



Today's Data Integration

Paper-Centric Paradigm

A Person must interpret electronic versions of paper based data.

The data or information being conveyed about the project is not understood buy the software.



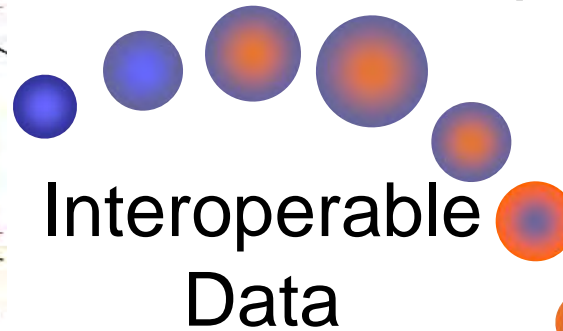


NBIMS Data Integration



Architect

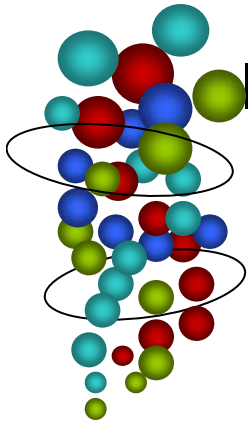
Machine Interpretable Data



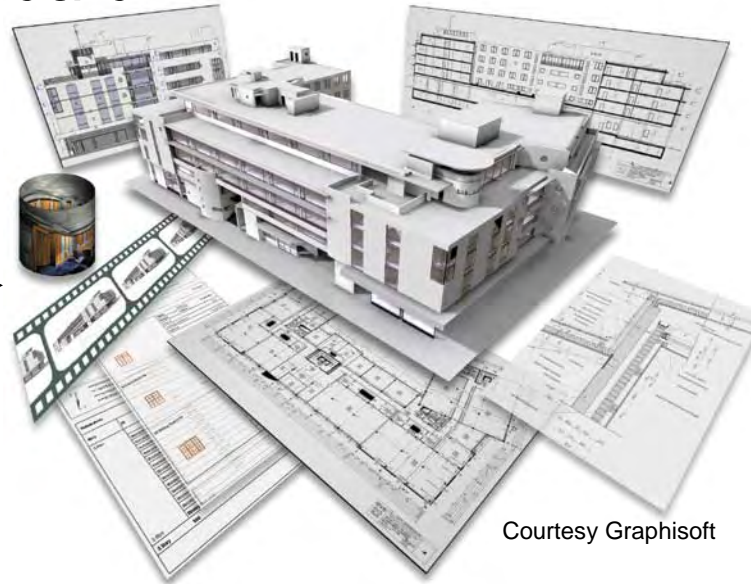
Engineer

Data-Centric/Interoperable Paradigm

Data is interoperable between disciplines, applications “understand” common data types and can use the same data for multiple purposes

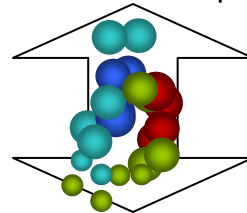


Information Workflow in the NBIM Standard



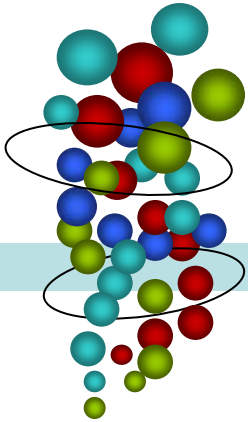
Softwares Supporting IFC's can use the NBIM Standard to Manage the Building Lifecycle Information Process

North American Data Standards such as Omni-Class and Uniformat are the **User Data View** Embedded in the Exchange
(Not Machine Interpretable)



NBIM Development Schema From User Understood Information To Machine Interpretable Data

IFC Entities are the **Machine Interpretable** mechanism for the Exchanges



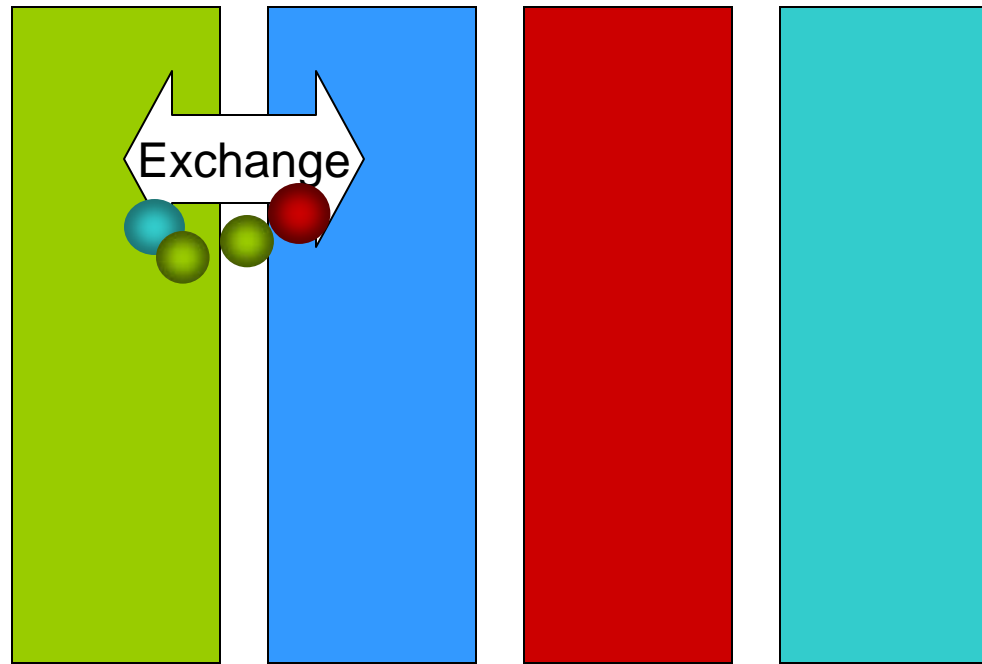
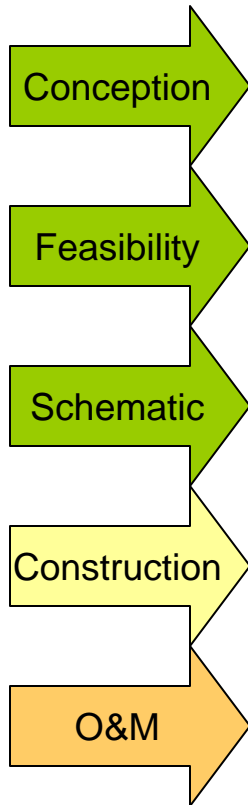
NBIM Standard Work in Progress

North American - Data/Information Standards

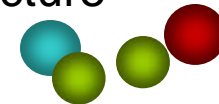
CSI-Omni Class-Example Participants and Disciplines

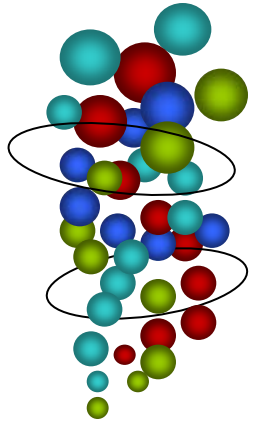
Architect Engineer Planner Owner

Omni Class
Example
Phases
Of the
Project



Exchange Information
Architect to Engineer for Structure
Feasibility Phase of Project





Information Exchanges In Development

It's an International Endeavor through the IAI

- Costing
- Geometry
- Early Planning
- Space
- Energy
- LEED
- Site
- Occupancy
- Electrical Engineering
- HVAC
- Piping
- Functional Parts
- COBIE-Owner Turnover
- Maintenance
- Scheduling
- Performance & Code