

Introduction

Building Information Modeling (BIM) is the process of generating and managing information about a building during its entire life cycle.

Background: The Government Construction Strategy in 2011 mandated the use of BIM Level 2 on all public projects by 2016.

The UK construction industry still has no agreed overarching method for BIM Level 2 compliance.

This prompted a request from **CH2M Hill** for this project.

BIM Task Group: Was set up in 2011 by the cabinet office to support and help deliver the objectives.

It brings together expertise from industry, government, public sector, institutes and academia.

Current state: is examined through analysis of standards and 13 interviews with selected BIM experts, results:

1. There is no agreed method of measuring Level 2 compliance (small part of a larger problem).
2. The majority of the industry is still unclear on the basics of BIM (larger problem).

Aim: Shifted to a strategy that would reorganise BIM, and tackle the larger problem.

Key finding: The strategy should target three sectors

1. "BIM Task Group"
2. "Construction Industry"
3. "Universities"

University sector: is examined through a small survey of 4th year students studying MEng Civil Engineering in five UK Universities, to obtain an understanding of the emphasis currently given on BIM.

Output: A **diagrammatic model** categorizing and linking the recommendations for each of the three sectors.

For: CH2M Hill, and other similarly large firms.

To: make targeted approaches with clear objectives in order to **accelerate** the formation of the official compliance framework for BIM level 2.

Current problems around BIM adoption

The 13 interviewees are split in three groups (i) Regulators, (ii) Strategists and (iii) Implementers. The table shows the currently major problems in the industry and by whom it was raised.

Problems	Regulators				Strategist					Implementers			
	R 1	R 2	R 3	R 4	S 1	S 2	S 3	S 4	S 5	I 1	I 2	I 3	I 4
1 Too many sources of information around BIM			X		X	X	X		X		X	X	
2 BIM Task Group hasn't defined the basics for Level 2	X	X				X	X	X	X		X	X	
3 Large number of BIM Task Group subgroups	X			X						X			
4 A missing summarising document	X	X	X		X	X	X	X	X		X	X	X
5 Shift of focus to Level 3 from BIM Task Group				X		X		X					
6 Software vendors promote BIM as 3D only			X	X				X		X	X		X

Sample of the interview data

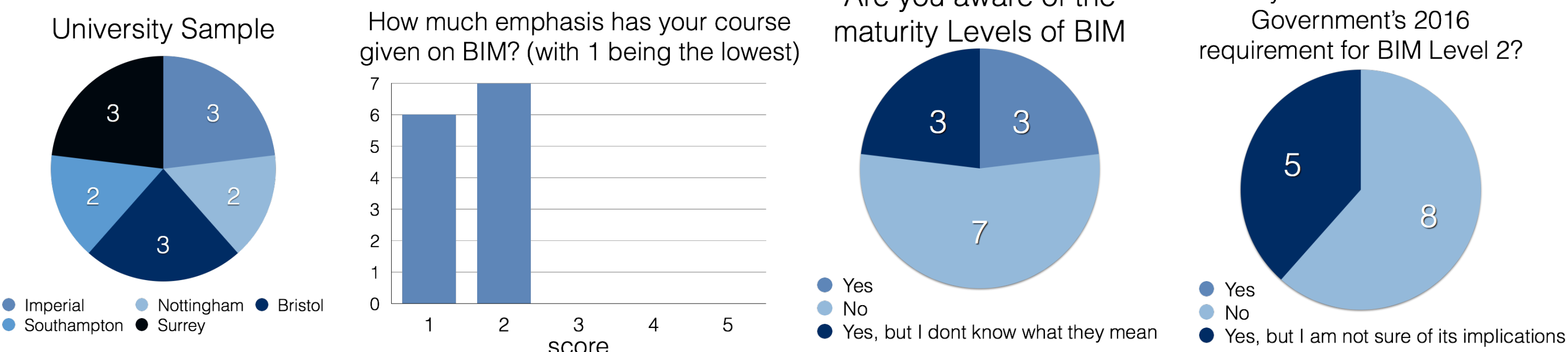
'We are thinking that BIM is a technology process or technology focus initiative where it's not, it's a management focus, meaning we need more people involved.'

'We don't know how the government is planning to check compliance.'

'Return On Investment is something people are very interested in but hasn't been clearly showcased'

'University undergraduate degrees should start introducing BIM as we are certainly not there at the moment'

University Questionnaire results



It can be concluded that in all 5 Universities only a minor emphasis is currently given on BIM in MEng Civil Engineering.

Prioritised action recommendations from the model

1. The BIM Task Group should **publish a summarising document** that sets the **basics** principles of BIM.
2. **Reorganise the BIM Task Group** by reducing number of subgroups and aim for a **single source of information**.
3. There should be a **senior management led initiative** on BIM adoption.
4. The BIM Task Group can **publish case studies** on government projects, showing **Return On Investment**.
5. **Introduce BIM** in all construction related **undergraduate degrees**.
6. **Involve and educate private sector** clients more on BIM.

Output Model

