

## NBS Digital Construction Survey 2021

A preview of findings from our new Digital Construction Survey David Bain, Research Manager, NBS



## Ten years of BIM surveys



First BIM report: 2011 400 respondents The first time that 43% of them had heard of BIM

10<sup>th</sup> BIM report: 2020 Over 1,000 respondents 99% heard of BIM 73% adopted BIM





## **Digital Construction Survey 2021**



# **Digital Construction Survey 2021**BIM, Future Technology & Innovation



#### Introduction

For the last 10 years or so, we've been talking about and implementing BIM. The adoption of Building Information Modelling or Better Information Management by many in construction has helped to transform the way that people work. While recognising that the process of embedding BIM continues, and that there are different views about it, we also see the adoption of other new ways of working and new technologies, often building on the foundation of BIM.

So, at NBS, we will continue to track the adoption of BIM in this survey but we now wish to gain a broader understanding of digital transformation in 2021. We want to know about your experience and views of cloud computing, offsite manufacture, virtual reality, digital twins and, of course, BIM and the potential, or otherwise, for these innovations to address the challenges we face - to create a better, safer and more sustainable built environment.

The survey is for designers, specifiers, manufacturers, contractors and others working in the built environment.

The survey should take 10 to 15 minutes. For every completed response we receive, we'll donate £1 to the charity Crash.

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## Industry support

































## **Approach**

- Collected responses between April and August 2021
- Questions on digital transformation and BIM
- Retained key questions to monitor changes
- 906 responses
- £906 to charity CRASH
- Shows that people are engaged in BIM and digital tech
- Mainly from the UK but respondents from across the world







### International interest

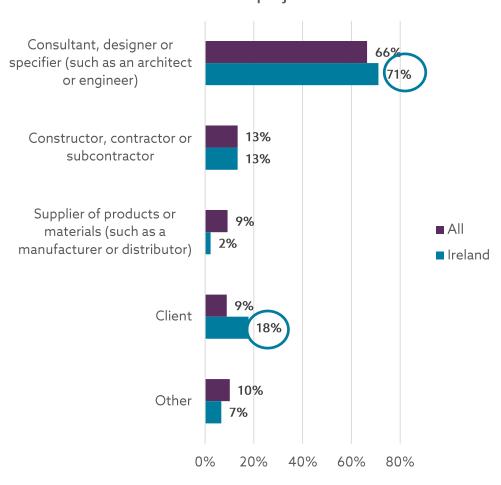


46 (5%) respondents based in Ireland



## Respondent profile

### Which of the following best describes your usual role on a project?



#### Ireland respondents

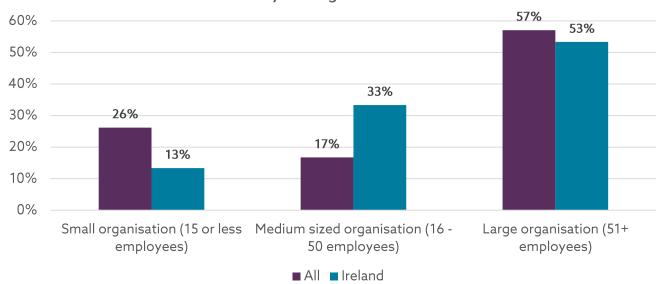
#### Organisations

- 43% architectural practices
- 11% engineering
- 9% multidisciplinary

#### Roles

- 43% in architectural roles
- 28% in BIM roles

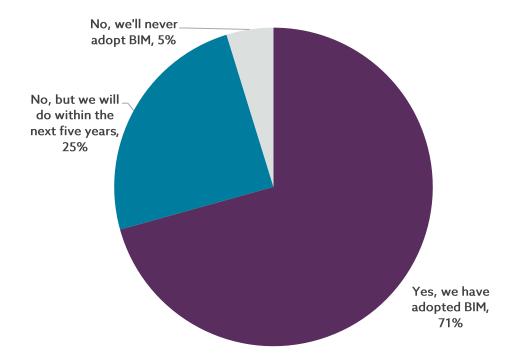
#### Including yourself, approximately how many people are employed in your organisation?





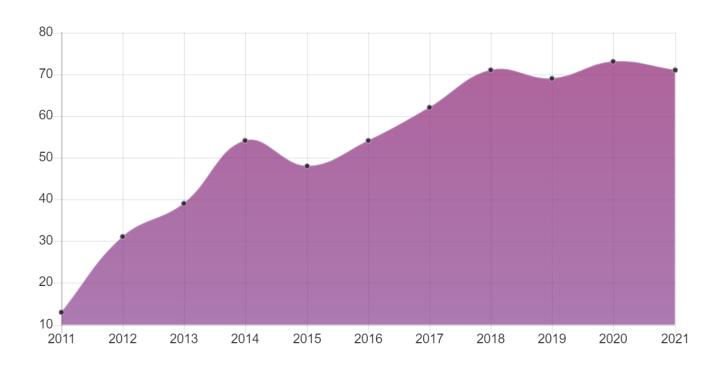
## **BIM** adoption

#### Within your organisation, have you adopted Building Information Modelling (BIM)?



#### Ireland respondents

- 67% adopted BIM
- 31% plan to
- 2% will never do

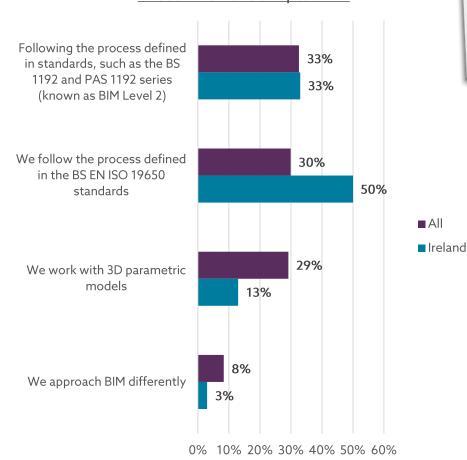




## Approach to BIM

Thinking about your organisation's overall approach to BIM, which of the following would you say best describes what you do?

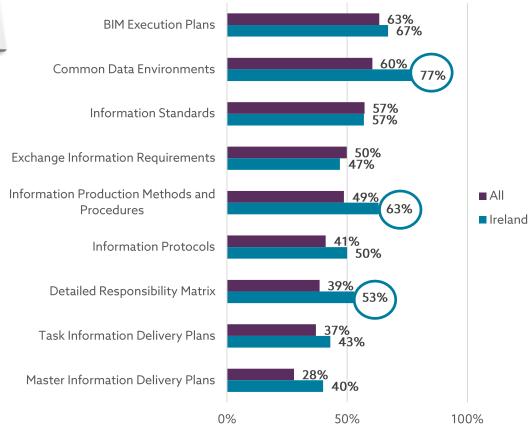
Those who have adopted BIM





Thinking in more detail about BIM, in the last 12 months, which of the following things have you been involved with, in some way, on BIM projects you have worked on?

Those who have adopted BIM

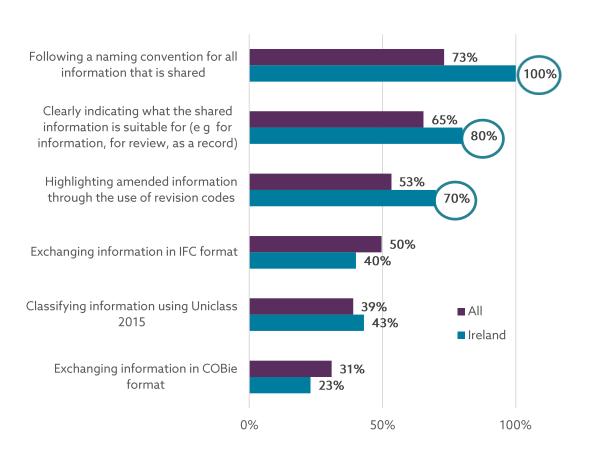




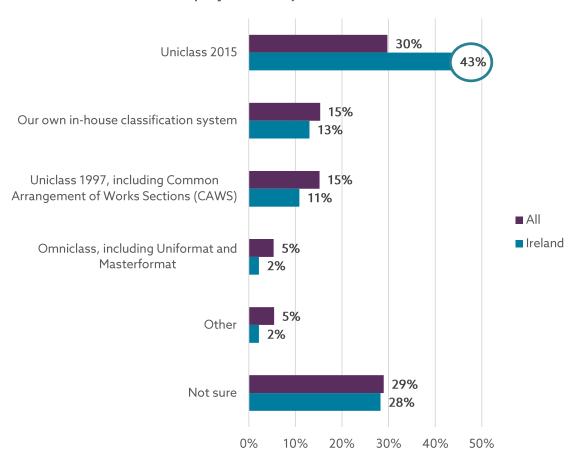
## Sharing and classifying information

And, thinking about the projects where you have adopted BIM, which of the following approaches has your organisation adopted with respect to sharing information?

Those who have adopted BIM



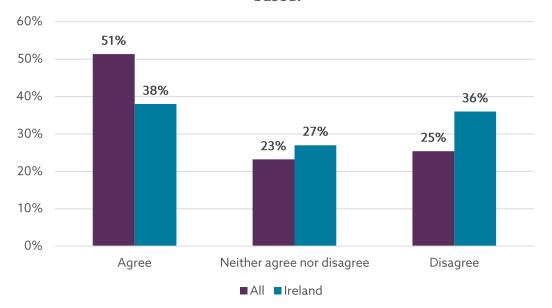
What type of classification is most commonly used on the projects that you work on?





#### BIM the norm?

To what extent do you agree or disagree that BIM is the norm for project information in the country where you are based?



"BIM is too convoluted with jargon which has come from industries with more manufacturing tendencies than building construction. A simple design becomes a monster of bureaucratic roles, stages, procedures which are a meaningless distraction from actually producing the needed information."

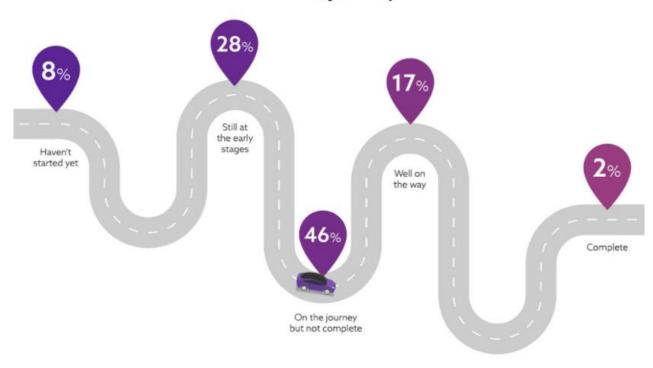
"Clients are frequently asking for BIM to ISO19650 but are not sure what that means and what is involved."

"We are doing our part and have transitioned but are still waiting on other consultants (predominantly MEP, landscape and QS) to adopt fully without fear. Supply chains also affect construction efficiencies due to adoption of digital."



## The digital transformation journey?

### If digital transformation was a journey, where is your organisation on that journey?

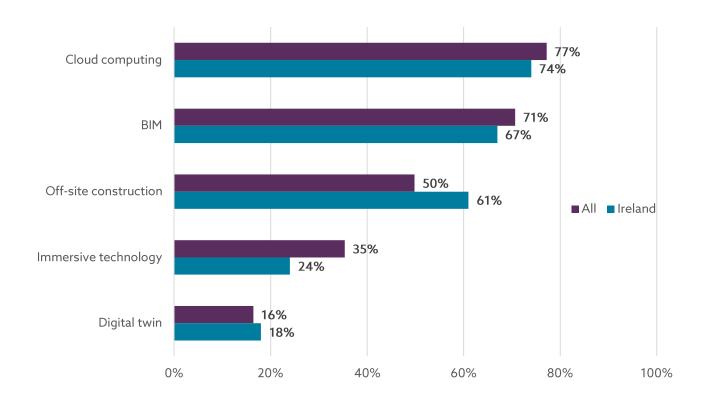


- More people are further along on their journey than in 2018.
- The picture looks similar in Ireland.
- 57% have been on the journey for some time and 9% are well on the way.



## New technologies

Have you adopted in your organisation or have you been part of a project that used...? (Excludes those who answered 'not sure')



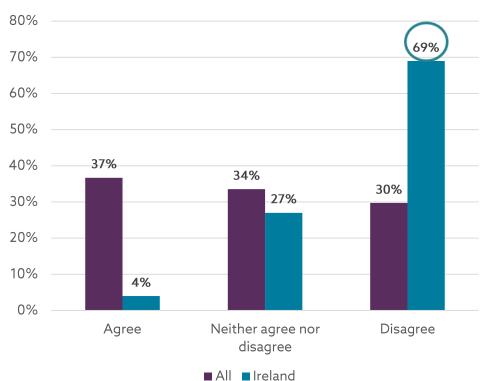
Most significant technologies / ways of working over next five years:

- 1. BIM
- 2. Cloud computing
- 3. Offsite construction
- 4. Digital twins
- Virtual/ augmented/ mixed reality

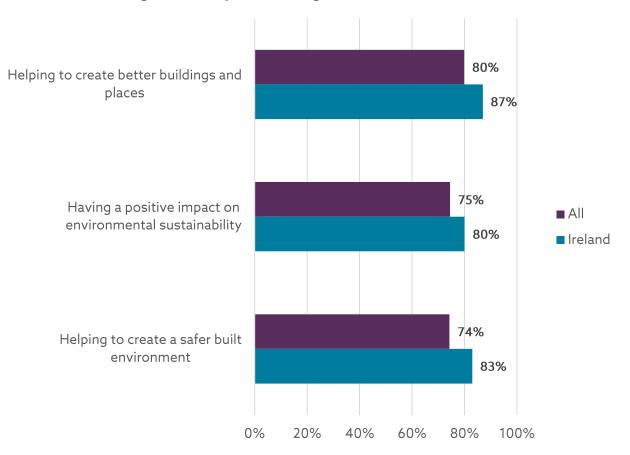


## Creating positive change

To what extent do you agree or disagree with the following statement: The Government in my country is leading the industry in terms of digital construction?



To what extent do you agree or disagree that the adoption of digital technologies and ways of working in the built environment are...?

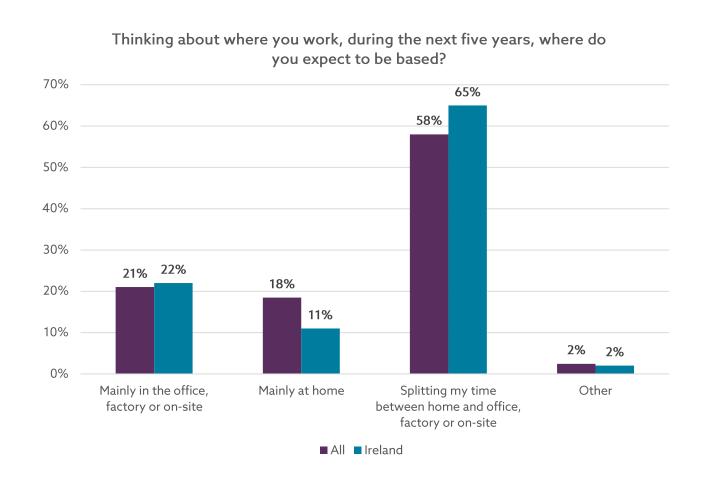




## Future working arrangements

The majority of respondents say that the Coronavirus pandemic has accelerated their adoption of digital technologies

A majority expect to split their time between home and the office/ factory/ on-site





## Closing thoughts

- Professionals in the built environment generally agree that digital ways of working are helping to achieve positive outcomes
- And that BIM is a key part of that
- BIM and new technologies are being adopted but there are challenges
- Many still say that BIM is not yet the norm
- Standards are helping and many are following them
- People feel the Government could do more
- Most people are 'on the journey' though and it is likely that they will continue to adopt new technologies and ways of working – if it helps us address key challenges



## Report release

Read the full report here: https://www.thenbs.com/digital-construction-report-2021/



https://www.thenbs.com/events/CLS2021-building-better