



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VIRTUAL REALITY: A BEGINNER'S GUIDE



INTERVIEW: EDONIS JESUS, BIM4HERITAGE
MAKING BIM WORK FOR HISTORIC BUILDINGS

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Analysts and major contractors have already noted that this creates a need for greater agility, since new entrants are unconstrained by the legacy baggage of established firms, such as ageing IT or traditional processes. They may use MMC approaches by default, and will no doubt leverage every advantage digital can deliver.

Maintaining speed

Construction is starting to change even though some traditionalists resist. Leaders must recognise resistance where it exists, and somehow find excitement and opportunity in change.

They must certainly invest to empower people to manage BIM projects better, and we support that with our own offerings - but cannot stop there. They must also re-envision the future, and use digital to help every site, office and individual work better, enable collaboration and become truly modern businesses.

BIM is just the first step in the process of transformation, and it heralds exciting wider change. Its progress must not slow - so firms must maintain confidence that the first BIM projects, now coming to fruition, will start to illustrate the benefits in a tangible way.

As a software company, we are deeply committed to BIM and big believers in what IT can do. We see many of our customers getting to grip with BIM in earnest now, albeit in varying degrees.

We urge all construction companies to dive into digital with BIM if they have not yet done so - and to keep the faith if they have. The construction industry must reach with BIM what Gartner calls the "Plateau of Productivity" which means pushing through its early challenges, and going fast and full-tilt to secure all that the digital world can offer.

Image: [Klosea39/Dreamstime](#)



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BIM WORK
FOR
HISTORIC
BUILDINGS**

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DATA
OVERLOAD,
LET'S START
TALKING
AGAIN**



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BRYDEN
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HOPE
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**PRODUCTIVE
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**COBIE -
THE
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**THE BIG
DATA GAME:
CAN IT
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Comments

The problem with BIM adoption is that it is being driven from the wrong end of the supply chain. The Design side of the industry is having no problem adopting BIM. Once they see the benefits the construction teams are also very positive, albeit their understanding is usually a fairly glib one, as they see how offsite fabrication and even just basic coordination and problem solving performed in the virtual environment saves them much time and effort on site. It is the "corporate" side of the industry that needs to get with the programme in terms of understanding the benefits and requirements of a BIM project. Usually their vision only goes as far as the bottom line and it is very difficult to convince them of what they cannot yet see.

Dave Smith | Posted: December 11th 2017