The beacon for public sector digital transformation

FUELING INNOVATION WITH INFORMATION AND TECHNOLOGY

WITH A 25-YEAR BACKGROUND IN TECHNOLOGY AND CHANGE MANAGEMENT, ADAM MATTHEWS, CHAIR, GLOBAL BUILDING INFORMATION MODELLING (BIM) NETWORK, BRINGS TOGETHER DIGITAL INNOVATION WITH NATIONAL TRANSFORMATION EXPERIENCE.

COMBINED WITH WORKING IN THE INFRASTRUCTURE INDUSTRY FOR OVER A DECADE, ADAM'S DIGITAL TRANSITION EXPERTISE PUTS HIM IN GREAT STEAD TO CHAMPION CHANGE ACROSS THE PUBLIC SECTOR AND ITS INTRODUCTION OF BIM.

The Network he leads has a vision of a global digital built environment that delivers benefits for people and places.

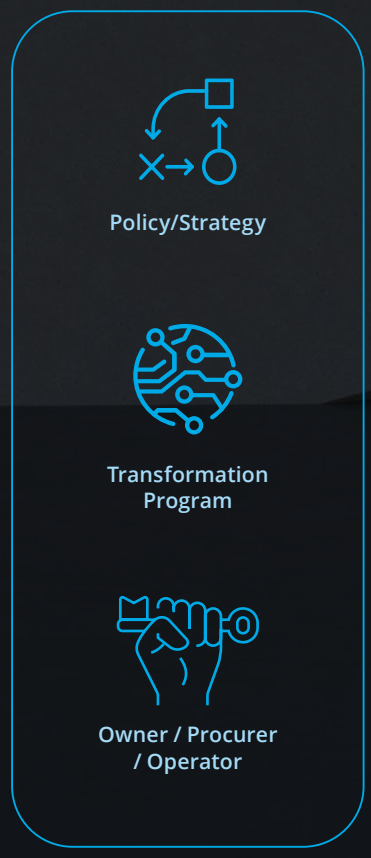
Guri Neote, partner in Major Programmes with a focus on Digital & Capital Projects in Deloitte UK, spent some time with Adam to find out more about his vision for the future and the critical role digital transformation plays in unlocking innovation, efficiency and performance in the sector. Interestingly, Adam reveals that his perspective is one that is entirely focused on change, and making continued improvements by asking the right questions to save time, money and effort on digital transformation journeys.

When describing his role for the UK Government's BIM program (2010–2017), Adam says, "I've been involved with BIM since the formation of the UK's BIM policy and it's an incredibly rewarding experience working with the UK's and other governments around the world to look at the challenges facing both government and industry in terms of adopting digital practices. I'm fascinated by our future and how we can shape today's built environment to make sure it is responsive and fit for purpose for decades to come."

GLOBAL BIM NETWORK, ITS VISION AND PRIORITIES

When asked to describe the Global BIM Network, Adam says it was established in March 2021 to connect international public sector representatives and multi-lateral organizations with the aim of advancing the digitalisation of the global built environment and sharing the resulting benefits. BIM is a powerful digital innovation tool, which combines technical standards, technology, data, collaborative working and digital skills, to deliver better outcomes for projects, people and places.

"The network is the natural development of the increased level of international collaboration between governments and multi-lateral organisations on the digitalisation agenda in the construction industry and built environment. This includes policy makers (from public sector entities), program leads (of a national digital transformation program in a country or within an organization), and public procurers (those involved in the execution supervision of public infrastructure within their organizations or countries)," says Adam.



BIM 3d hologram. (Image: Getty Images)

THE RISE OF PUBLIC SECTOR TAKING A LEADERSHIP ROLE TO PROMOTE BIM IN ITS PUBLIC CONSTRUCTION AND INFRASTRUCTURE PROJECTS.

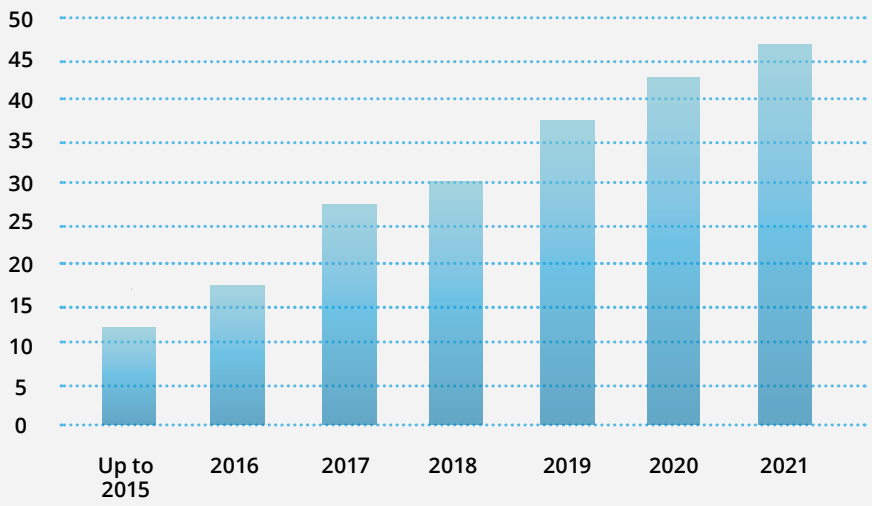
"These three communities learn from each other, so fundamentally it's a learning, knowledge sharing, information gathering network – so the bigger our membership, the richer our knowledge and the more we can inspire innovation across the public sector. Essentially, the BIM Network acts as a beacon, a flag, and a direction finder for those who work in the public sector to drive digital transformation within the industry as a whole," explains Adam.

When sharing the network's priorities, Adam says there's a wealth of material that the network can use to support and address its challenges, including tackling risk aversion or low risk appetite for public procurement. "It's helpful to have information exchange between how somebody's managed to work through some of these challenges, so one of the basic ideas is to bring all that information together into one central, structured place so civil servants can easily find and digest those insights.

"With this in mind, our priority for the next 12 months is to build on the 500 global articles we've already collected on digital transformation that could be useful for the public sector across all different levels of government, spanning national strategies.

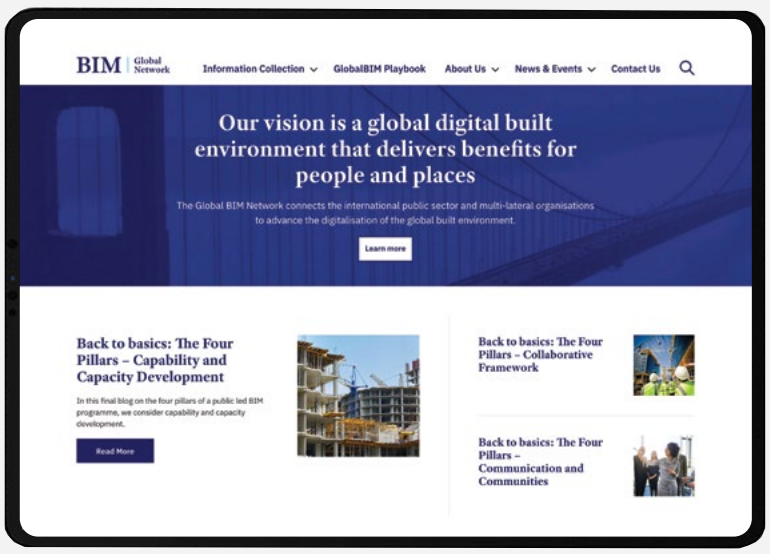
"Articles cover topics from creating the business case for digital transformation, to developing a roadmap for digital transformation, right down to the execution level for introducing digital construction into project supervision or project procurement. We're creating a wealth of easily accessible knowledge, based on a wide span of documents, so this combined this becomes the 'digital transformation playbook' for public sector construction so everyone benefits; citizens, communities and ultimately economies," says Adam.

PUBLIC SECTOR BIM PROGRAMS



THE GLOBAL BIM INFORMATION COLLECTION

From this wealth of information we've developed a world first: a dedicated knowledge product for the public sector to guide the introduction of BIM from the early stages of developing a case for it through to scaling implementation. It is developed by the public sector for the needs of the public sector.



https://www.globalbim.org/playbook

https://www.globalbim.org/information-collection

CREATING A GLOBAL BIM VIEW

As well as completing the digital transformation playbook in the next few months, Adam is focused on making sure that those who use this resource will feel confident to act on the knowledge they have access to.

"We're creating a global BIM view, a collective view, across about 60-70 countries, of what is happening, which we'll do in two ways: A secondary research study of the database with over 400 articles, including analysis and interpretation of what the articles mean; and producing and running a survey with our partner network, including government representatives from 27 European countries and close to 10 Latin countries. The survey will focus on accurately understanding the extent of people's knowledge, what's working well and less well in those countries."

TAKING PEOPLE ON THE JOURNEY

When asked about digital adoption barriers, Adam shares a few different examples.

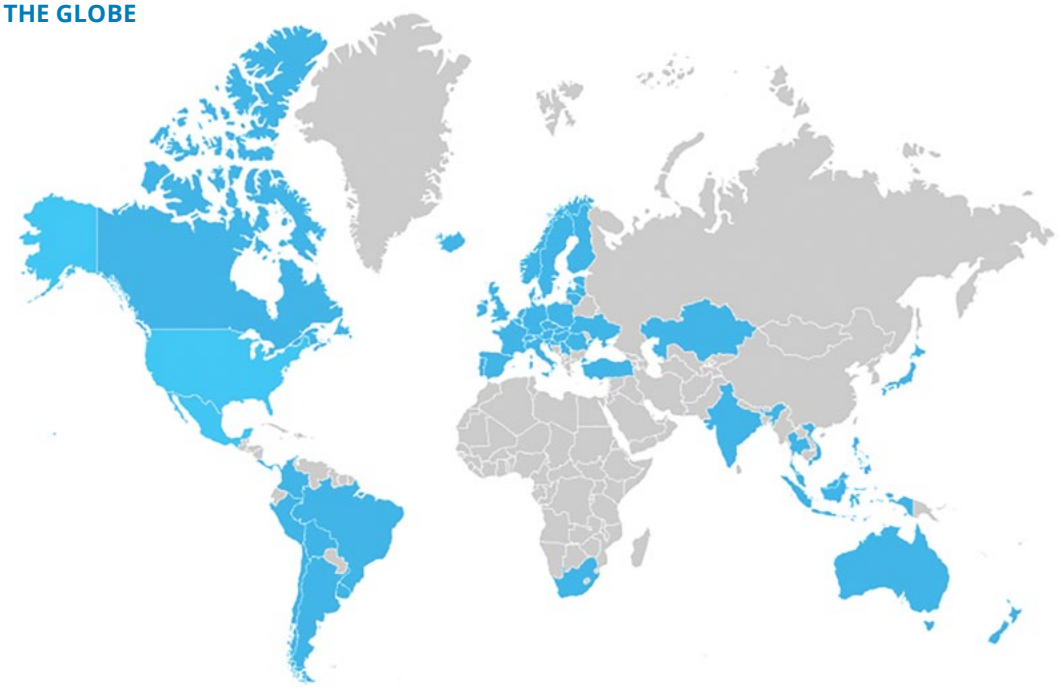
"Firstly, we need greater public sector involvement; especially in public procurement, which tends to be quite a risk averse area because of the need to reduce exposure.

"Secondly, it's appreciating that the landscape we operate in is complex. So even though our focus is on digital transformation, it's about people and engaging their desire for change – and it's bringing people along the journey that I enjoy most. We need to change the way we think to be about social change to succeed," says Adam.

INCREASING COVERAGE OF BIM KNOWLEDGE ACROSS THE GLOBE

400+
RESOURCES

60+
COUNTRIES



Source: Scope and scale of the global BIM network information collection resources

BUILDING A PICTURE OF THE FUTURE TO INSPIRE CHANGE

When thinking about the built environment, Adam likens its potential to science fiction. For example, imagine having the ability to completely, instantly understand an asset's potential, like R2-D2's probe droid in Star Wars (an apparent reference to the 1977 Episode IV!).

Adam explains, "The central idea of really understanding our built environment means understanding not only how it's built, but how we can build better infrastructure to support our changing climate. There's something to be said for understanding how we interact – as people – with our surroundings, and how our surroundings can interact with us … and how we relate to each other. That's impossible without technology and the broader understanding of how to introduce this technology into the environment. Infrastructure is one of the least digitalized sectors on the planet. I believe process innovation is the key."

If we are to take the next leap to a real-time interaction with our built environment with a much promised 'digital twin' of the built environment – we first need to build the digital skills and capabilities of both the public sector infrastructure client community and the private sector.

UNPACKING THE FUTURE, QUESTION BY QUESTION

In closing, Adam reflects on how innovation is fuelled by asking the right questions to unlock transparency and an ability to act f aster and better.

Over the years he has been involved in projects that revolved around understanding the nuts and bolts of government departments.

"I have asked tens of questions during workshops with representatives from government departments at the table. Questions about what their information needs as a department were, to asking them to talk us through what they did day-to-day, to describing their processes and what decisions were being made … so that I could better understand how information, or better and more reliable information, could improve the quality of or speed up decision making. Not only did these questions help me, they helped the workshop participants too. They began to realize that their interpretation of what they did was different to what they actually did, or what others thought they did, creating moments of clarity for those involved. So for me, innovation is a lot about driving a process change through asking better questions to gain clarity and alignment … alignment towards goals, and clarity on how to work together and make better decisions. Ultimately, we need to become more intelligent clients with better questions for our suppliers.
"Timing is also key: Sharing information early removes unnecessary work and rework and misunderstandings. It's about driving transparency to maximize value, saving time and unlocking the intended benefits for the public sector, engineers, contractors – everyone involved in planning, operations and maintenance so citizens have a great experience of the assets in question. When you have visibility of the final destination, you can make sure you have the rights laws and policies in place to make them a reality," concludes Adam.

Guri Neote
Partner, Major Programmes, Digital & Capital Projects, Deloitte UK

gneote@deloitte.co.uk

Adam Matthews
Chairman, Global BIM Network

Adam.Matthews@cp.catapult.org.uk

Editor note: Adam Matthews OBE is a Director of CIMO Consulting, a change management practice dedicated to the social change aspect of strategic transformation within the public infrastructure sector.