

02. ICE BIM Heat Map

ICE BIM Action Group

Where is the ICE Membership with the Building Information Modelling (BIM) journey and what should ICE do to help digitally enable its members to face the future?

One of the key purposes of any institution is to keep a weather eye to the market and ensure the membership is aware, ready and capable of meeting demands. ICE has a long history of ensuring good communications and sharing takes place amongst the membership, supported by the formal training and publication services of Thomas Telford. In recent years this has been dramatically improved by the use of web technologies and this has expanded our reach globally. But what of BIM? It is many years since we have seen such a dramatic change in an industry. The recession has conspired with better technologies and a Government determined to lead the global charge of better value and international growth, how best do we respond and ensure ICE and its members continue to be valued as the best in the world?

The BIM Action Group was set up in early 2013 and was faced with the same question. They decided to ask the membership and get a picture of how the market was impacting various sectors around the move to the digital economy.....and here are the results.

We received a good response to the survey. The sample gave us a representation across the sectors which have painted an interesting picture, especially if reflected in the responses from the first ICE BIM conference in 2011.

Back then the conversation was "what is this BIM thing?", "Where can I buy one?"; this matured in 2012 to genuine hunger for examples and help in piecing together an understanding of "what shall I do next?".

The Heat Map we have created takes that anecdotal evidence the next step and provides the Institution with an accurate picture of where you, the membership are now and where we should be collaborating in the future to provide you with help, guidance and information to ensure you face you everyday challenges properly equipped.

The Findings

The detailed findings will be further analysed by the Action Group in the coming months with detailed discussions with the sector leaders to ensure we bring local relevant help. However a common pattern from across the sectors was that there appears to be a very good understanding of what BIM is and some of the potential benefits available.

This is illustrated by the left hand section of the heat map which focuses on awareness of BIM across the key infrastructure markets and ICE areas of interest.

The questions we asked were selected to elicit an understanding of current awareness and its depth.

It is clear from the responses that we enjoy a good understanding and - with the exception of some of the Procurement benefits - the participating individuals are clear of the "what" around BIM including "what can it do?".

The right hand side of the Heat Map however tells a different story. It shows us awareness falls far short of the detailed knowledge required to confidently deliver a BIM Level 2 project. The understanding of data and classification systems are a particular area of the process that needs support, but the fact that some sectors are making good progress will allow us to enable "lessons learnt" sessions and focus detailed support.

All of the documents and standards to enable BIM Level 2 have been deliberately made available free of charge so it was a little disappointing to see a number of sectors had failed to even look at PAS1192:2:2013, one of the key documents released in February this year. We will ensure that we redouble our efforts in communicating to all communities the resources that are available.

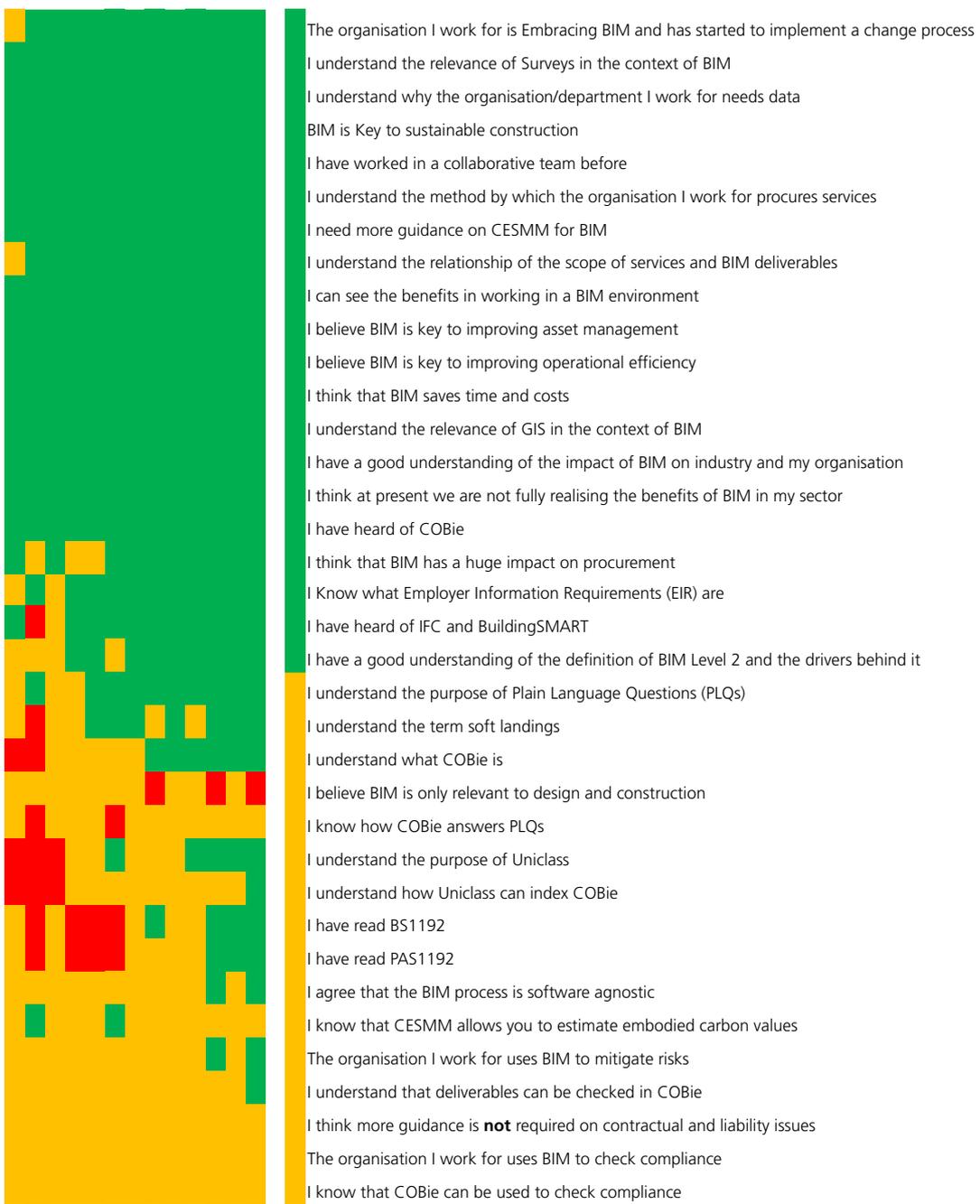
BIM Level 2 forms a key policy and will be mandatory by 2016. It is a key enabler to the Level 3 and Smart City Agenda and the Government is fully committed to supporting this vision.

For our part ICE is keen to both support the UK Government and our membership and supporting businesses to ensure all ICE members are fully equipped to face the digital switchover.

Next steps:

- Encourage more participation of the survey
- Understand and distribute the survey report and heat map to all parties
- Discuss action plans with each sector community leader to ensure suitable focused support
- Ensure an annual conference is organised to disseminate best practice in the domestic and international markets
- Training
- Support HMG
- Make the Civils' voice heard in the digital economy
- Collaborate with other parties to ensure the UK and civil engineers remain relevant and trusted in the Digital Economy
- Best Digital Civil Engineers in the world

Airports
 Buildings
 Power
 Utilities
 Water
 Rail
 Nuclear
 Coastal Defence
 Ports
 Geo / Tunneling
 Road
 Flood
 Other



Strongly agree/Agree
 Neither agree or disagree/Disagree
 Strongly disagree

04. Acknowledgements

ICE BIM Heat Map

Mark Bew MBE

EC Strategies, Building Smart UK and
Government Industry BIM Working Group

Dr Ilka May

Arup

Dr Anne Kemp

Atkins