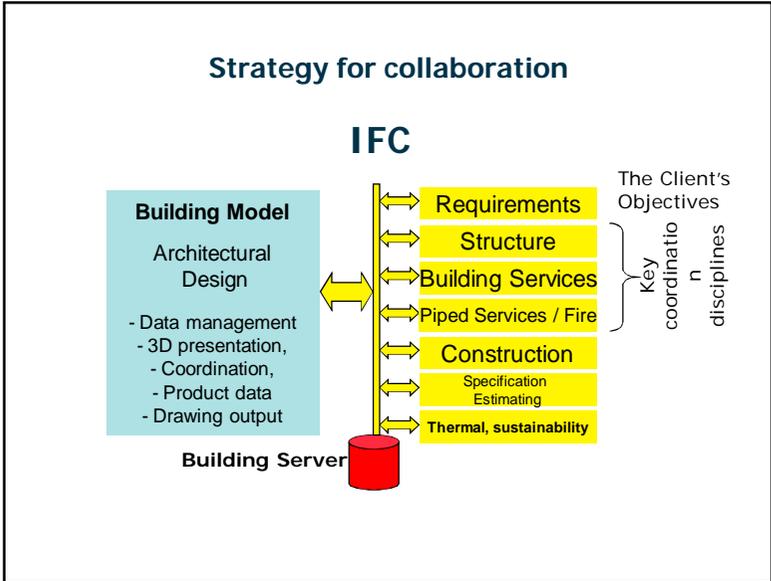
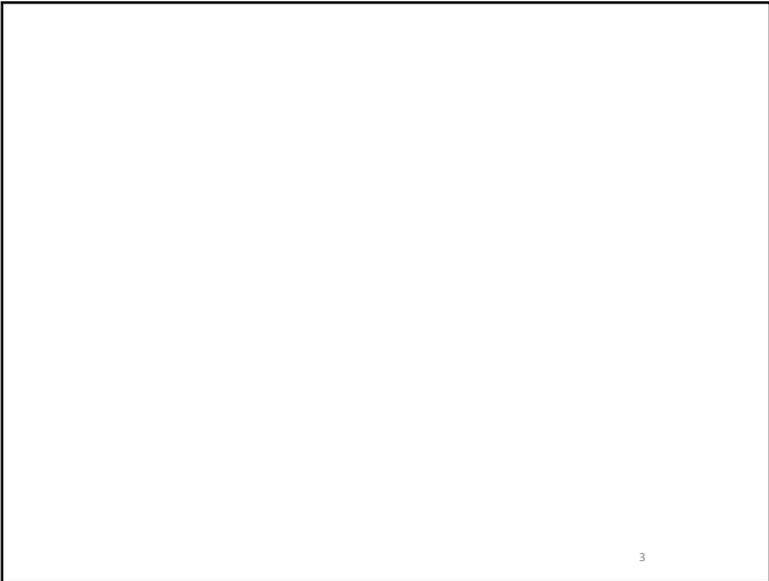
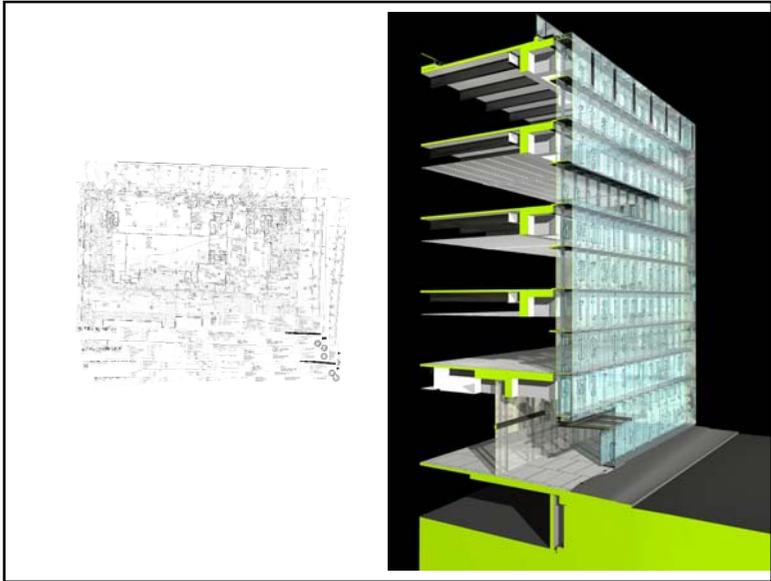
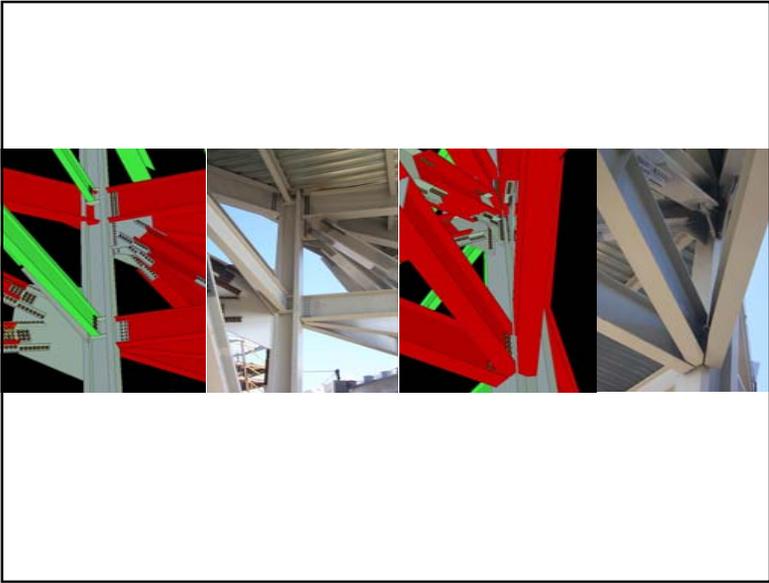


BIM Where to next?

LSAA Conference 2011

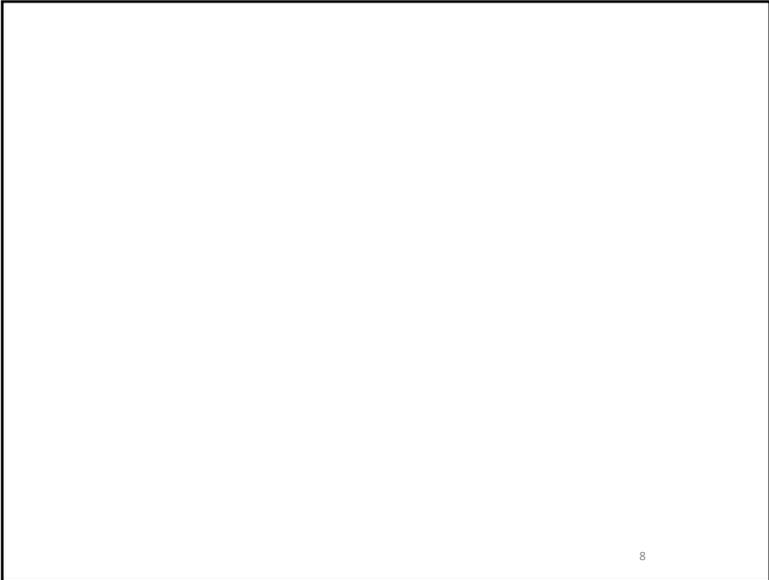
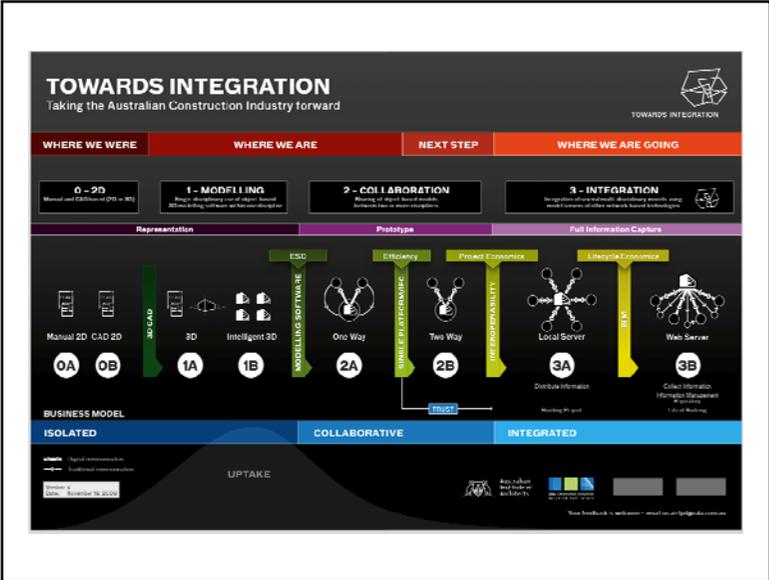
John Mitchell,
Chairman, buildingSMART Australasia



Design of excavation pit at HITOS

E.g. Structural IFC model (BIM) from consultant makes the foundation/base for design of the excavation pit and thereby production of data for stake-out and machine-control.

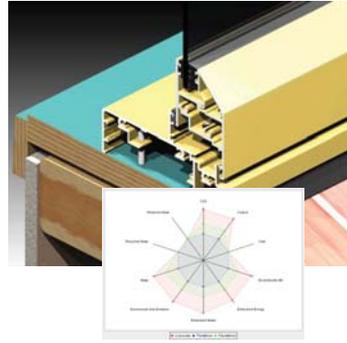


Product Information & BIM Libraries

A crucial issue is access to **information from building product manufacturers** for use in all types of model-based applications.

The responsibility for action lies with:

- product manufacturers,
- suppliers,
- product brokers such as Natspec,
- certification agencies,
- industry bodies and
- software vendors

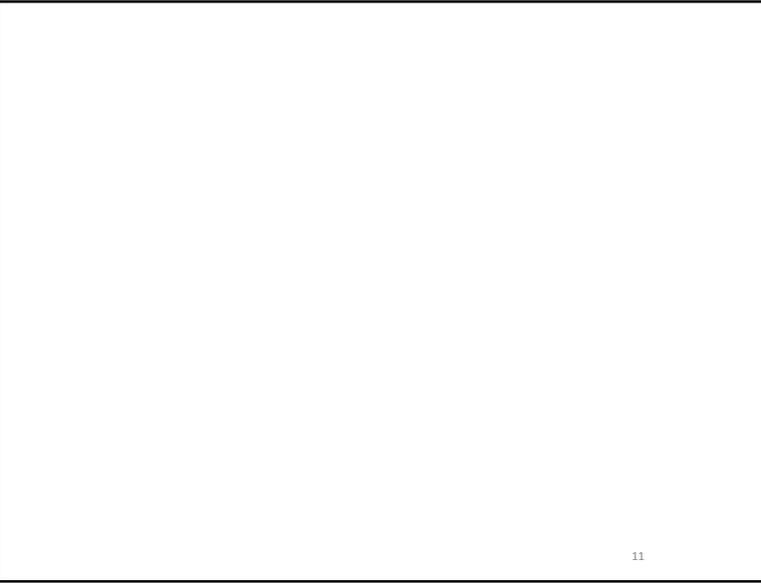


Compliance and Certification

It is widely recognised that we need **performance standards** that encourage **innovation in products, process and methods.**

Government policy must facilitate **performance standards** enabled by BIM

- policy makers,
- codes and standards bodies,
- research organisations, and
- local regulators



Procurement, Legal Issues & Insurance

Integrated design and project delivery has a **major impact on current consulting services and procurement** methods.

Should we be adopting **Integrated Project Delivery (IPD)**?

These issues need to be resolved by groups such as

- APCC and state agencies,
- legal practices,
- professional indemnity insurers,
- Standards Australia and
- Local Government

Multi-disciplinary BIM education

BIM requires a **high level of knowledge and expertise in the use of specific software** and the capability or 'know how'

This is a crucial role for Educational institutions at all levels,

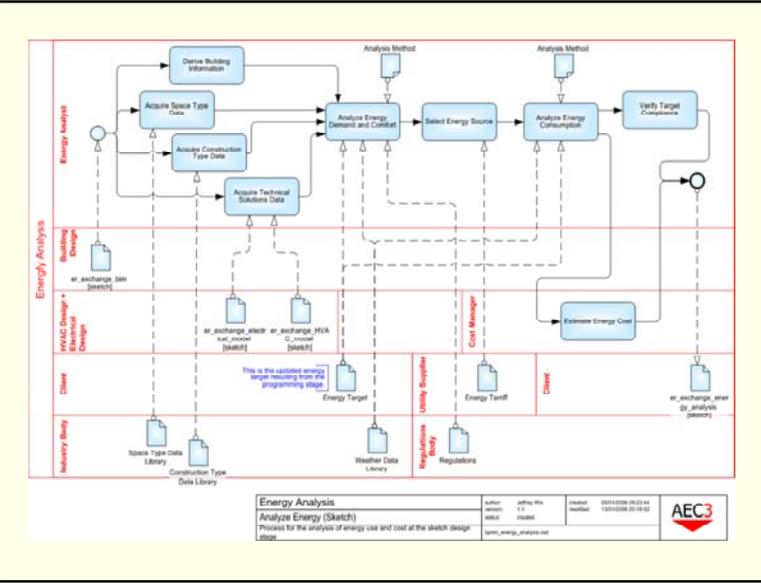
- Universities and TAFE,
- Secondary Schools,
- professional accreditation bodies and
- groups such as the Construction Industry Training Boards

Business Process Change

There is an urgent need for cultural as well as process change.

*Process change must be encouraged and facilitated by **peak industry bodies**, supported by*

- process specialists,
- education providers,
- supply chain alliances
- the development of guidelines.



Adoption of Common BIM Guidelines

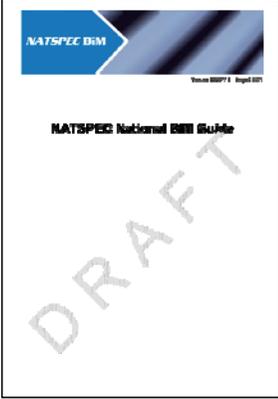
Document **best industry practice in each client portfolio** as a basis for effective collaborative working.

This requires concerted action by

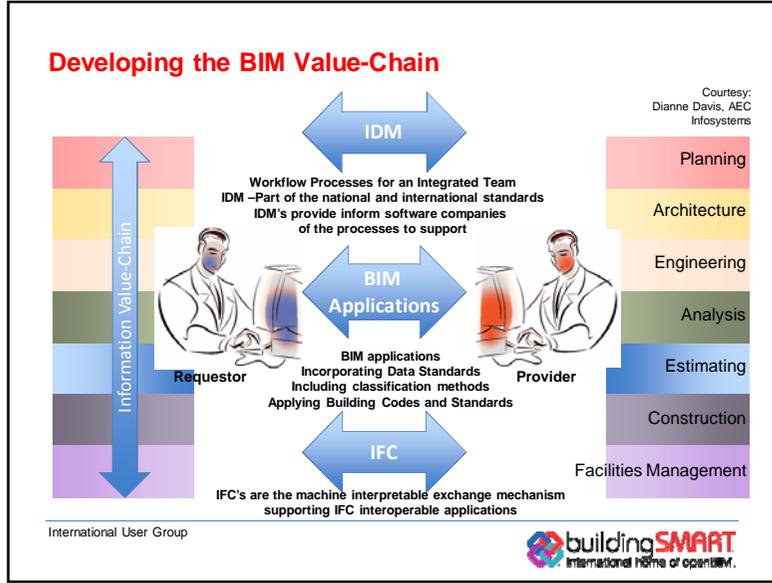
- government client agencies
- industry and professional standards organisations
- private owners and
- property developers

NATSPEC National BIM Guide

- The Australian *National BIM Guide* is a reference document to be read in conjunction with a *Project BIM Brief* which outlines the particular requirements for each project.
- The *National BIM Guide* is to assist clients and consultants to clarify their BIM requirements in a nationally consistent manner. This will reduce confusion and duplication of effort.
- The *National BIM Guide* is an adaptation of the *US Veteran Affairs BIM Guide*.



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Eureka Project EU130 1986 - 1996

CIMsteel

- **C**omputer **I**ntegrated **M**anufacturing for **C**onstructional **S**teelwork

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Improve Industry's operational efficiency

- Enables **digital transfer** of project information:
 - (a) between **applications software** within a company
 - (b) between **companies**
- Allows the **most appropriate** applications software to be used

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... yielding

- **Greater productivity**
 - resulting from time savings by not regenerating information
- **Improved quality**
 - by eliminating errors caused by data re-entry
- **Flexibility and improved collaboration**
 - with partners, suppliers and the client
 - Improved price-performance
 - Greater ability to respond to change
- **Business opportunities**

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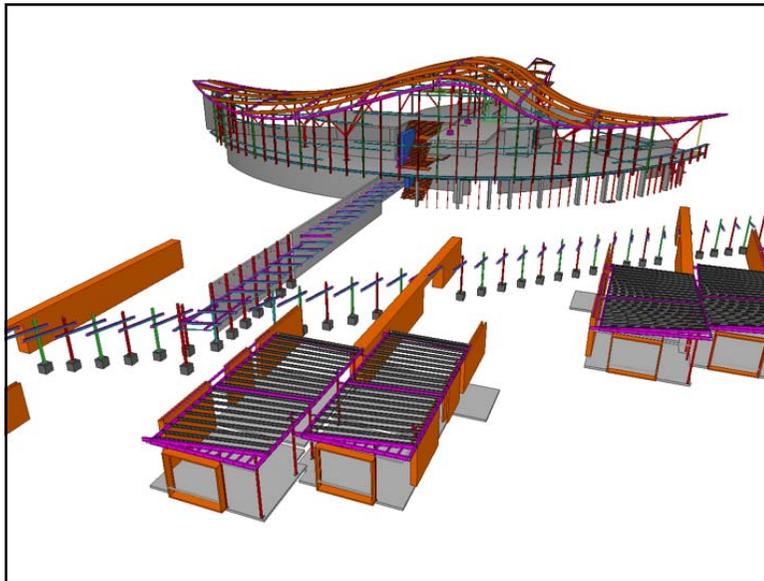
CIMsteel

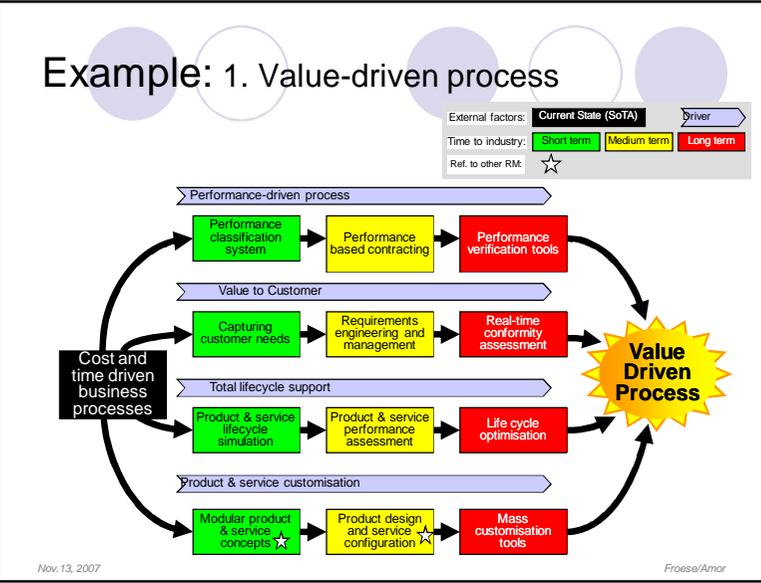
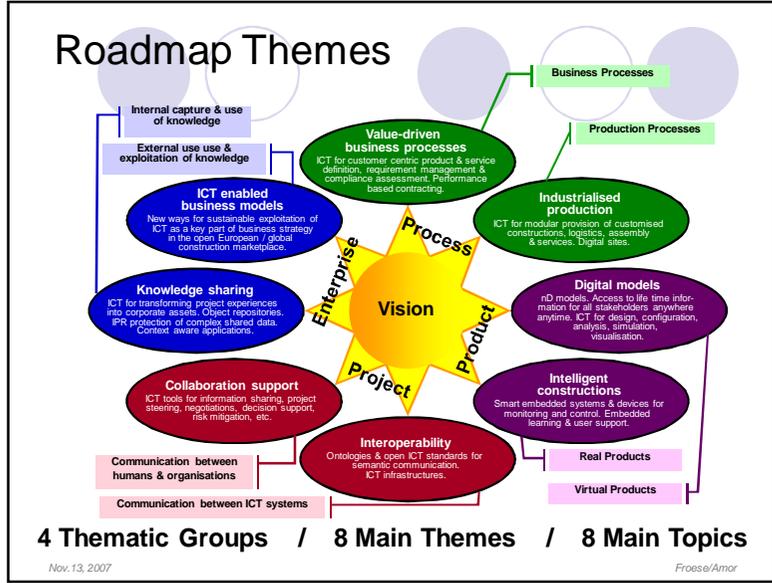
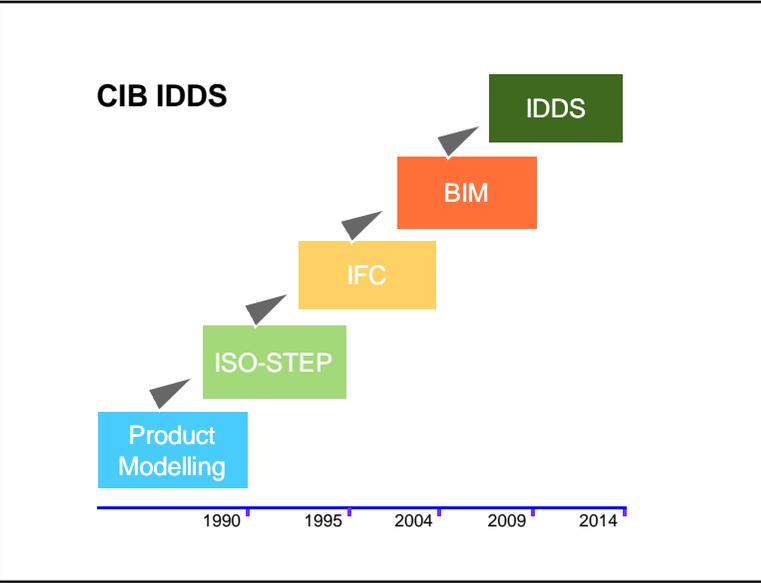
To sustain a long-term strategy

- An “open systems” integrated approach
- Facilitate introduction of other CIM techniques
- Enable migration to full information management and sharing
- Allow information integration with other aspects of a building
- Re-engineering of the business processes

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National Pilot Projects

The outputs of the Program would be used and tested through a series of **National Pilot Projects**

- directed by client groups, both **private and government**
- in-kind commitment** of project teams
- validating** these new protocols, procurement methods and collaboration scenarios.

Pilot projects would form a series of **case studies**, **industry workshops** and **technical documents** that would disseminate results and give feedback to the program.

Recommendations

- Agencies undertake a bi-lateral coordinated **BIM Pilot program across the whole Construction Sector supply chain**
- The Industry work with **building product manufacturers and suppliers to make available rich product information to support facility procurement & operations**

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Program Outcomes

Industry & Government would declare their **shared commitment** to the new technology

The Declaration would provide

- **leadership** in the built environment,
- **give industry confidence** to adopt the new technologies,
- **make more efficient use of resources,**
- **support innovation and quality** in the built environment



Targeted **actions** and **prioritised implementation** to support the direct objectives of the vision

A sustainable built environment

Thank you

Are you willing to participate in an **Australasian BIM Initiative?**

Please register at <http://buildingsmart.org.au/national-strategy-for-bim-adoption>

