

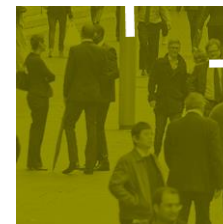
Building Information Modelling (BIM) in Australian Standards Contracting

BrisBIM

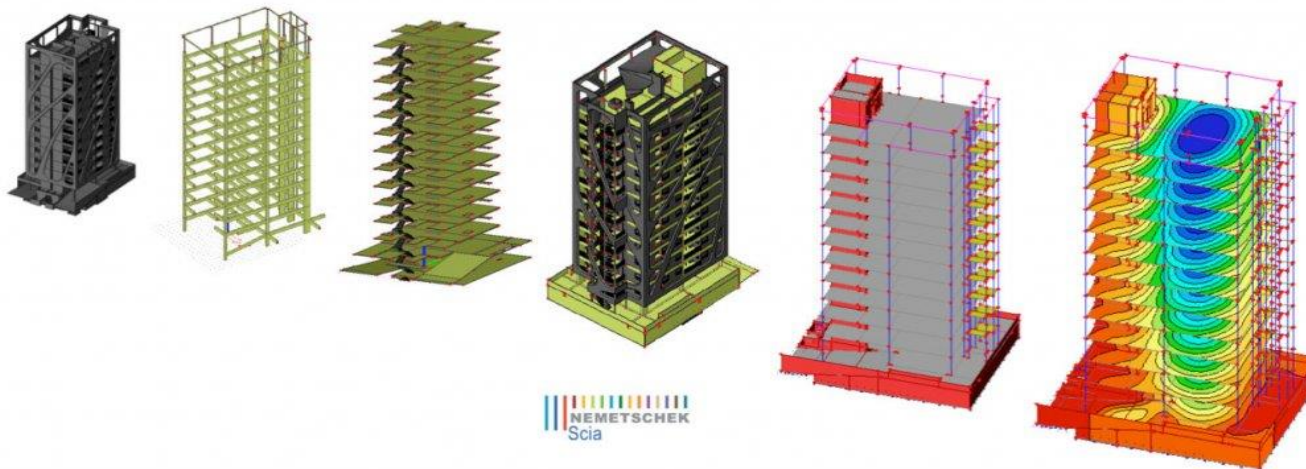
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14 October 2015

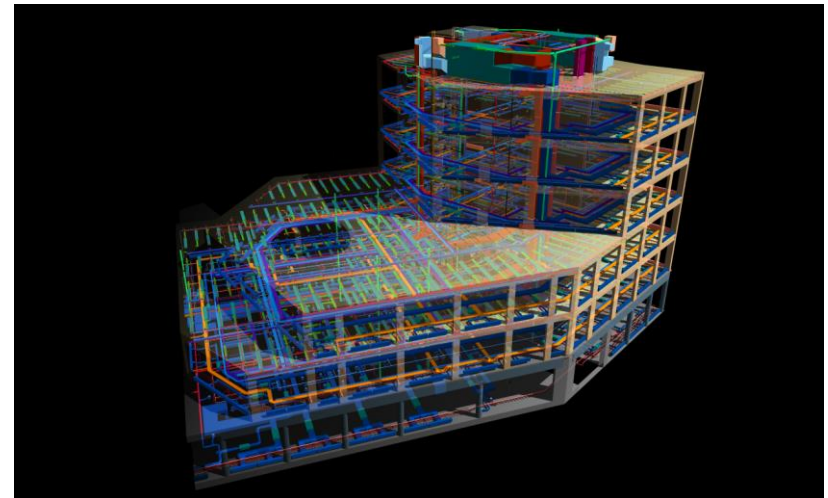


- What is BIM
- BIM challenges
- BIM success factors
- BIM contracting in Australia and other jurisdictions
- BIM implementation in Australian Standards (AS) contracting

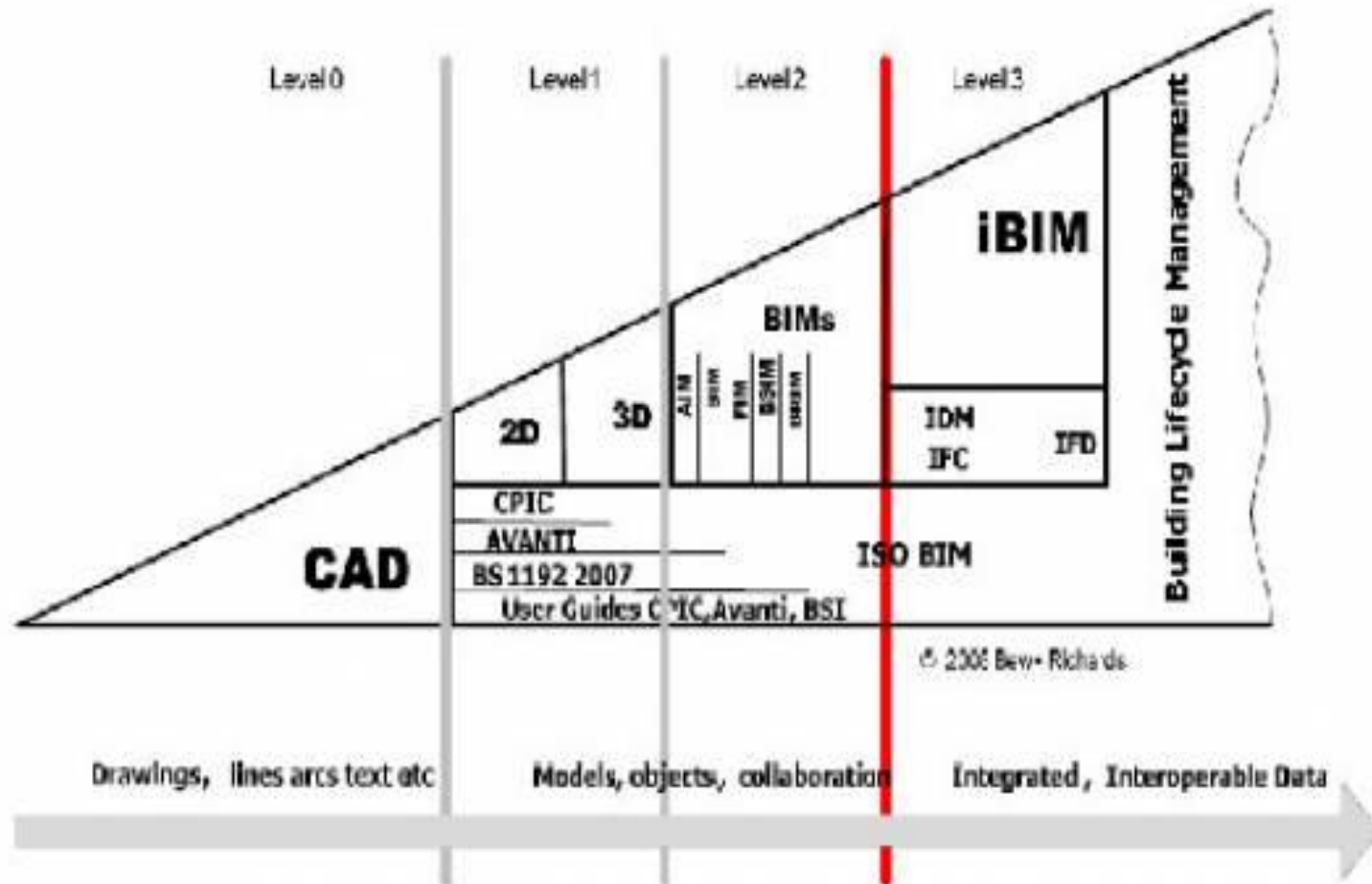


What is BIM?

- 3D model with intelligence
- New approach to design development and project delivery (IPD)
- Different forms of BIM (see next slides)
- Savings in time and cost
- Improvement in health and safety
- Australian BIM based projects
 - Sunshine Coast Public University Hospital
 - Moorebank Units Relocation



BIM models (Level 0 to 3)



- Legal issues (liability, IP, security, ownership, access)
- Insurance issues (updating policies or new policies to cover BIM issues)
- Organisational issues (investing in new technology, training, culture change)
- Technology issues (software, desktop, file format)
- Others (new way of working)



- Appoint BIM Manager
- Develop BIM Execution Plan and BIM Protocol
- Resources for all contracting parties
- Establish clear objectives
 - project integration
- Cultural fit
- Contractual fit
- Technological support



Contractual implementation of BIM in Australia

- BIM guidelines present but no BIM friendly contracts (yet)
- BIM not currently mandated in Australia (all levels of Government)
- National Building Information Modeling Initiative Report:
 - all Australian Government building procurements to use BIM by 1 July 2016
- Australian Government not inclined to press BIM until industry is ready (but this may change)
- Some State Government running BIM pilot programs (WA, VIC)




Contractual implementation of BIM in other jurisdictions


- United Kingdom – BIM friendly contracts
 - BIM protocol preferred method of addressing BIM issues
- United States – BIM friendly contracts
 - BIM protocol preferred method of addressing BIM issues
- Asia – guidelines present but no BIM friendly contracts
- Scandinavia – guidelines present but no BIM friendly contracts
- Middle East – no BIM friendly contracts

Building Information Model (BIM) Protocol

“The Protocol identifies Building Information Models that are required to be produced by members of the Project Team and puts in place specific obligations, liabilities and associated limitations on the use of the models. The Protocol can also be used by clients to require the adoption of particular ways of working – such as the adoption of a common naming standard”



Making buildings better

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Implementation of BIM in AS contracting

- Level 0 BIM (2D design only)
 - can use AS4000, AS2124 and AS4902
 - generally no amendments required (but some changes could be made to improve design process depending on project profile)
- Level 1 BIM (2D design plus some modelling without intelligence)
 - can use AS4000, AS2124 and AS4902 (same approach as Level 0 BIM)
- Level 2 BIM (separate 3D models with intelligence)
 - can use AS4000, AS2124 and AS4902 (but need to use BIM protocol / BIM execution plan)
 - AS contracts need to be amended on BIM issues (recognise BIM protocol / BIM execution plan etc)
- Level 3 BIM (fully integrated model)
 - option 1 – use current form of contract with amendments (not preferred)
 - option 2 – develop new form of contract (preferred)
 - option 3 – integrated framework agreement (combination of option 1 and option 2)

Summary

- BIM is here!
- BIM can bring substantial benefits to projects
- BIM issues need to be properly addressed
- Need to tailor contract if BIM is used
- Need to use BIM to remain competitive

SUMMARY

Questions?



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