RIBA Enterprises surveys - a survey





Introduction

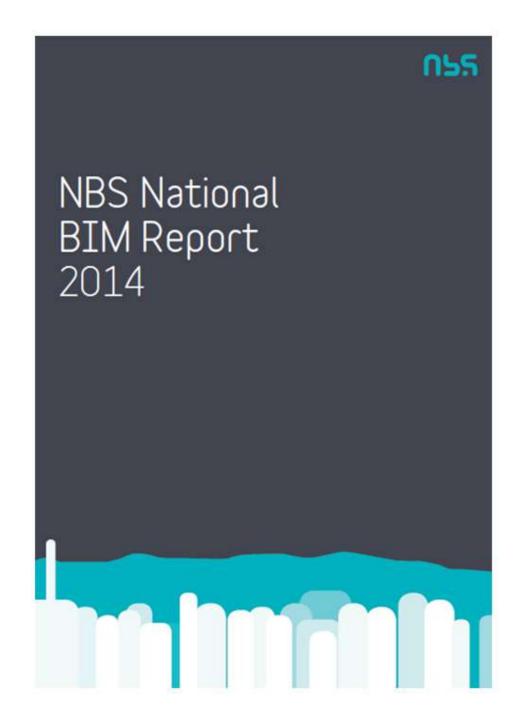
Amazing insight & fascinating trends



RIBA Enterprises conduct a range of surveys and generate annual reports

- Drivers
- Scope
- Methods
- Topics in detail
 - Key findings
- Involvement





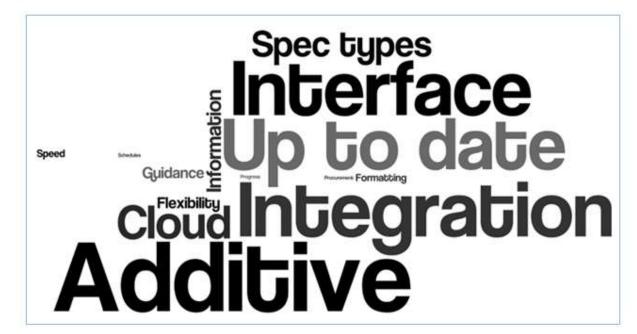
Drivers

Why conduct surveys?



Distinct forms of RIBA Enterprises surveys

Internal use



- Customer Satisfaction Survey
- Market research



Distinct forms of RIBA Enterprises surveys

- Internal use
- Publication
 - Industry
 - Press
 - Context





Data validation and extraction: The challenge beyond geometry

Dave Monswhite
Associate Director - Building
Information Modelling,
Turner & Townsend Cost
Management



" Turner & Townsend

Since the previous NBS National BIM report in 2013, Turner & Townsend have seen a rapid acceleration in both understanding and application of BIM in all our operating sectors. Across our global business we encounter every variant of BIM, ranging from 600,000 tonne offshore vessels to luxury car showroom rollouts.

Many are surprised to find that BIM is not new to our Cost Managers - BIM has been a fundamental part of how Turner & Townsend has operated for many years now, using techniques and toolsets developed in our Natural Resources sector where the concepts of data management, validation and extraction are commonplace.

From our experience, we know that good data and information management is the key to unlocking the real benefits of BIM, but the sheer diversity of the design team approaches, objects and platforms is still the real challenge facing quantification from BIM.

Measuring the welds on the complex pipework of a gas platform in Toronto differs significantly from that of the mass concrete underpinning of a station concourse in Birmingham, but the datasets we interpret could have been authored in the same way, or federated from multiple sources, each with their own idiosyncrasies.

Variations in the way authoring platforms treat objects or export neutral formats, such as Industry Foundation Classes, can have a significant effect on our ability to interpret and extract data with the consistency we need to apply for procurement.

Every time a different practice then applies their own 'standard' to the upstream data, we have to start from scratch, and often it is this that drives the behaviours of the QS practitioner toward the traditional paper-based outputs.

The use of information to make commercial and operational decisions is a key activity at



Distinct forms of RIBA Enterprises surveys

- Internal use
- Publication
- Commissioned





Scope

What topics do we cover?



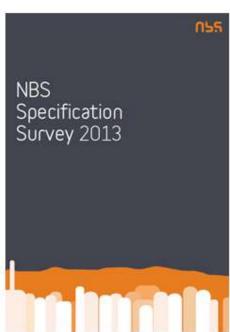
Focus on subjects integral to the modern construction industry

- BIM
- Specification
- Sustainability
- Contracts & law

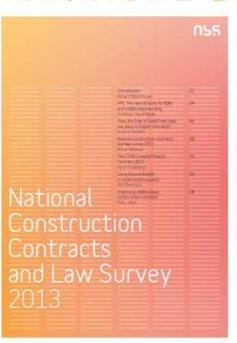
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Making results freely available to public and profession

Target audiences:

- Construction professionals (NBS)
- Manufacturers (RIBA Insight)
- Wider industry









Method

Ensuring best practice



Qualified market research team

- Market Research
 Society expertise
- Experience
- Quality



Adrian Malleson Head of Research, Analysis and Forecasting, NBS







Digital survey and analysis

- Call for responses
- Web-based tools
- Data analysis
 - Confidence intervals
 - Significance testing
 - Error rates







Topic: BIM

NBS National BIM Report



First survey data 2010, first report published 2011

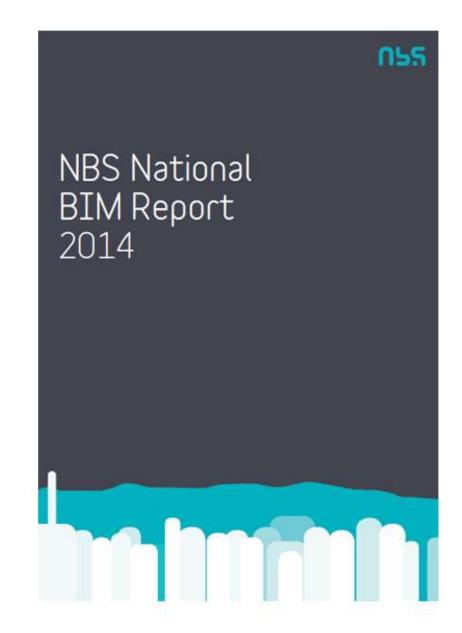


Use, awareness, understanding, requirements, skills



Key findings: 2014

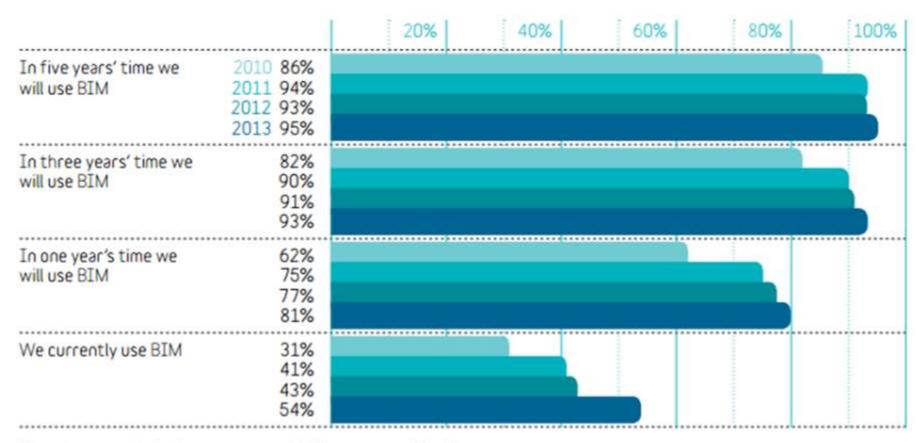
- Tipping point in adoption
- Majority use/intention
- Measurable benefits
- BIM training needs
- Work to be done to meet 2016 Level 2 UK mandate





Key findings: 2014

Projected use of BIM among those aware of it



Percentages exclude those unaware of BIM or unsure of their answer





Infographics

With the Sovernoent's mercine for BIM fest approaching this year's survey taxes a cose took at BIM aduption in the CM I's BIM becoming the norm for design teams?

Adoption, beauty the sec on 50 het ne need of 100 h

54% of respondents now use BIM

Are you Aware of BIM? Attitude towards adoption

Are you Using BIM?

We use BIM





Adrian Malleson

Are you aware of the three levels of SDAP | 1946 | 1946 |

The Government will require fully collaborative 3D BIM as a

HIR UNDVERSAL.

51% Level 2

False bra sybnisorsi MDB

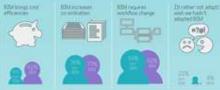
minimum by 2016" success measures comp. 2011.



Richard Waterhouse



Attitudes towards BDM Comparing those who use it, and those who don't



NSS

Not In between Confidence

We've come a long way in four years, and we assis forward to severy 80% of

respondents agree BIM is the future

We are pleased to say,

surfue half the bright number of serving National BIM Survey 2013 requires yet. The reflects the equations of \$200 to the industry

Prote years is a long time when consisting the impact of new digital technologies. This third foreign light foreign manages in the protection of the protect waget are change that have been place, and there call request to achieve the UK Soverment's buryot of Levil 2 80M by 2006.

Are you Aware of BIM?

Adoption: Something the year and the name have of State at the State of State at the State of State at the State of Stat

Over 1/3 use BIM DESCRIPTION OF THE PERSON NAMED IN

How do you draw?



















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teams collaborate

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through data access.

digital corestruction future are now being. par in place.

Attitudes towards ECAI: Comparing those who use it, and those who den't















Confidence

Have confident are place to your EDV requirings and make?

75% agree BIMIS the future



Infographics

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54% of respondents Adoption, beautiful incomes to be for head of the now use BIM

Attitude towards adoption

Are you Aware of BIM?

Adrian Melleson

Are you Using BIM?

We use BIM

In 1 year 0=

In 3 years

We are pleased to say.

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Prote years is a long time other parameters; the impact of new signal technologies. This third formers \$20 favors provided intriguing waget are change that have been place, and there call request to achieve the UK Soverment's buryot of Levil 2 80M by 2006.

Are you Aware of BDM?

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Over 1/3 use BIM 175 a 2010, \$15 a 2011

How do you draw?

35%



Are you thing BDM?



We use BIM

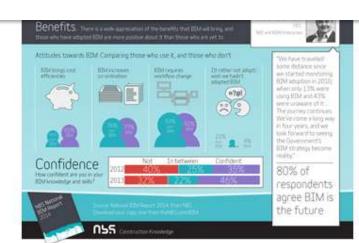


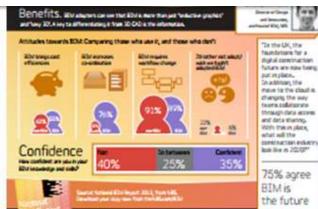


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Source: National BIM Report 2014, from NBS.

155 Construction Knowledge





NSS commence



Infographics



Retweeted by George Mokhtar

Stefan Mordue @StefanMordueNBS - Apr 23
Our latest NBS 2014 #BIM survey infographic ow.ly/w4ydS





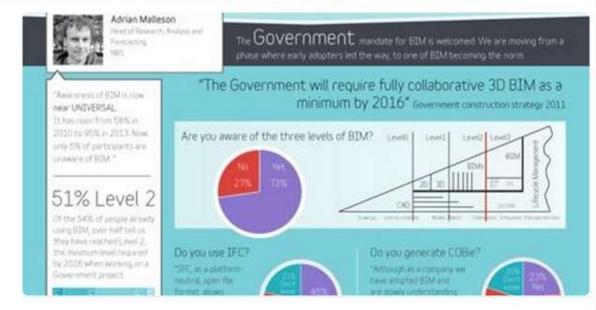


Retweeted by allister lewis and 2 others



Stephen Hamil @StephenHamilNBS - Apr 23

As is now the tradition, a top infographic illustrating our @thenbs #bim report - #BSL2014 - thenbs.com/images/bim/NBS... pic.twitter.com/1tCVC69seW











Retweeted by Claire Bowles and 1 other

Casey D Rutland @CaseyRutland - Apr 23

"@TheNBS: Take a look at out National #BIM Survey 2014 Infographic ow.ly/w4ydS" #UKBIMCrew









Topic: Specification

NBS Specification Survey



Focus:

- Plans of Work
- Specification timeline
- Attitudes
- Methods
- Integration / BIM
- Future

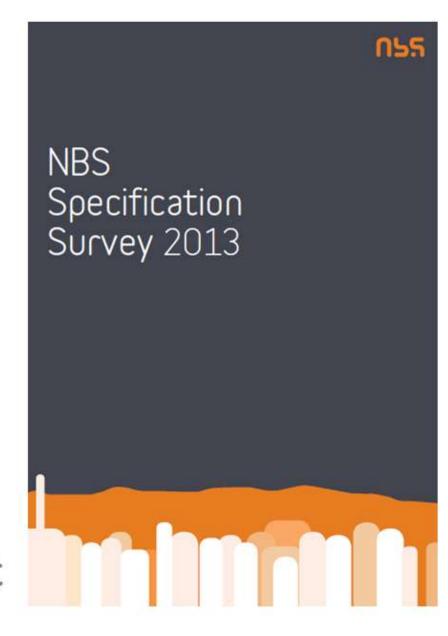






Key findings: 2014

- Specification & BIM
- Digital linkage
- Whole timeline benefits
- Future specification will integrate disciplines
- Current lack of collaborative working
- Information management





Overall, when you write specifications, which of the following processes describe how you do it?

	1	20%	40%	60%	80%	100%
I re-use specifications that I've written for other projects	75%					
I collect information from manufacturers and put it together	71%					
I copy and paste from previous specifications	66%)	
I write my own specifications from scratch	59%				**************************************	
I ask manufacturers to write specifications for me	52%					
I use specification templates	38%					
I use a specification template that includes proprietary information	31%			***************************************	***************************************	******



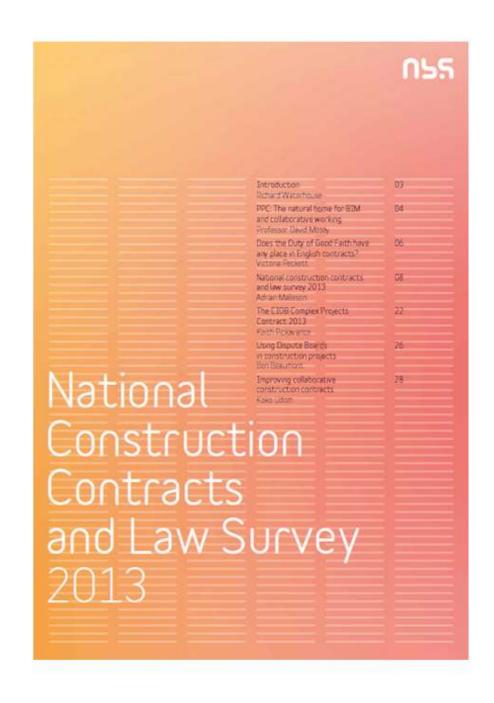
Topic: Law

NBS Construction Contracts and Law Survey



Focus:

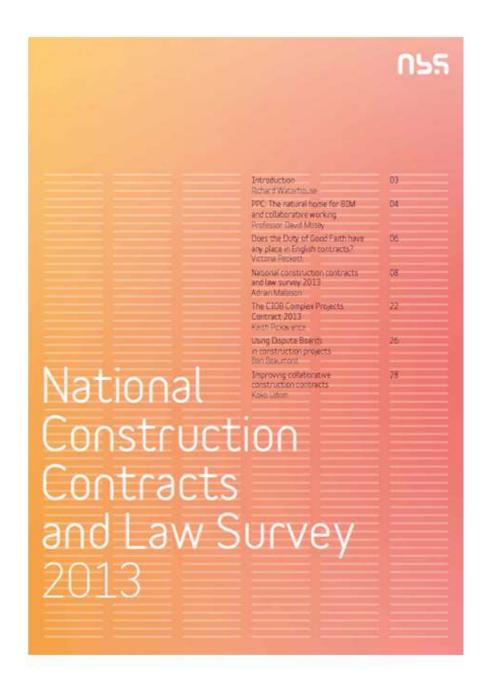
- Contract forms
- Disputes
- Procurement
- Appointment
- Pricing
- Collaboration





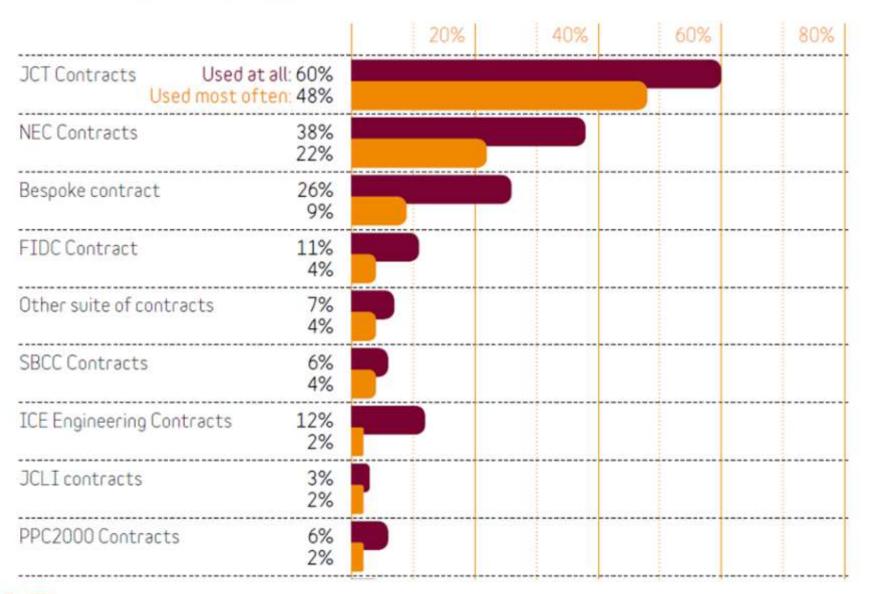
Key findings:

- Increased need for contracts which facilitate BIM and collaboration
- More respondents in dispute (time, value)
- Prevalence of bespoke contracts and appointment documents





Contracts used: at all / most often





During the construction phase of the project, which of the following matters did you find to be the most difficult or recurrent in 2012?

		20%	40%	60%
Assessment of delay and Cli extension of time Contrac Consult				
Employer variation	33% 50% 54%			
Contractor's variation	26% 20% 34%			
Scheduling and construction programmes	43% 26% 28%			
Slow pace of construction	32% 14% 29%			



Topic: Sustainability

NBS Sustainability Survey



Focus:

- Industry definitions
- Environment
- Ecological, social, economic
- Aspects of sustainability
- Assessment methods
- Product certification





Key findings:

Difficult to define

Multiple priorities:

- 1. Health
- 2. Waste
- Water use & pollution
- 4. Air pollution
- 5. Community
- Operational carbon
- 7. Ecosystem
- 8. Recycled materials
- 9. Transport
- 10. Embodied carbon



Views on sustainability

People define 'sustainability' in different ways and we wanted to find out what people mean when they refer to it. Therefore, we asked people to tell us, in their own words, how they define sustainability. The definitions people gave varied widely, but common themes did emerge. Sustainability was widely understood to be about safeguarding the future:

"Saving the planet for future generations."

"Balancing the needs of today with the ability to maintain the environment for tomorrow."

"Managing resources responsibly so that the earth can continue to support human life."

People strongly associated safeguarding the future with minimising the use of non-renewable resources, particularly energy:

"Reduce the environmental impact and use of finite resources."

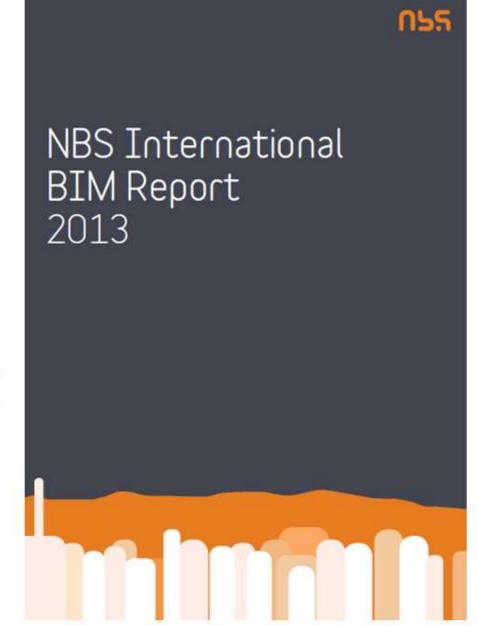
"Less raw material usage, less energy consumption."

Topic: BIM

NBS International BIM Report

Focus:

- Verify state of BIM in different countries
- Examine attitudes and adoption rates
- Impartial, reliable data about international BIM
- Produce annual report





Participants:

Our thanks to Digicon, Masterspec and Rakennustieto for running the surveys in their countries.

- UK
- Canada
- New Zealand
- Finland





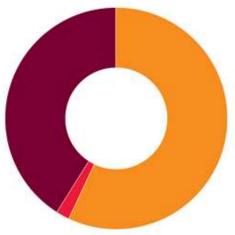






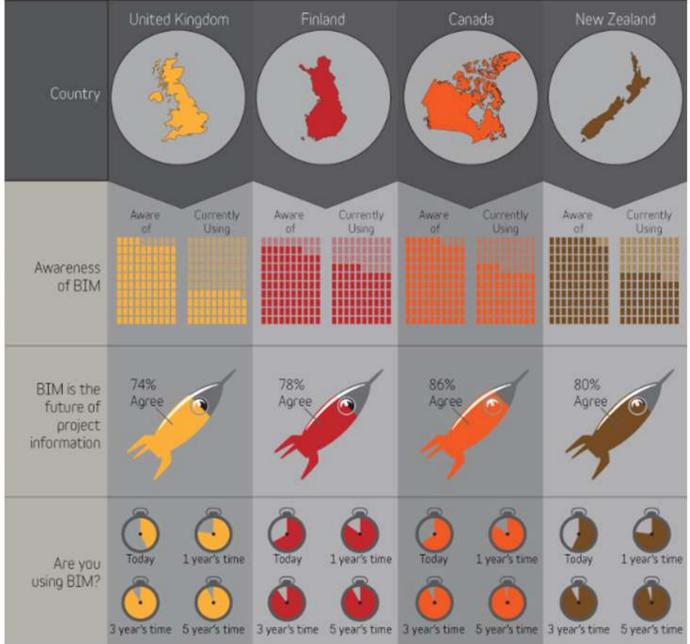


Key findings:



Awareness and use of BIM

Aware and currently using BIM	57%
Neither aware nor using BIM	2%
Just aware of BIM	41%





What are the main barriers to using BIM?

Î	20%	40%	60%	80%
54%				
39%				
37%				
34%				
12%			······································	
14%				
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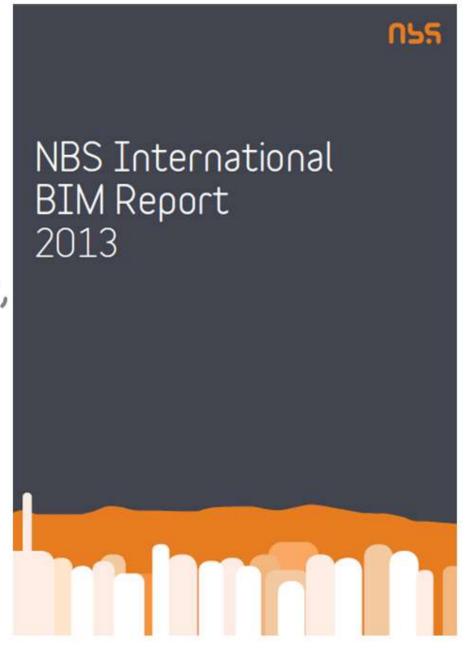
Getting involved

Call for participants



Getting involved:

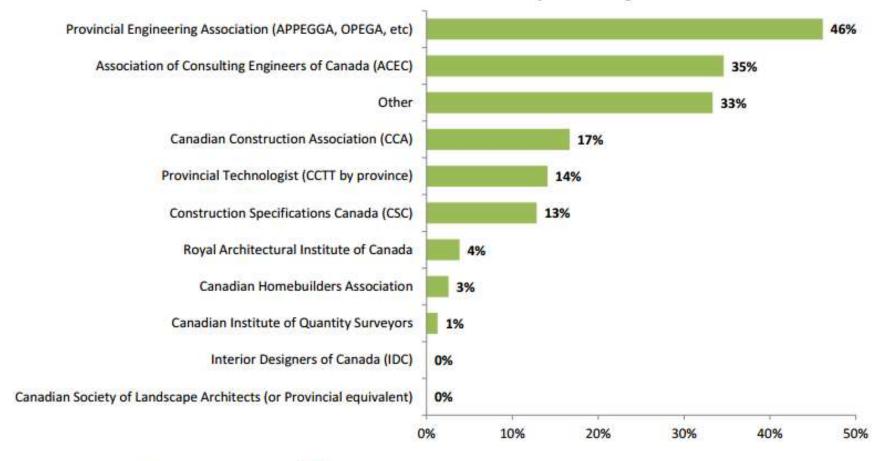
- We would value your involvement
- Core questions are required for comparison, but survey can be localised and expanded
- Hosting responses
- Top-level analysis
- Localised output





Digicon / IBC National BIM Survey: Respondents

Which institutes or associations do you belong to?







Thank you

paul.swaddle@thenbs.com

