

COBIE and BIM

construction operations building
information exchange

and

building information modeling

Nicholas Nisbet, MA, DipArch
buildingSMART ifcXML Coordinator
Director, AEC3 Ltd

BIM Vendors Process

- How does BIM work with COBIE ?
- How does COBIE work with BIM ?

Building Services

DdsPartner 6.35

File Edit View Insert Format Ductwork Text labels Tools Window Help - Customize...

Project 217_ N:\MSVFC\BSP\US-Navy\217_EPM_IBTK\217_... Duct 217_7000 N:\MSVFC\BSP\US-Navy\217_EPM_IBTK\217_...

Supply air-diffusor circular w. re

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Air Terminal

Calculation data

Position: 1

☒ Automatically regulate

Air flow: 180.00 m³/h

Velocity: 1.59 m/s

Pa loss: 6 Pa

Zeta: 3.89 Z

☐ Fixed dimensions for pressure loss calculation

Zeta calculator

Air flow: 180.00 m³/h

Air flow: 50.00 l/s

Velocity: 1.59 m/s

Width/Radius: 200 mm

Height: 0 mm

Pa loss: 6 Pa

Zeta: 3.89 Z

HVAC Partner Ductwork

Duct 217_7002 N:\MSVFC\BSP\US-Navy\217_EPM_IBTK\217_...

Duct 217_7001 N:\MSVFC\BSP\US-Navy\217_EPM_IBTK\217_...

Damper

Calculation data

Position: 1

☒ Automatically regulate

Air flow: 1620.00 m³/h

Velocity: 3.00 m/s

Pa loss: 1 Pa

Zeta: 0.17 Z

Zeta calculator

Air flow: 1620.00 m³/h

Air flow: 450.00 l/s

Velocity: 3.00 m/s

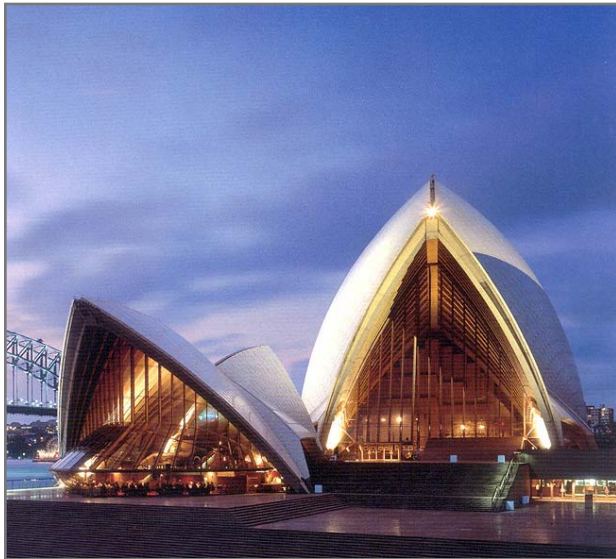
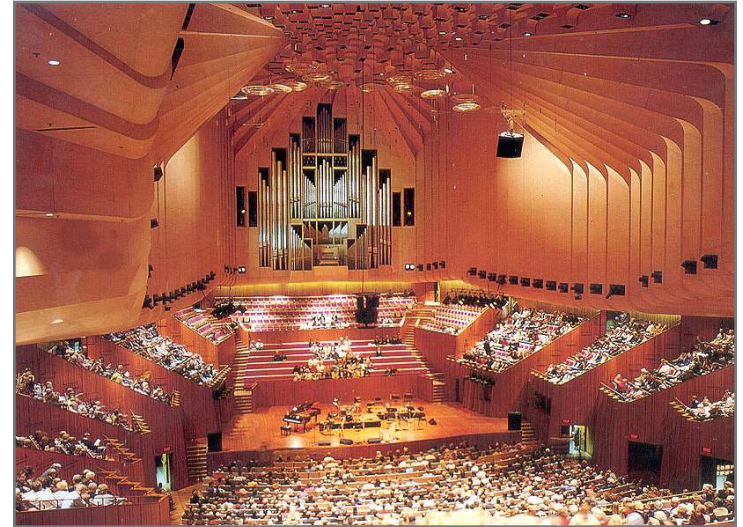
Width/Radius: 500 mm

Height: 300 mm

Pa loss: 1 Pa

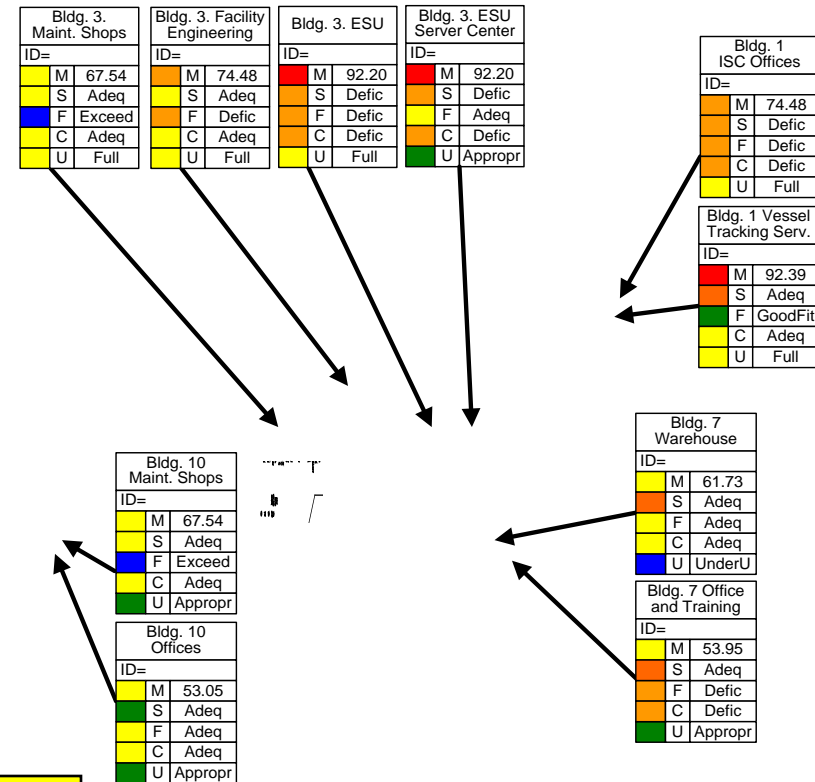
Zeta: 0.17 Z

Refurbishment



FM / Design

- Portfolio and Asset Management and Early Design
 - Collaboration with IAI NA Chapter
 - Capturing ‘demand’ at pre-design stage
 - Capturing ‘supply’ performance for comparison with demand
 - Information required at the briefing stage

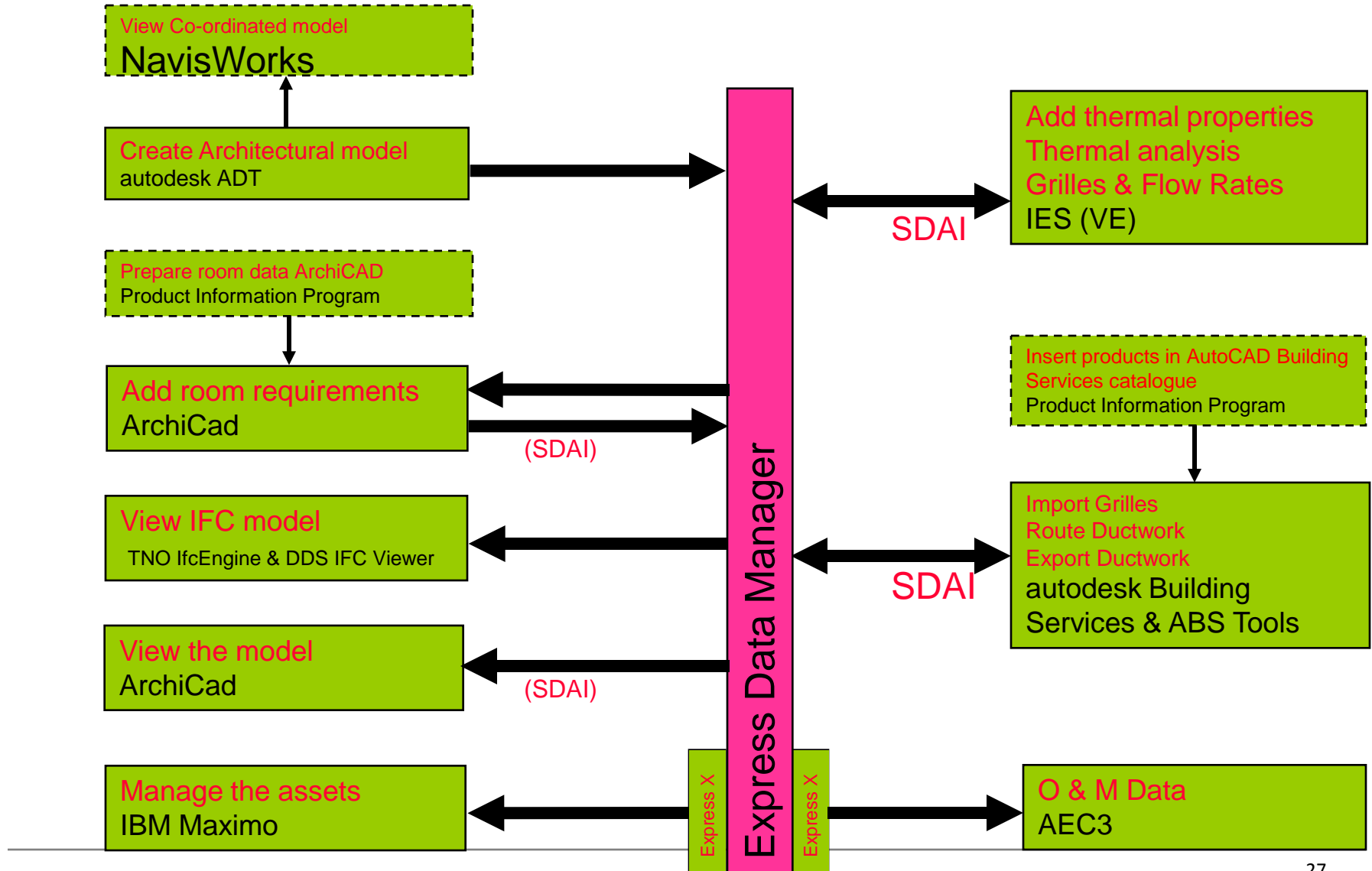


Data Stamps can be used to summarize key facts about assets (demand/supply)

Capability is captured in IFC Property Sets

LEGEND: STAMP FOR SUITABILITY IN RESPONSE TO REQUIREMENTS				
ID = Real Property Facility Number + sub-codes as needed				
M=Mission Dependency Index	S=Security	F=Functionality-Serviceability	C=Condition and Service Life	U=Utilization
90-100	Redundant	Exceeds Need	Exceeds Need	Underutilized
70-89	Mitigated	Good Fit	Appropriate	Appropriate
50-69	Consider	Consider	Adequate	Full
30-49	Deficient	Deficient	Deficient	Cramped
0-29	Urgent	Dysfunctional	Urgent	Overutilized

UK: ifc-mbOMB 2004



HITOS College in Tromsø

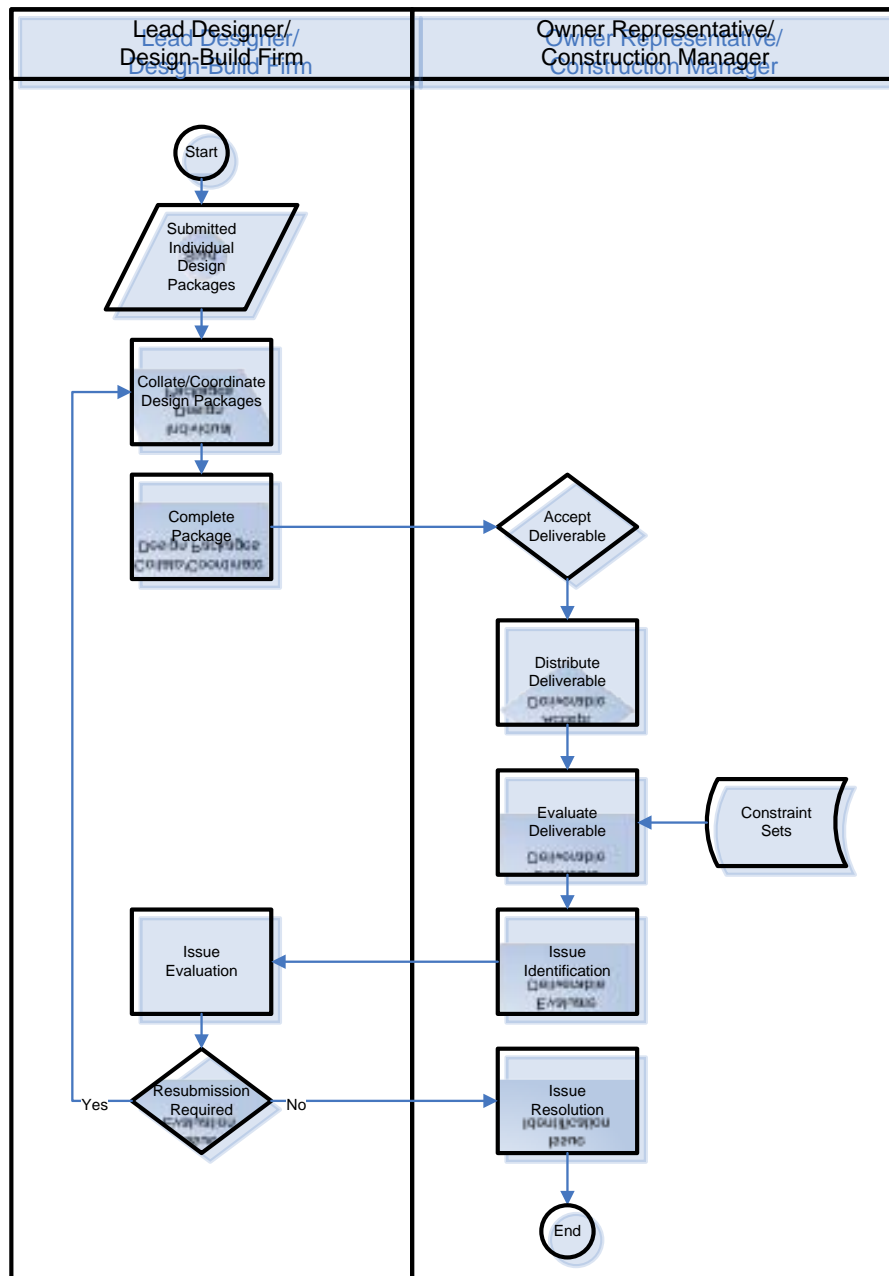


IFC pilot-project

5000 m²
newbuild

COBIE and IFC

	COBIE	buildingSMART
Location:	02 Facility, 03 Floor, 04 Space	Ifc Spatial Structure
Instance:	07 Component	Ifc Element
Typing:	Product Data 06 Register	Ifc Type Product
Submittal request:	Other requests	Ifc Project Order



checks

- **Schematic Design (SD) Deliverable**
 - Spatial Compliance (Program) Check
 - Massing Check
 - Circulation Check
 - Fire Compliance Check
 - Security Check
 - Sustainability Check
- **Design Development (DD) Deliverable**
 - As before plus....
 - Functional Checks
 - System Checks
- **Construction Document Deliverable**
 - As before plus....
 - Collision Detection Quality Assurance
 - Required Construction Details
 - Materials, Products, Equipment Specification Checks

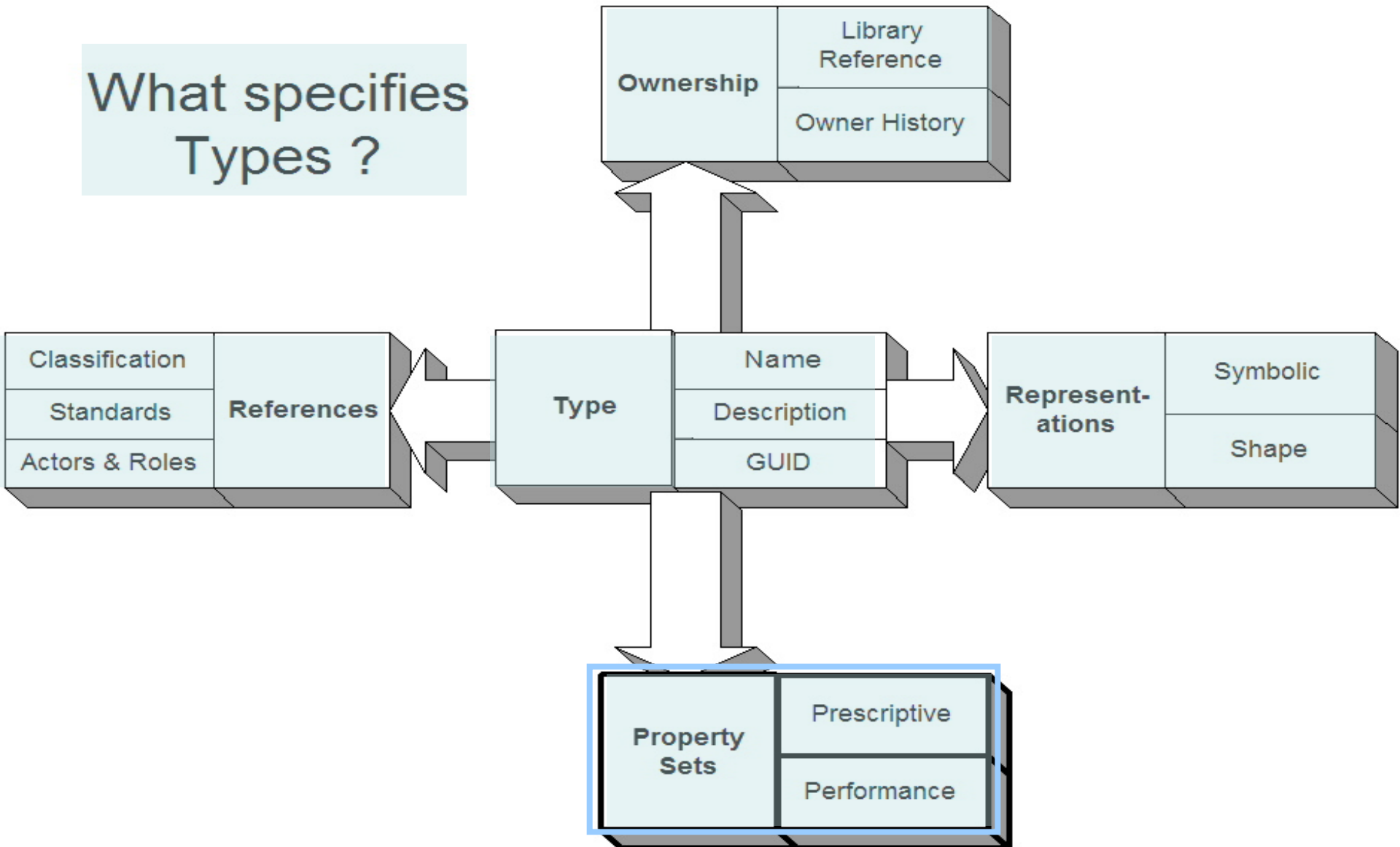
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assets

- what is an asset ?
 - what assets are to be managed ?
 - anything that shares a product definition.
 - in COBie this is a registered requirement for submittal of 'product data'.
 - In buildingSMART this is a 'type definition'.
-

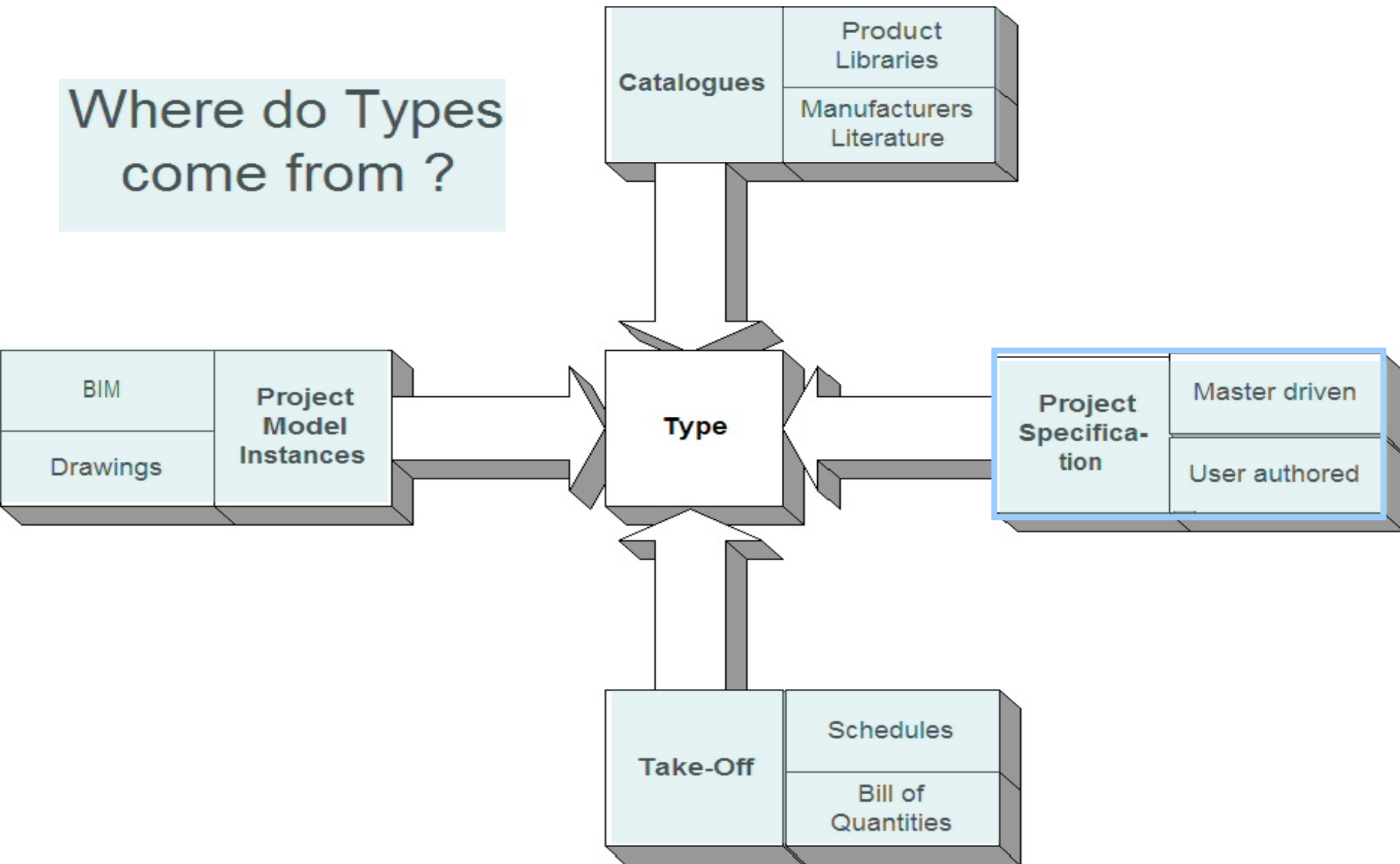
types

What specifies
Types ?



types

Where do Types come from ?



types

What are
Types for?

