



Collaboration through **OPEN BIM**

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- Open BIM - Introduction
- Open BIM - Concept
- Open BIM - Program

OPEN **BIM**TM

Changes of Building Project Delivery



vs.

Integrated Project Delivery

< Completion Time

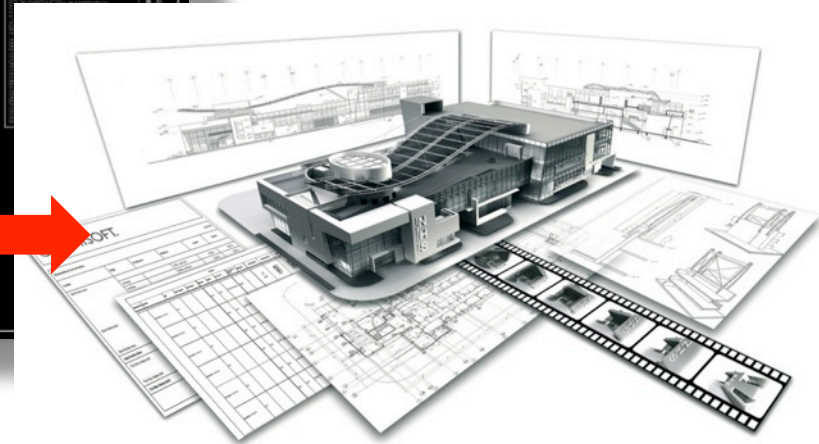
Changes of Building Design Methods



Paper



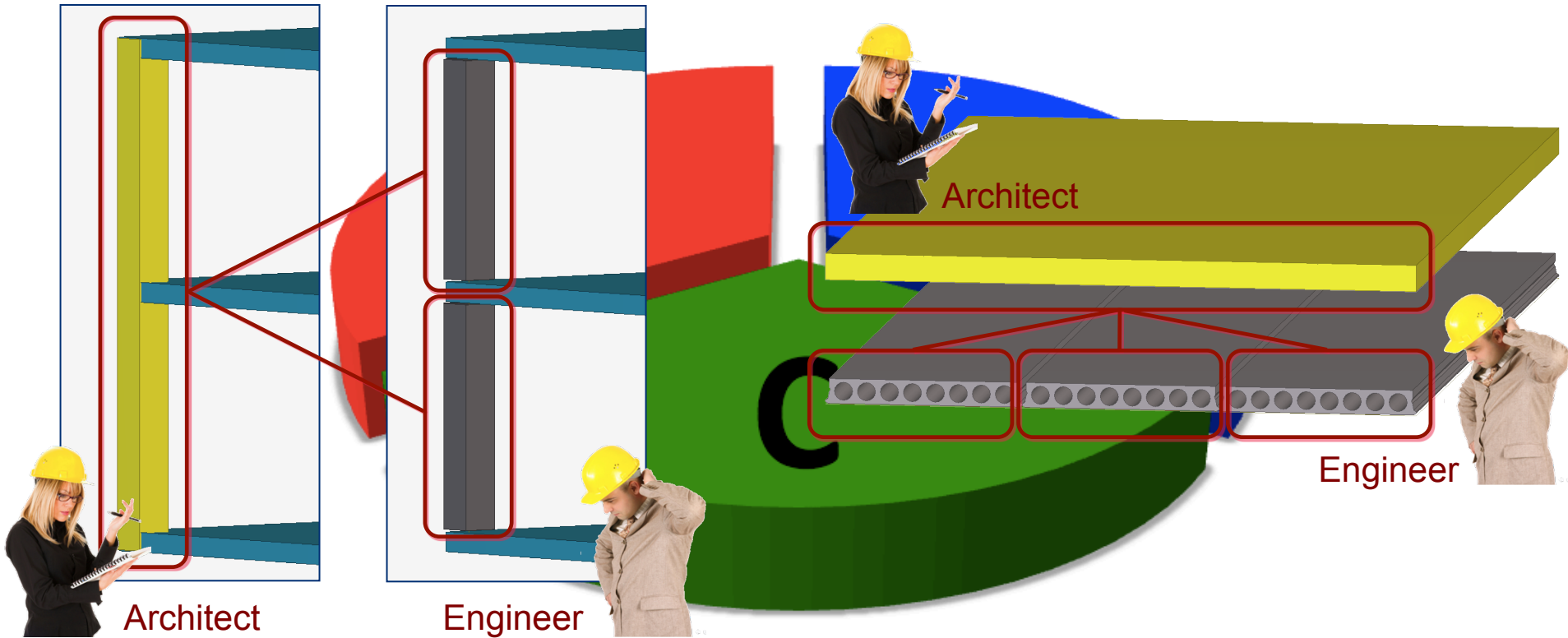
CAD



BIM

NHS Office Complex, paastudio, US

Challenges of Model Based Collaboration



ARCHITECTURAL MODEL ≠ ENGINEERING MODEL

Plurality of AEC Standards



Each trade to use the best
global / local BIM solution
available in every project...

Open Standards

SmartMarket Report



McGraw Hill
CONSTRUCTION

Top Ways to Improve Value of BIM

Source: McGraw-Hill Construction, 2010.

Improved interoperability between software applications



More 3D building product manufacturer-specific content



Improved functionality of BIM software



More owners asking for BIM



More clearly defined BIM deliverables between parties



Open Standards



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AIA Advocates for Open Standards in Interoperability for Design Software

Contact: Scott Frank
202-626-7467
sfrank@aia.org

For immediate release:

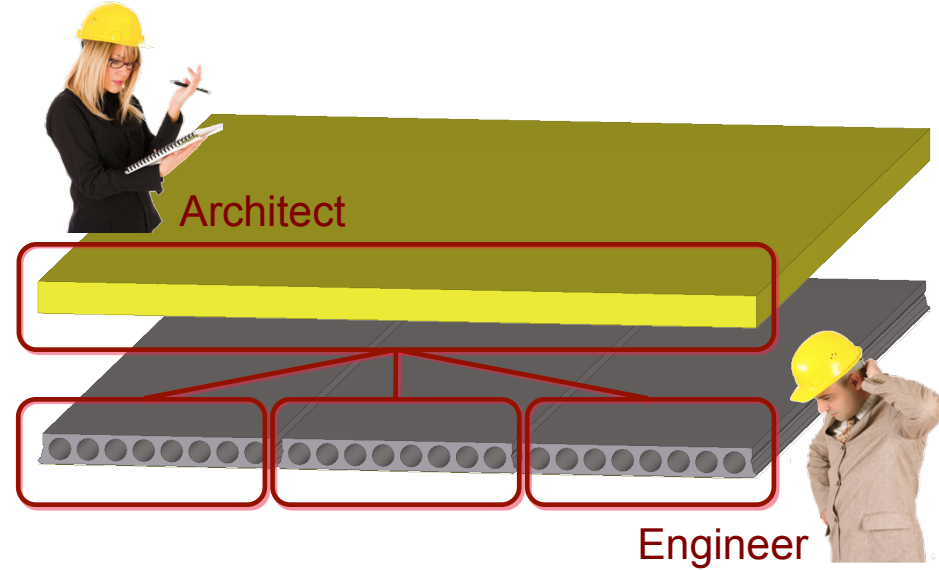
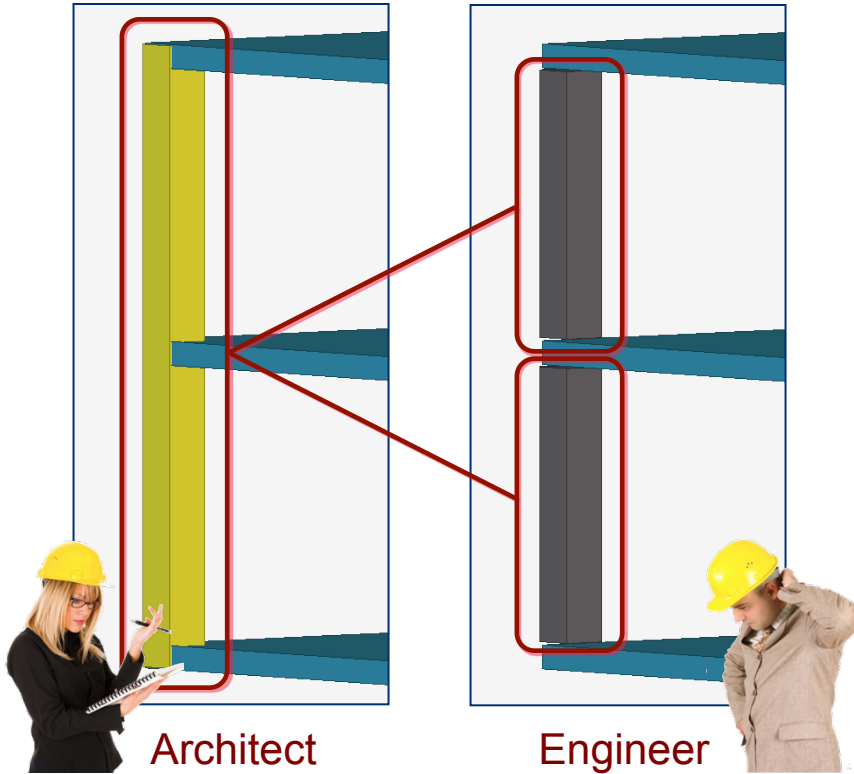
Miami - June 11, 2009 - According to the 2009 *Business of Architecture*, a survey of firm characteristics published by the American Institute of Architects (AIA), the share of firms that have obtained Building Information Modeling (BIM) software has doubled in period from 2006-2009 and is up to 34 percent of all architecture firms, representing about 50% of AIA architects. Due to challenges associated with the use of BIM

OPEN BIM™

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What is OPEN BIM?

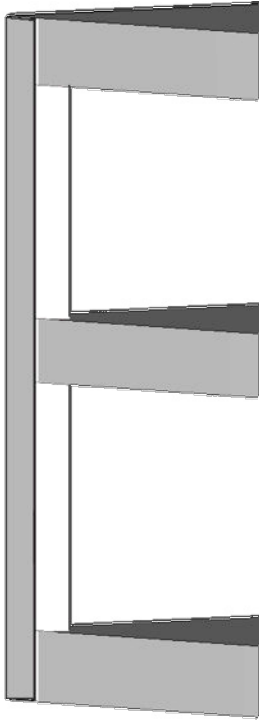
Challenges of Model Based Collaboration



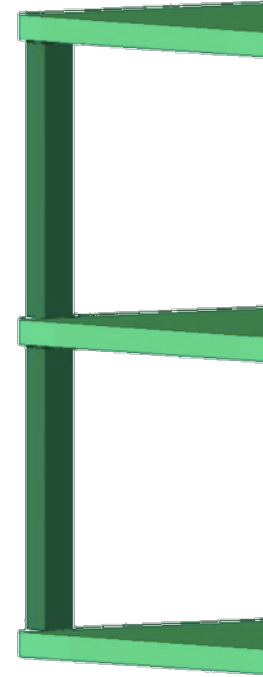
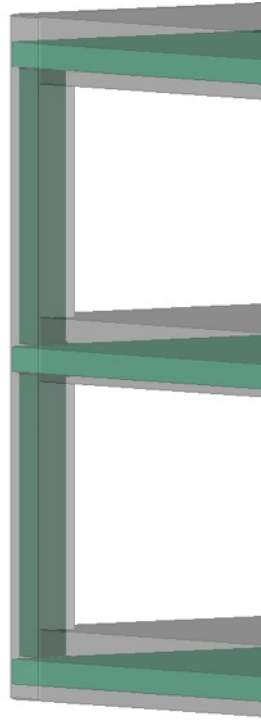
ARCHITECTURAL MODEL ≠ ENGINEERING MODEL

#1 – Reference Model Concept

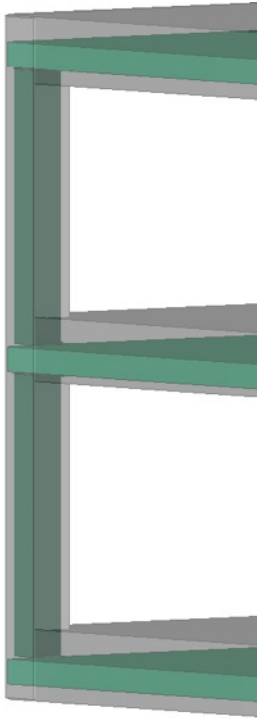
Architectural Model



Engineering Model



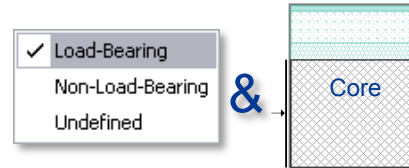
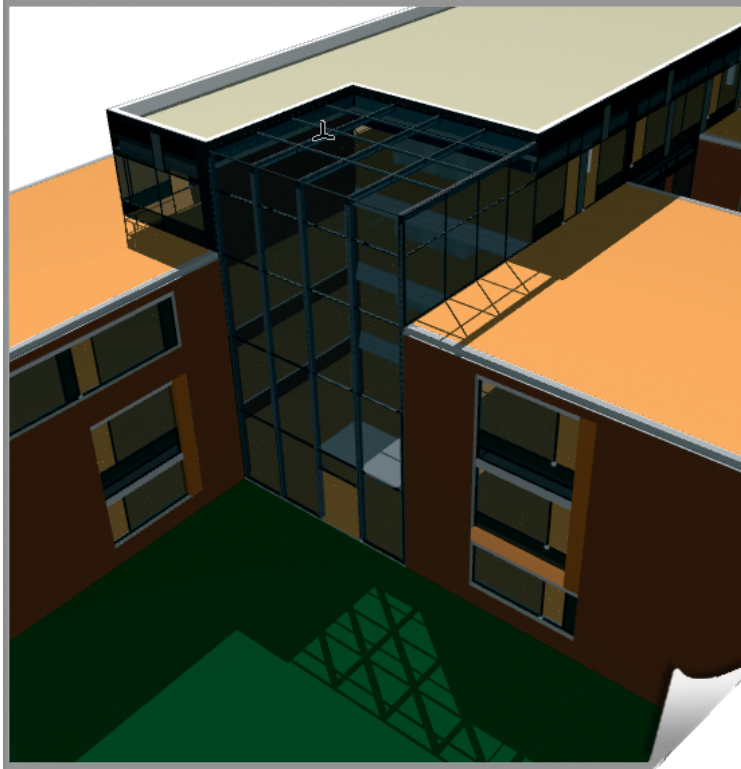
#1 – Reference Model Concept



Benefits

- Clear ownership of models
- Workflow compatibility
- Change management

#2 – Model Filtering & Classification



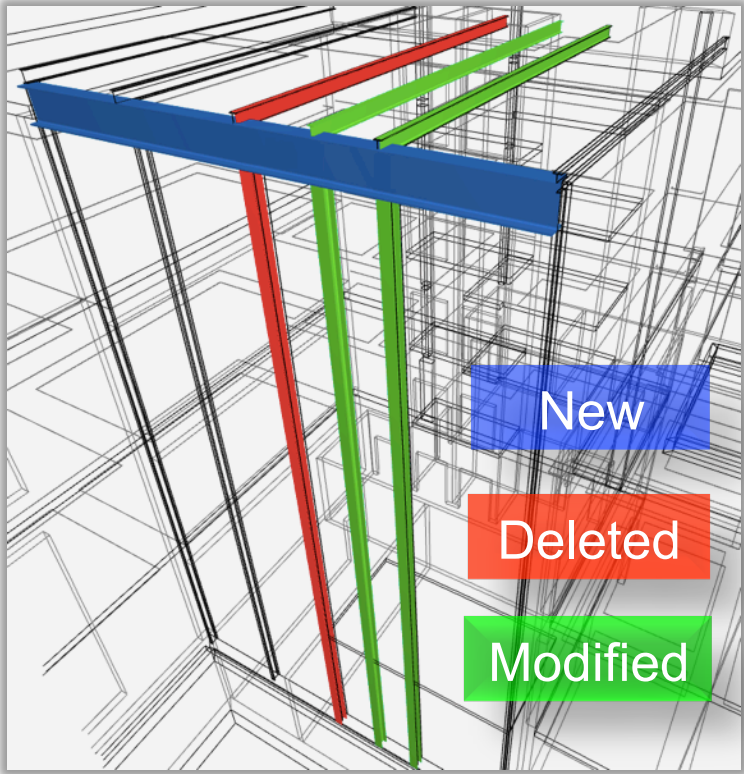
Load-Bearing Elements

#3 – Change Management

IFC Model 1



IFC Model 2



OPEN Workflow Requirements



- System independence
- Workflow transparency
- Ownership of BIM data
- Information classification
- Reference model concept

IFC < Open BIM

- **Commit to:** the utilization of open standards such as Industry Foundation Classes (IFC)
- **Engage:** any vendor with similar strategy to participate (even competing products)
- **Attract:** users of BIM solutions to join the workflow, without giving up their production tool

Open BIM Program

#1 – Unified Communication

Open BIM is a universal approach to the collaborative design, realization and operation of buildings based on open standards and workflows.

Open BIM is an initiative of buildingSMART and several leading software vendors using the open buildingSMART Data Model.

#2 – Unified Branding



#3 – Full AEC Spectrum

- AEC Software & Technology Vendors
- Organizations & Businesses in the AEC Industry
- Building Projects in the AEC Industry

OPEN BIM™

Benefits of Open BIM

1. Work with the **best-of-breed solutions**
2. Maintain **full control** over **software upgrades**
3. Reduce **coordination errors**
4. Create BIM for the **entire building life-cycle**

Open BIM Participants



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Thank you for your attention!

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