

BIM and NFRC

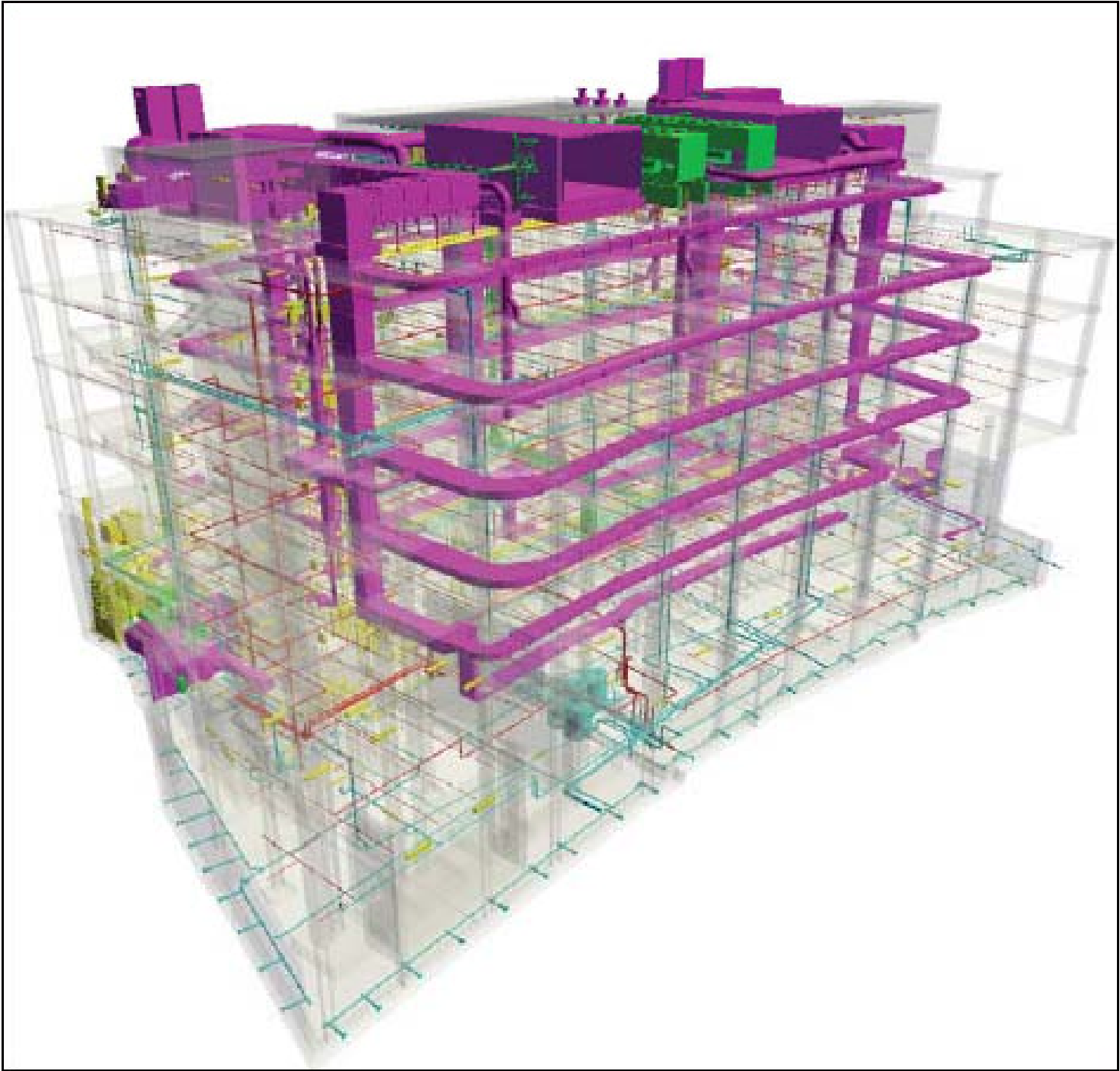
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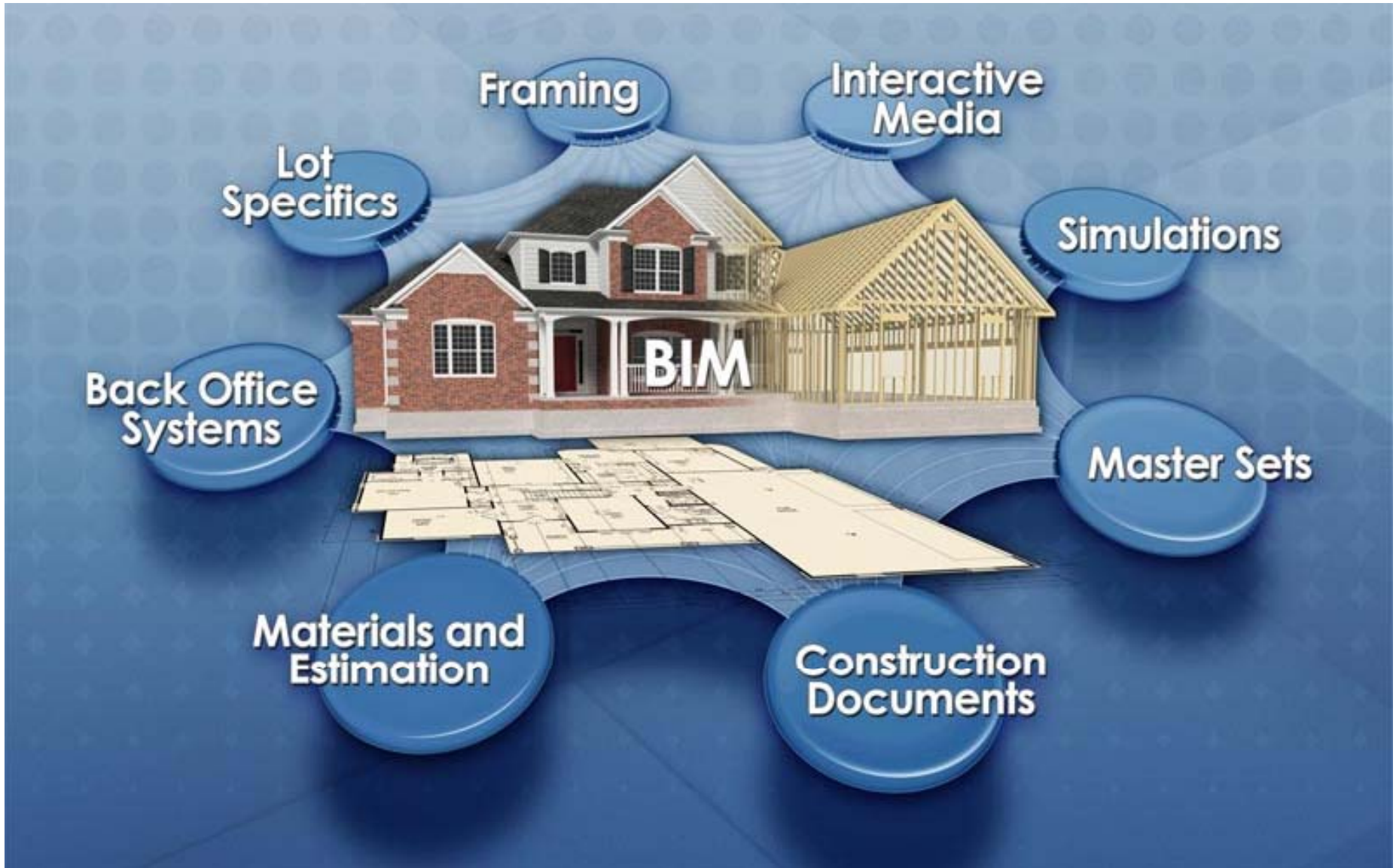
November 15, 2009

Definition of BIM

- **Building Information Modeling (BIM)** is the process of generating and managing building data during its life cycle
- Building information modeling covers geometry, spatial relationships, light analysis, geographic information, quantities and properties of building components.
- AIA Definition: a model-based technology linked with a database of project information







Overview

- Building Information Modeling (BIM) is becoming more common and pervasive
- Fenestration manufacturers can benefit from seamless exchange of information
- NFRC does not have BIM enabled processes currently
- Currently there are efforts to create linkages between various tools

Current Linkages

- WINDOW reads THERM and OPTICS files
- CMAST reads WINDOW, OPTICS, and THERM new xml files and runs WINDOW and THERM in background
- CMAST produces EnergyPlus report file and provides it as a part of label certificate, accessible on the web

BIM Directions

- While BIM is becoming more pervasive the question is how can we best benefit from it and where would we like to see BIM progress
- This session will hopefully answer some questions and clarify confusions, while generating input about the needs and future work

Potential Linkages

- Fenestration manufacturers would benefit from the ability to export from custom in-house configuration and bidding systems to NFRC rating tools
- Link from CMAST to Architectural and Simulation software packages
- Extension of BIM definitions to cover important material properties (e.g., spectral data for glazing, frame materials, geometry, etc.)

Next Presenters

- Justin Wong and P.C. Thomas.
 - Justin is a Ph.D Candidate at the University of New South Wales in Sydney, Australia. Doing research in Building Information Modeling and building energy simulation using EnergyPlus.
 - P.C. Thomas is a principal at Team Catalyst, company in Sydney, Australia. His work is in building energy simulation and mechanical systems design

Next Presenters

- Dr. Peter Lyons
 - Peter is our old friend and colleague from Australia and is a principal of Peter Lyons & Associates. He is active in fenestration systems modeling and building energy simulation. He is an NFRC member and is a Certified Simulator and ACE under the CMA Program.