BIM4Ren

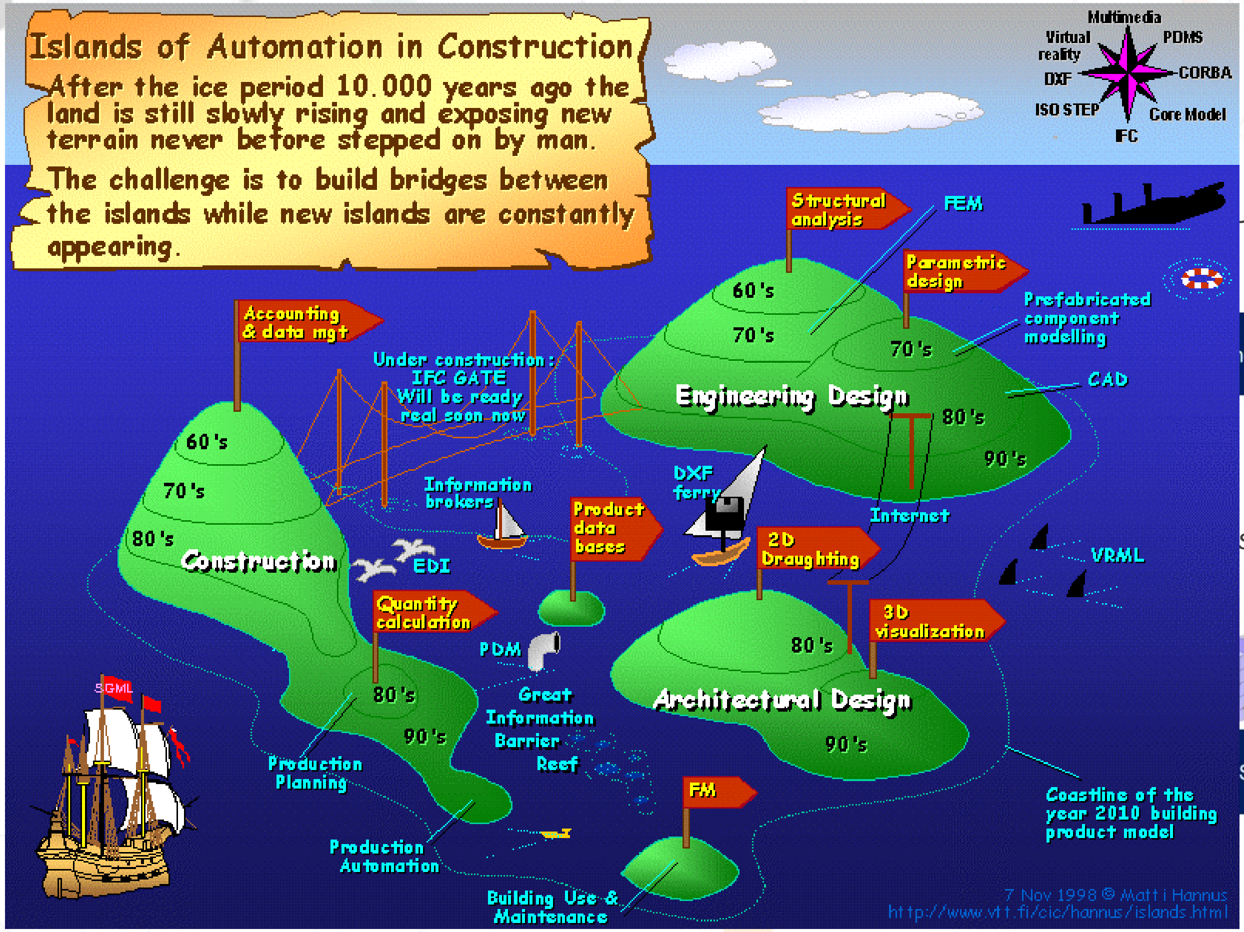
TRAINING

BIM Advanced

The high potential of BIM and its future developments

This project has received funding from the H2020 programme under Grant Agreement No. 820773

Open BIM Overview

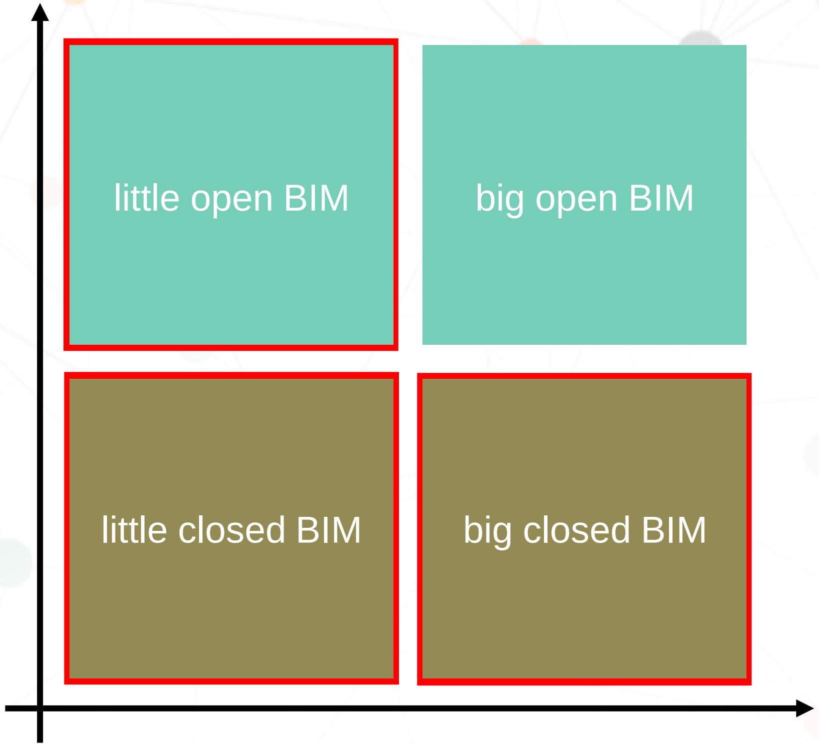


Open BIM

Using software tools by different vendors using open data standards

Closed BIM

Using software tools by the same vendor using propriatary exchange formats



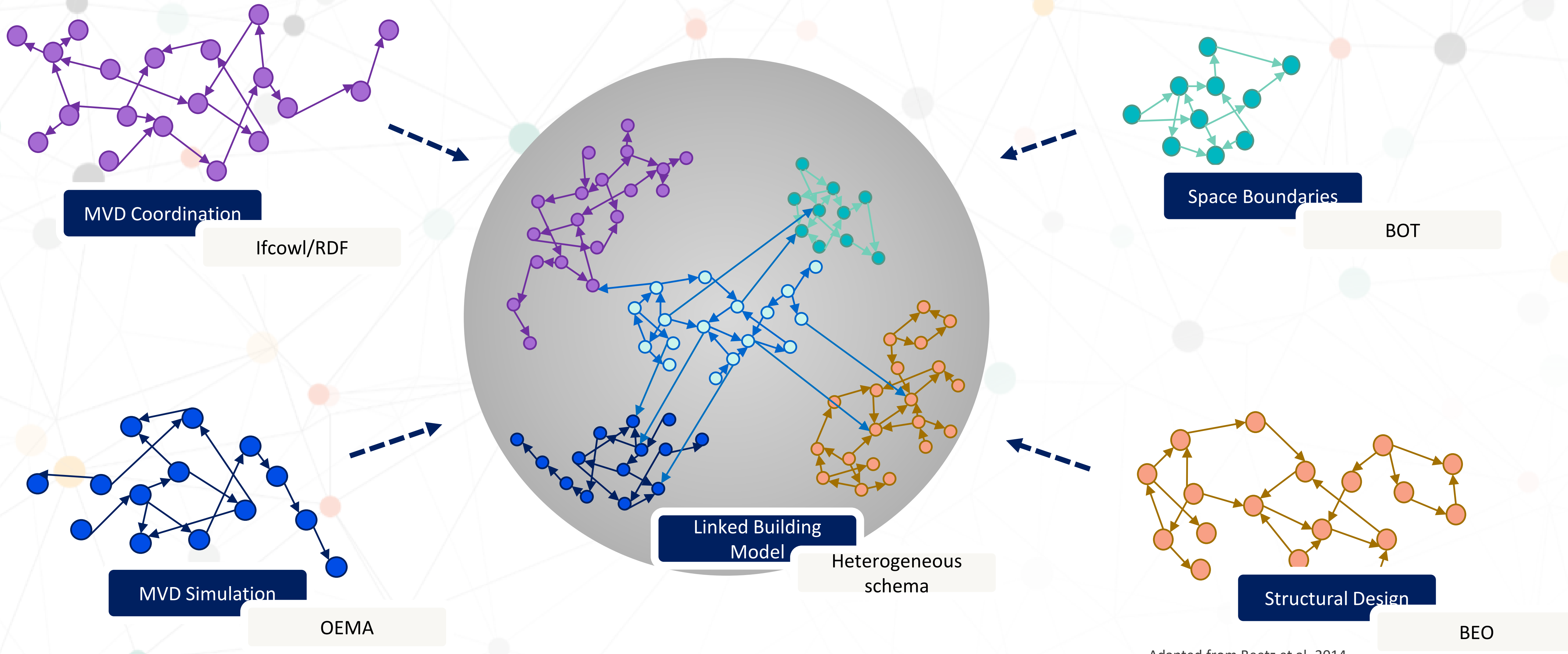
little BIM

BIM tools being used as island solutions for specific purposes only

BIG BIM

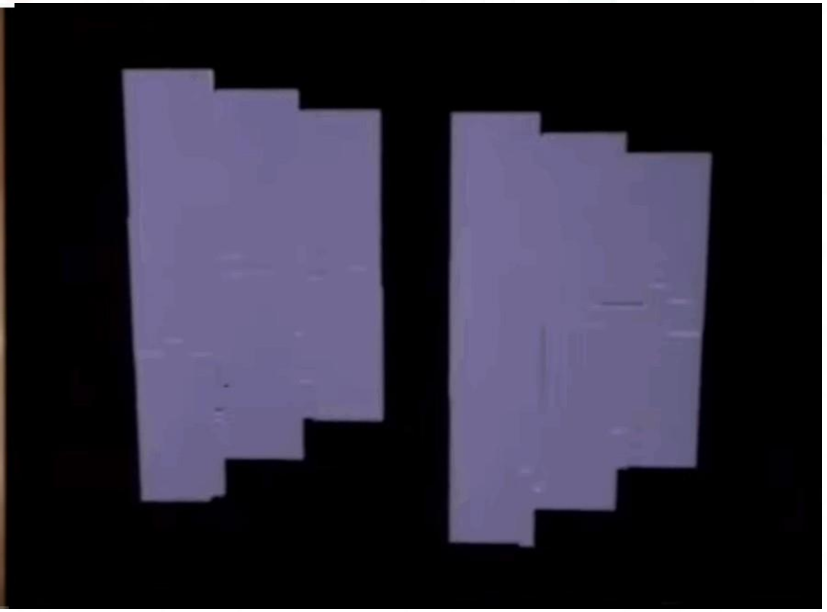
Building information Models are being used throughout the lifecycle by all stakeholders involved

Big Open BIM: Linked Data



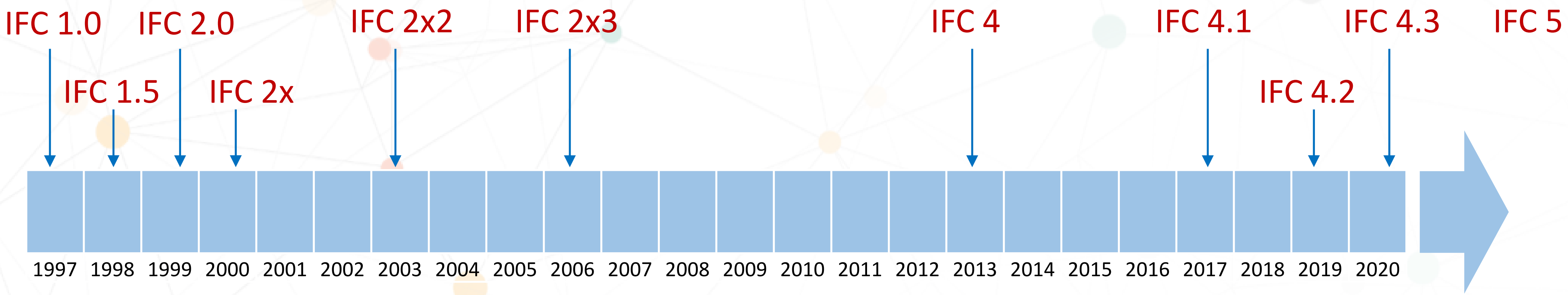
Adapted from Beetz et al.,2014

- Promotional Video “The end of Babel” for the foundation of

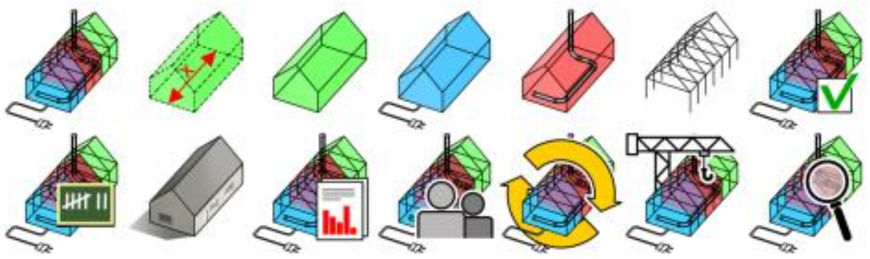


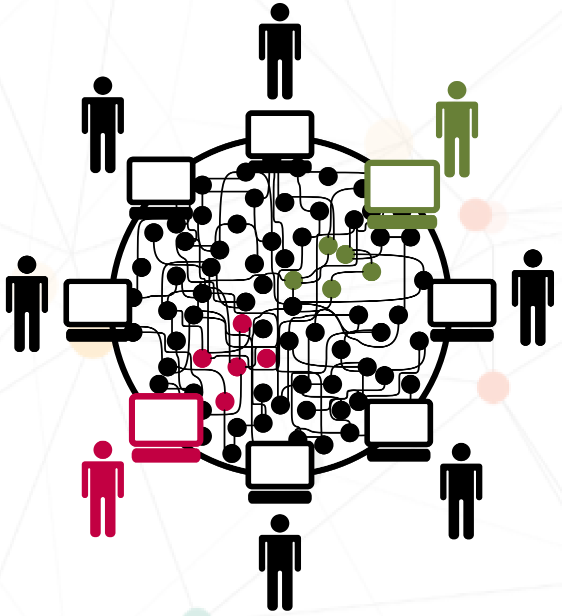
History: IAI, buildingSMART

- 1994: initiative by Autodesk
- 1997: Industry Alliance for Interoperability – IAI
- Acelleration of ISO? (Eastman 1994)
- 2005: IAI -> buildingSMART
  - > 800 members in > 32 countries organised in local "chapters"



Need for structured information





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	little BIM	BIG BIM
Open BIM	little open BIM	big open BIM
Closed BIM	little closed BIM	big closed BIM

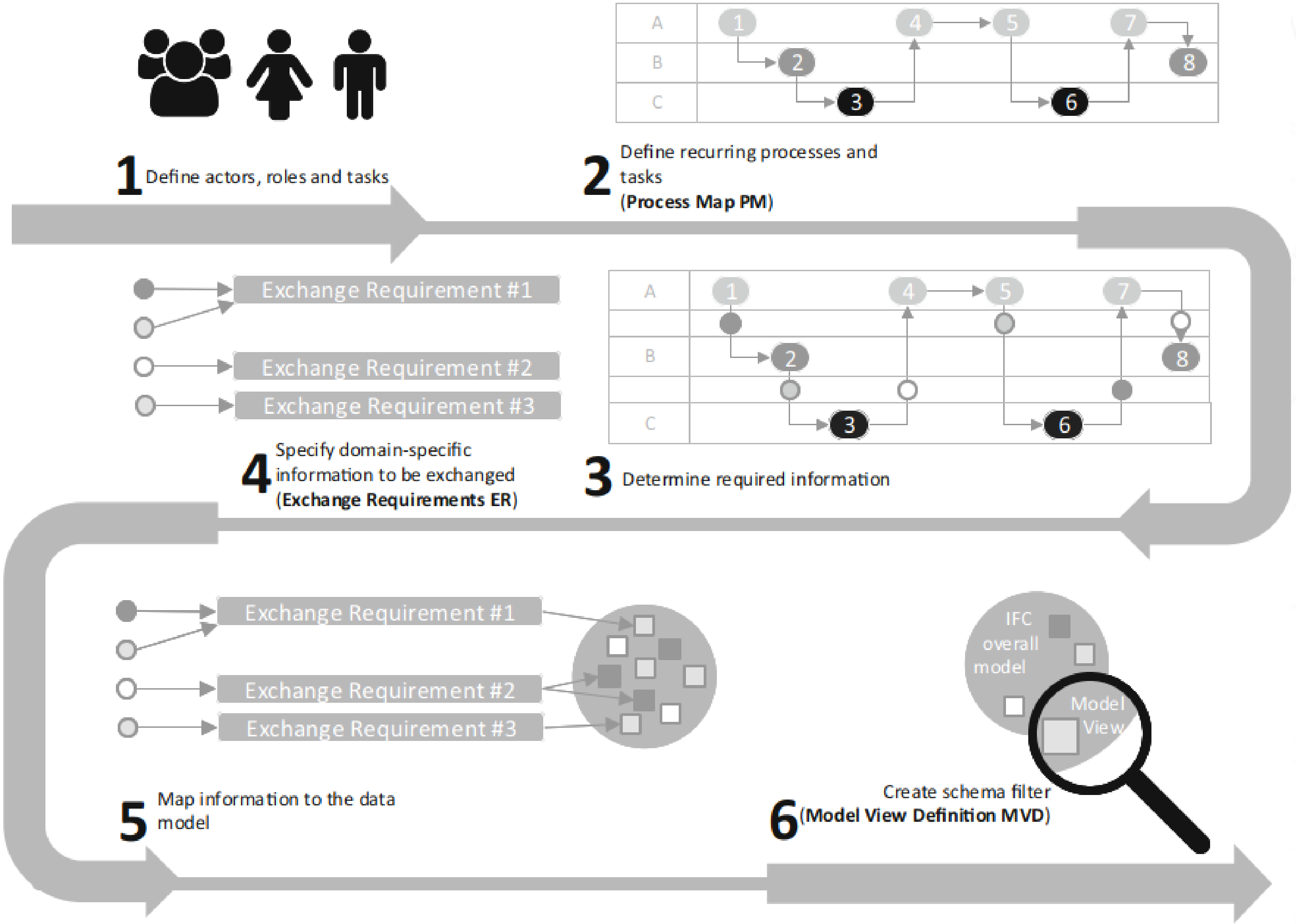
little BIM

BIM tools being used as island solutions for specific purposes only

BIG BIM

Building information Models are being used throughout the lifecycle by all stakeholders involved

IDM: Process-oriented information, IDM

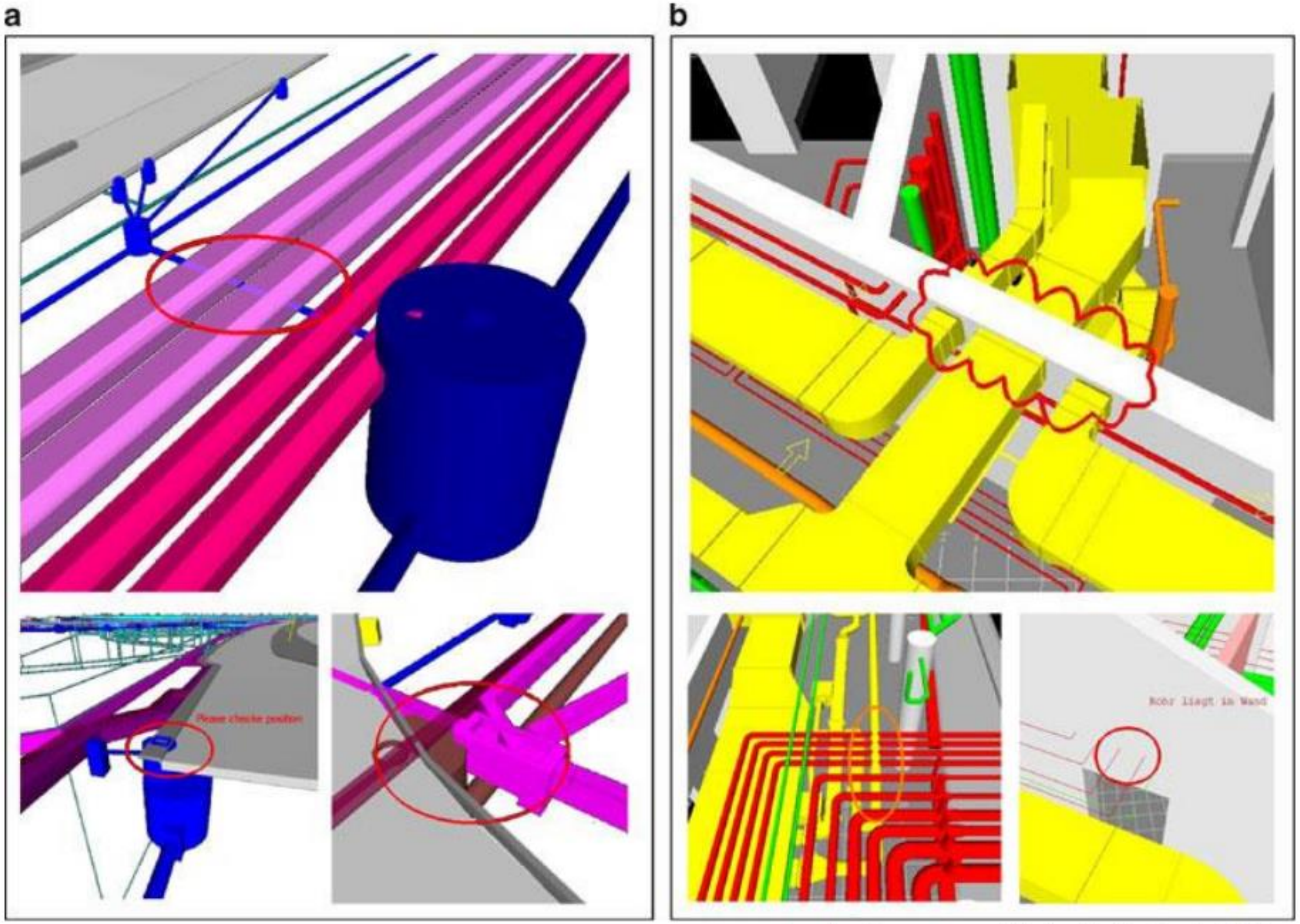


- Assignment

Document a process using BPMN 2.0 and IDM and IDS principles and (evolving) standards

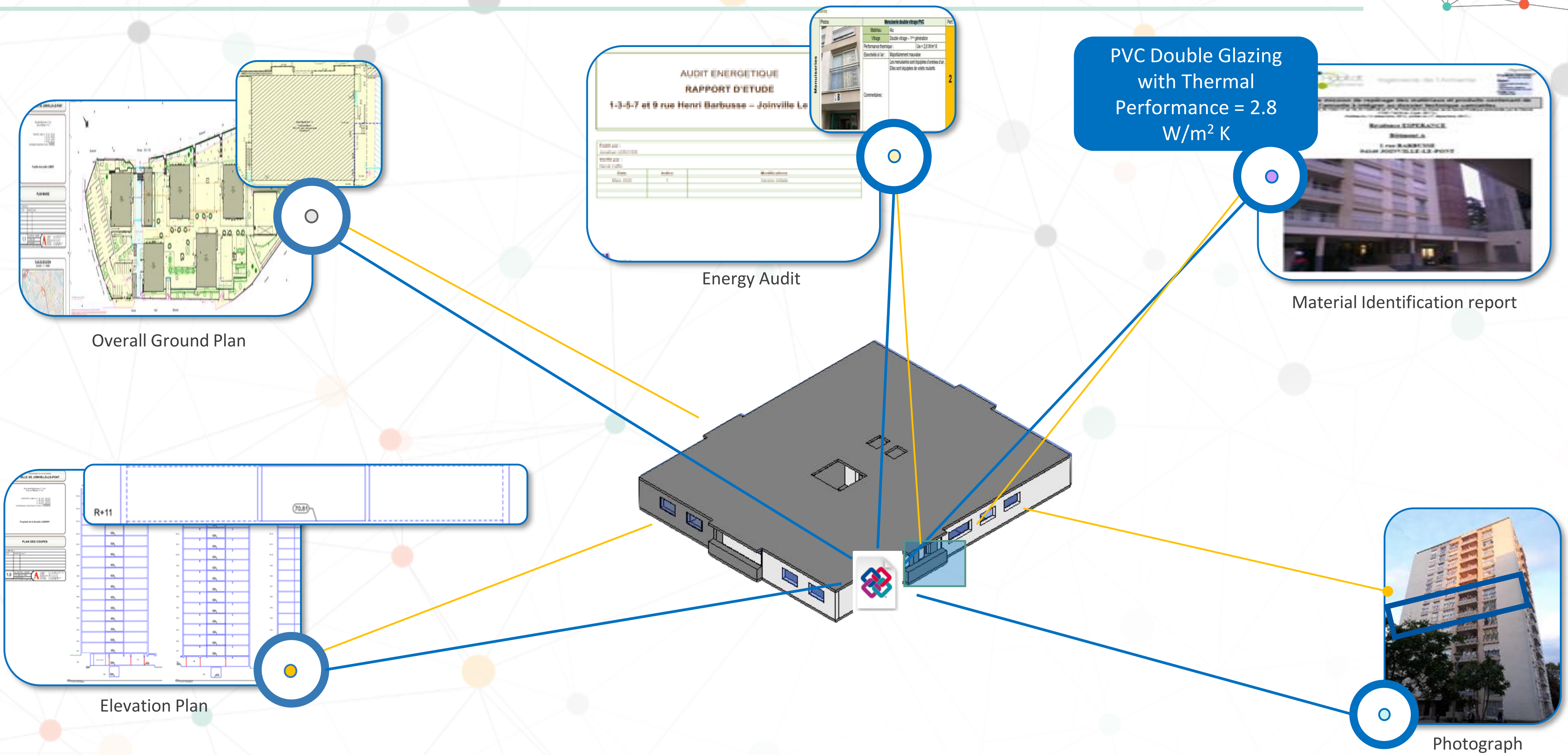
- Identify Use case
- Model Process Map
- Model Exchange Requirement

BCF

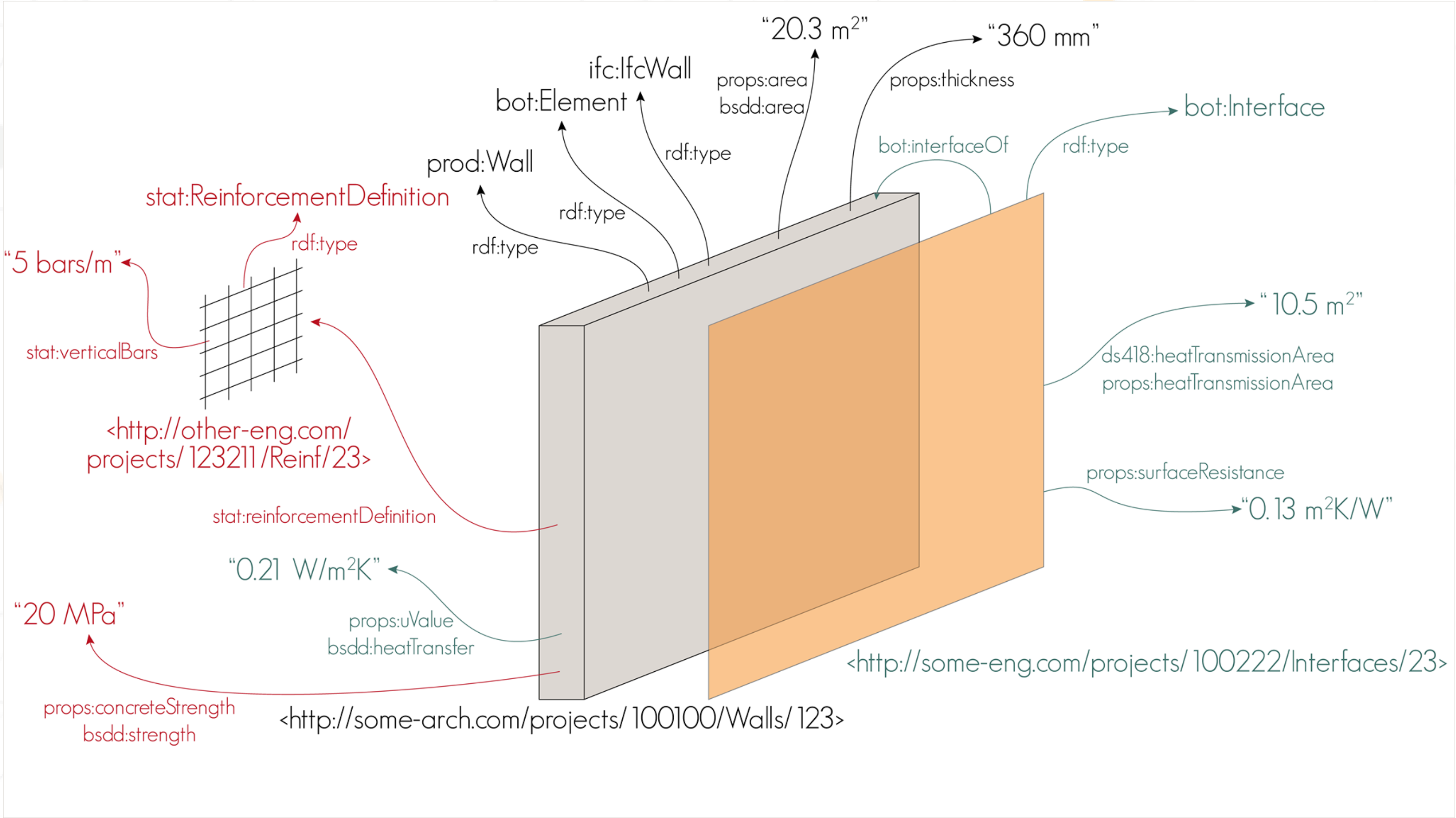


Quelle: Borrmann, König, Koch, Beetz 2015

Linked Data Introduction



Linked Data Introduction



- Mads Rassmusen Holten, PhD thesis 2019

- Describes the flow of activities for a particular business process.
- Enables understanding of the configuration of activities that make it work, the actors involved, the information required, consumed and produced.

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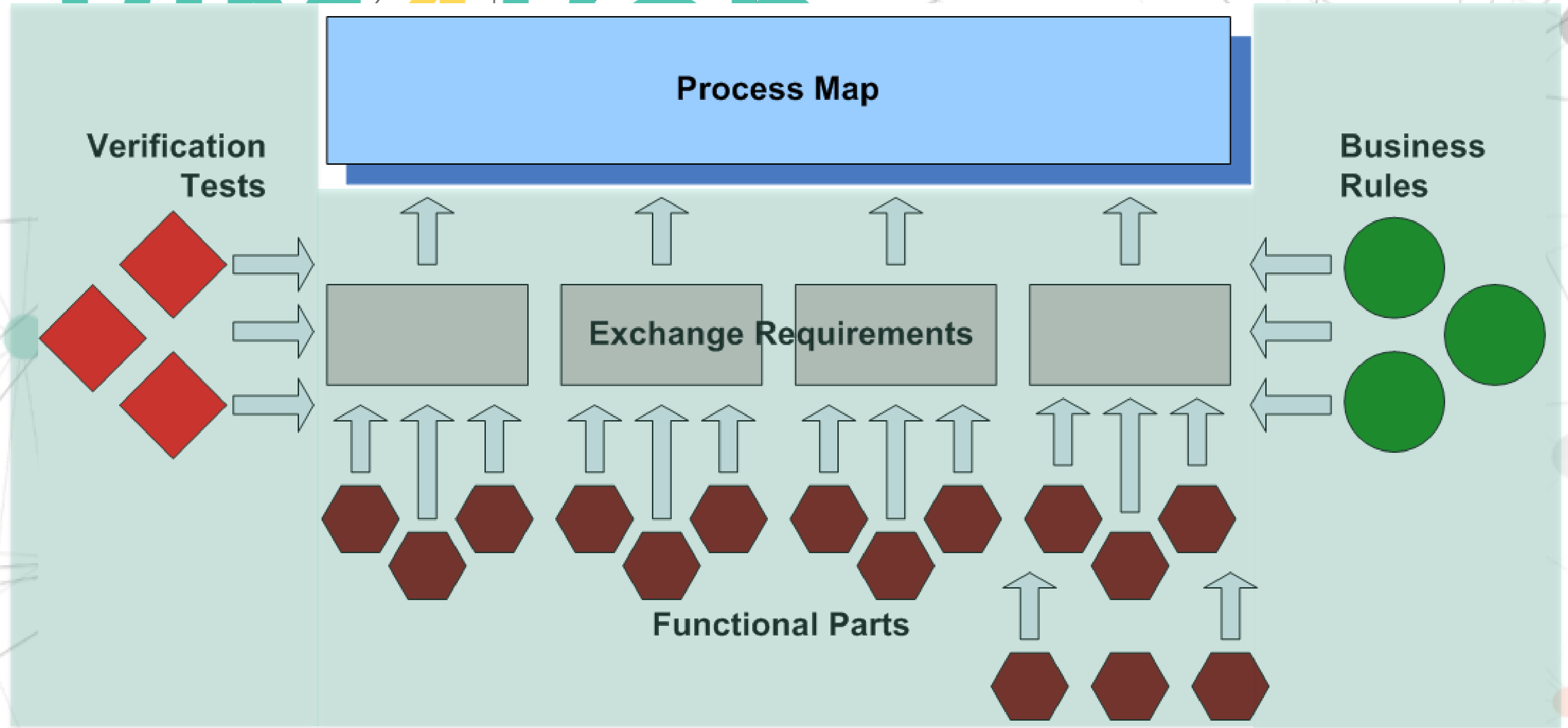

Source: Presentation Jeff Wix
http://iug.buildingsmart.com/idms/training-material/IDM_Generally_0.pptx/view

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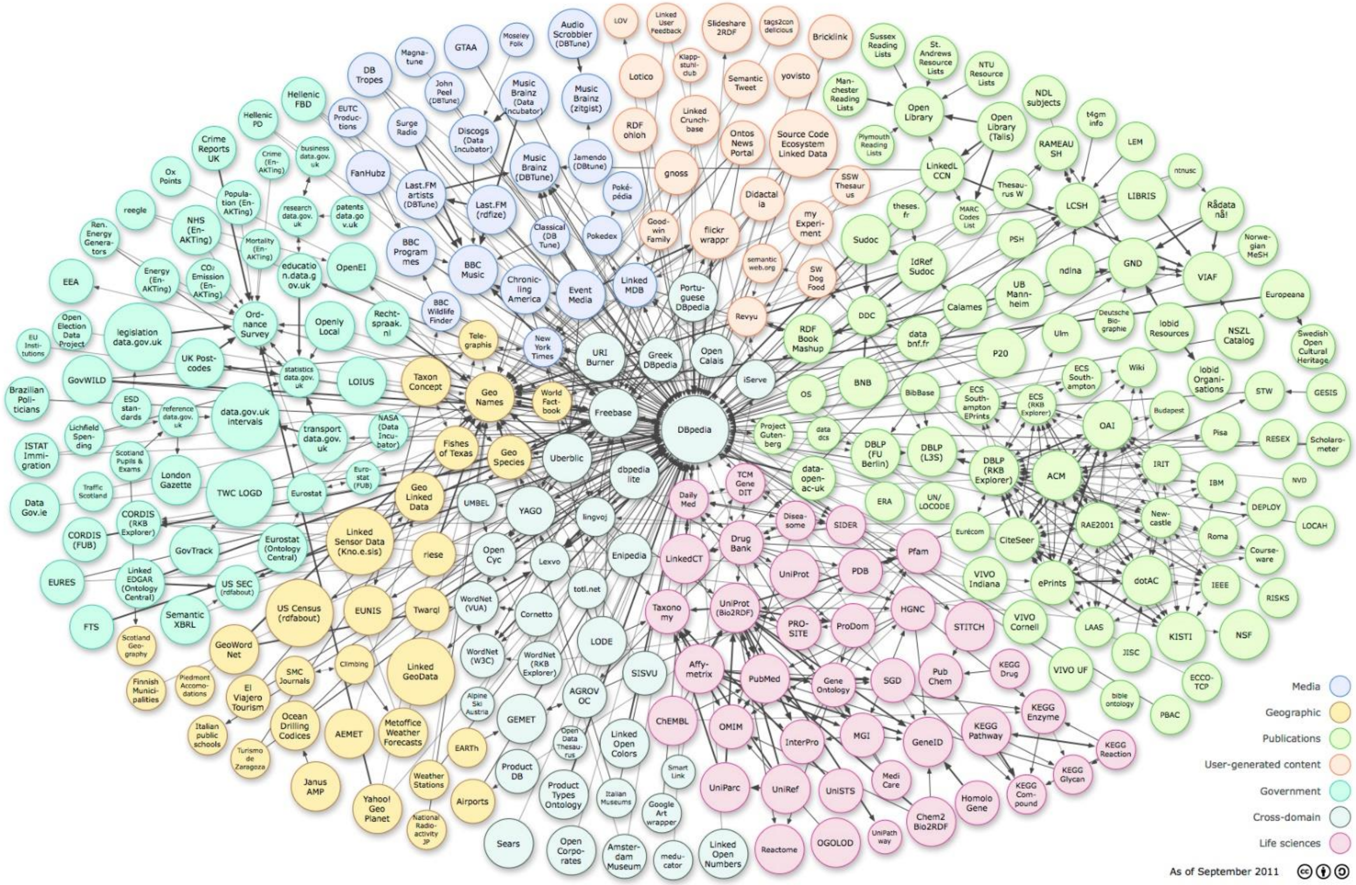
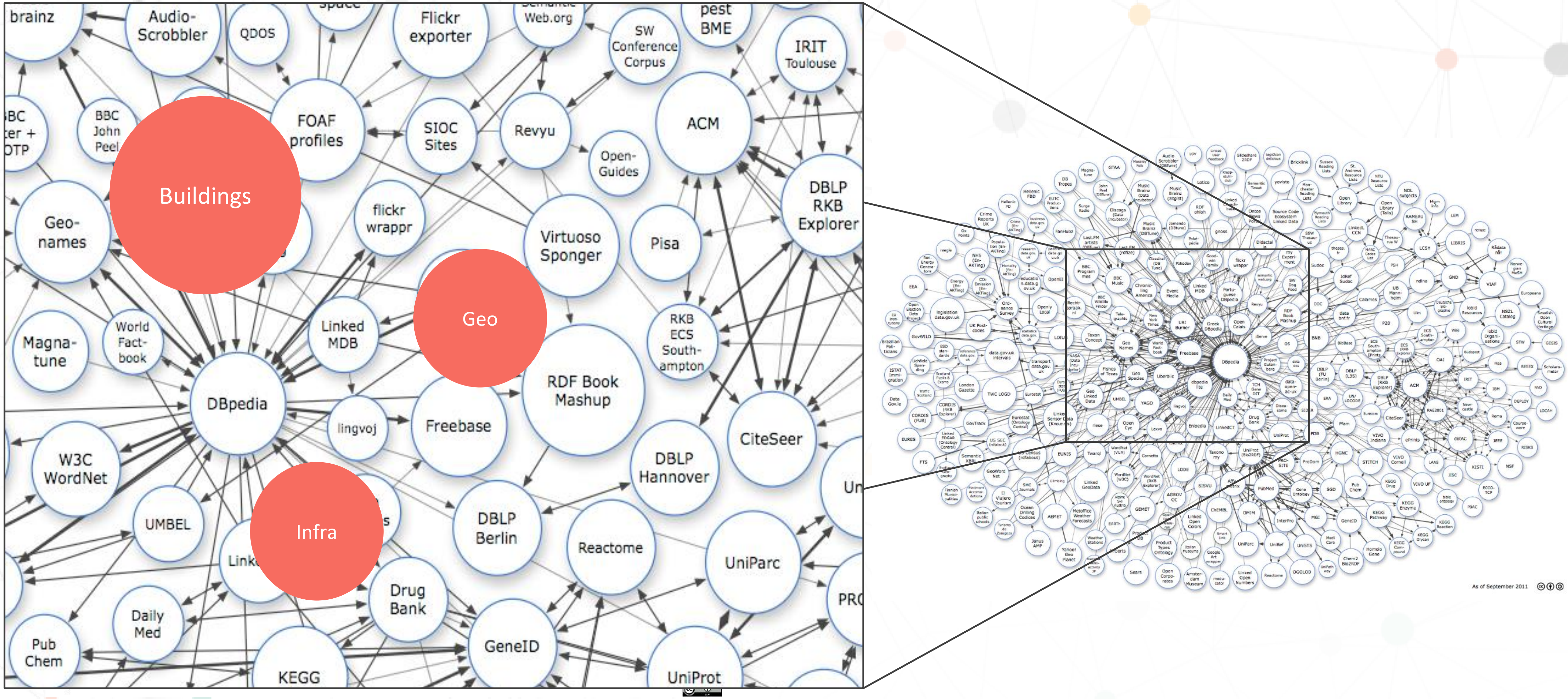
Linked Data Context

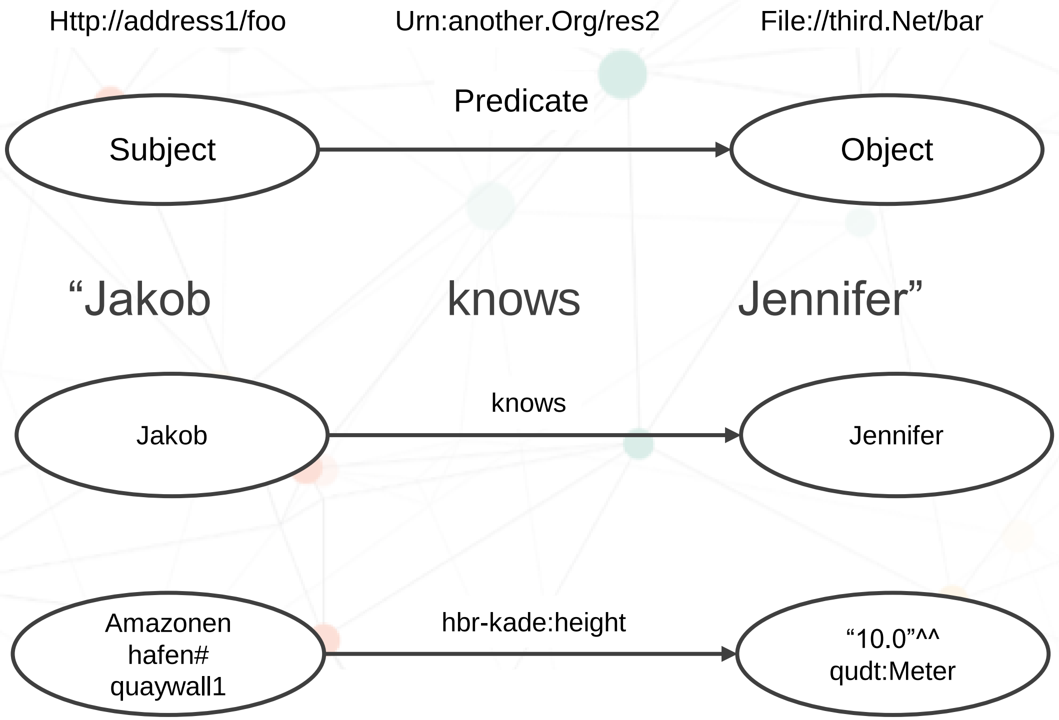


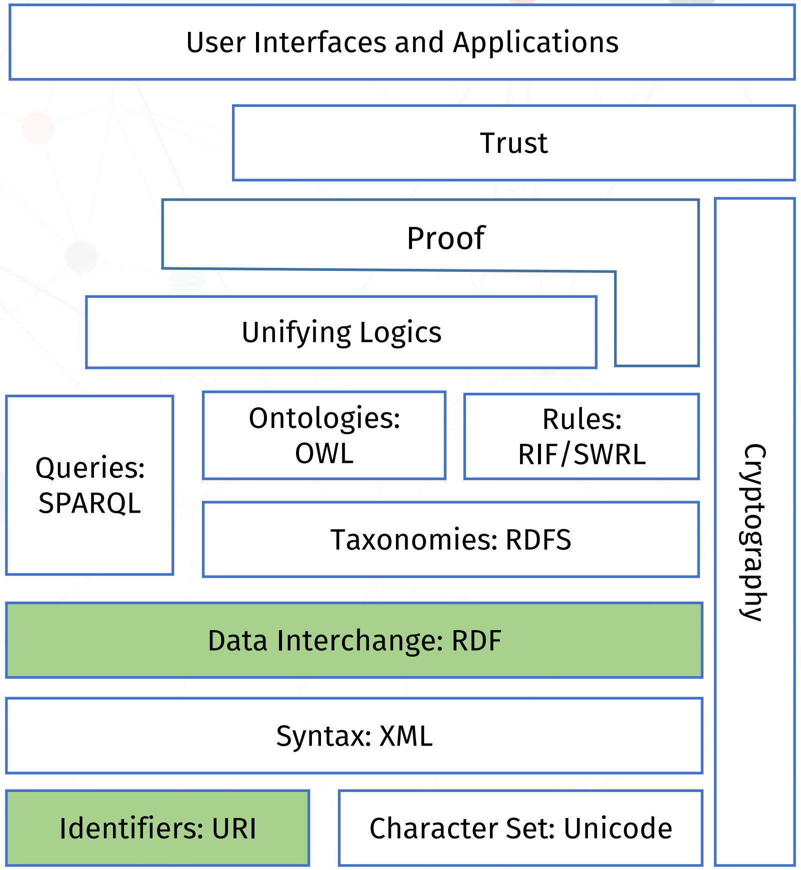
Building Data in Linked Data



Linked Data and the Semantic Web: Building blocks

- Resource Description Framework (RDF)

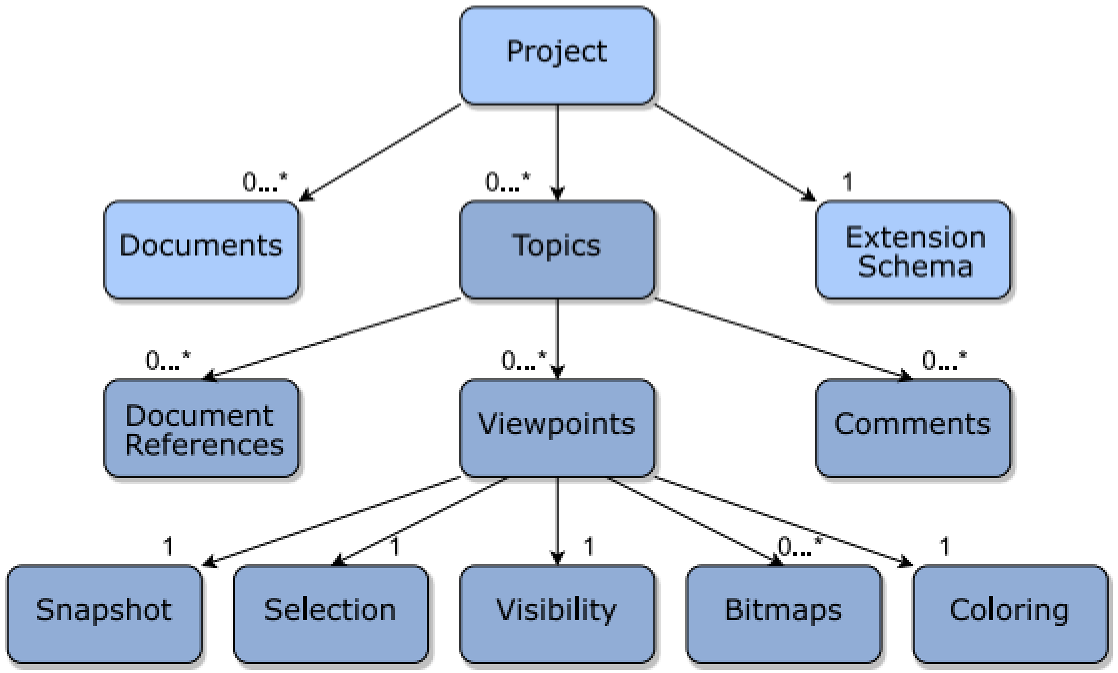




after [Obitko 2007]

bcfOWL

BCF



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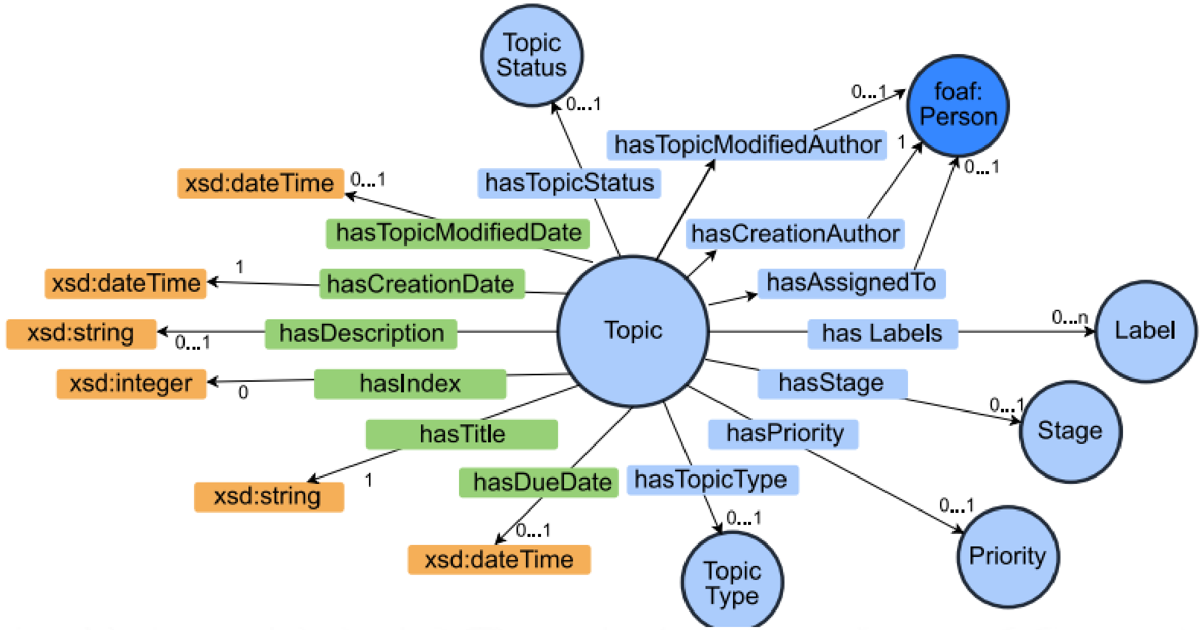
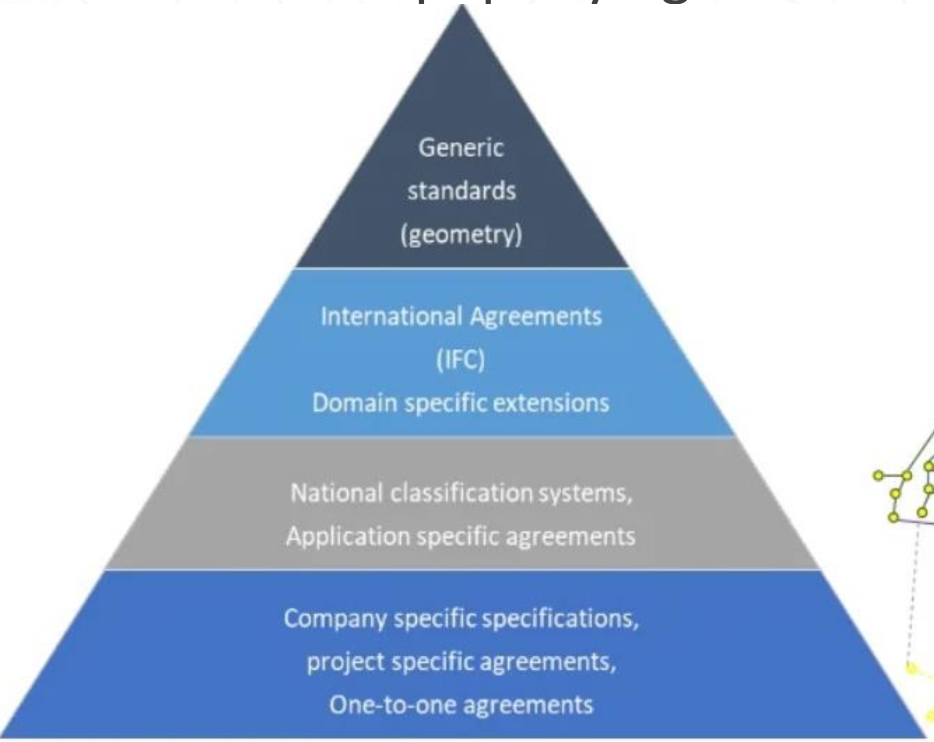
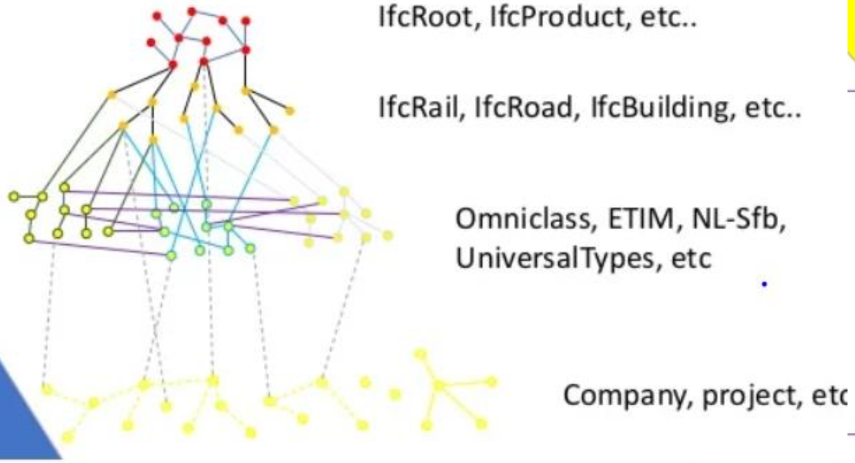
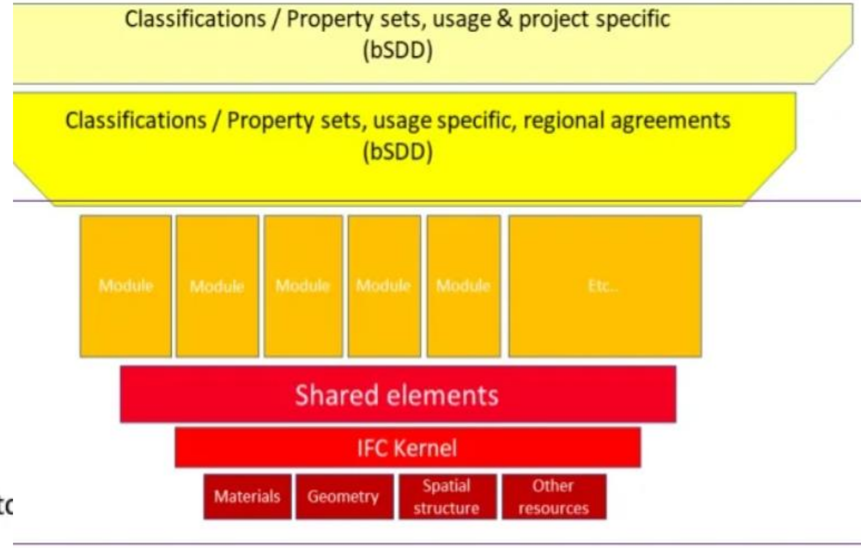


bSDD Ontology

- One Stop querying service

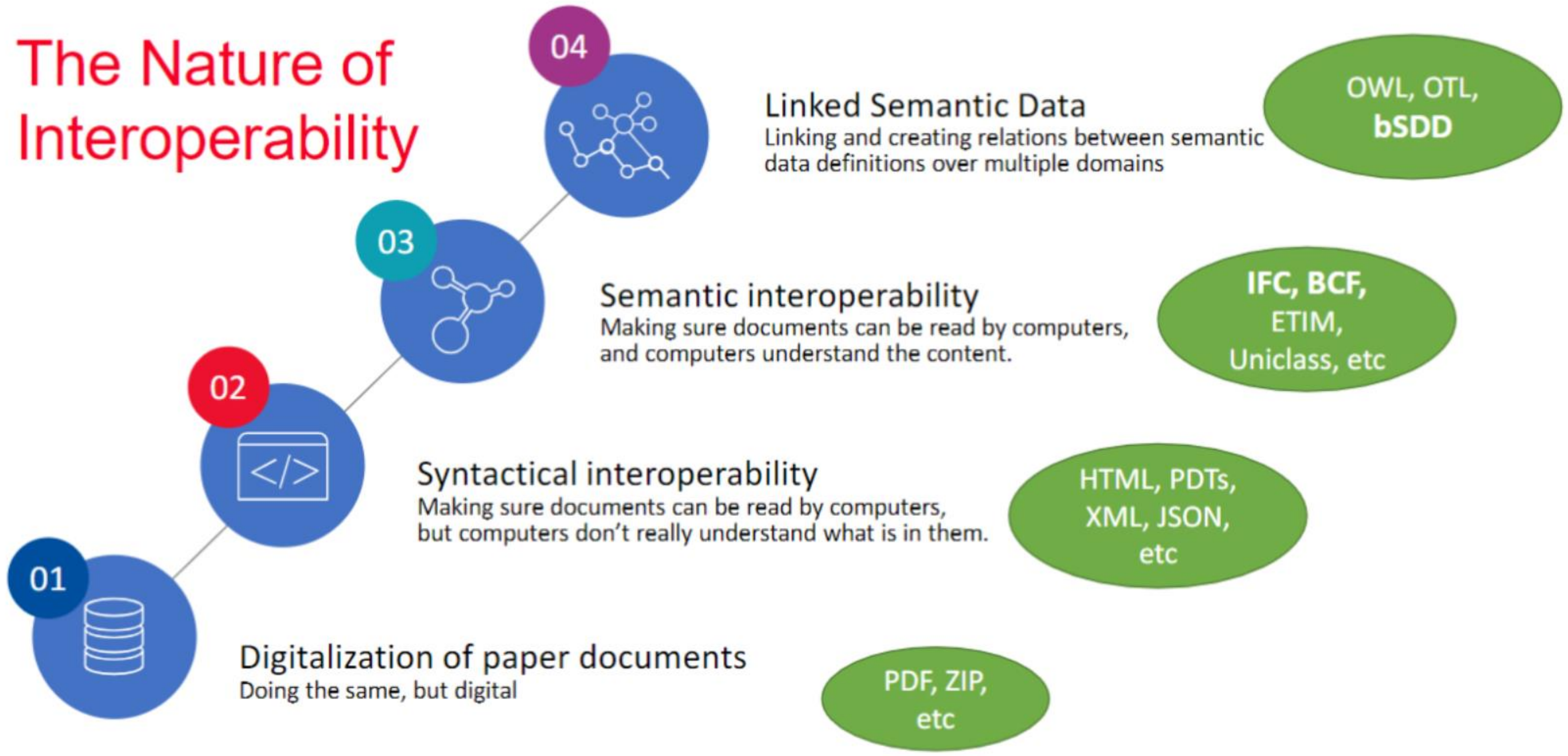




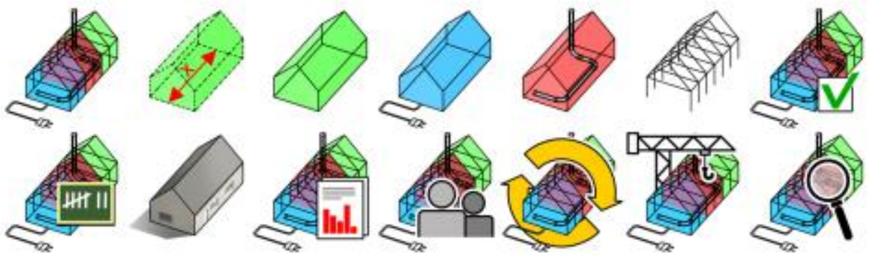


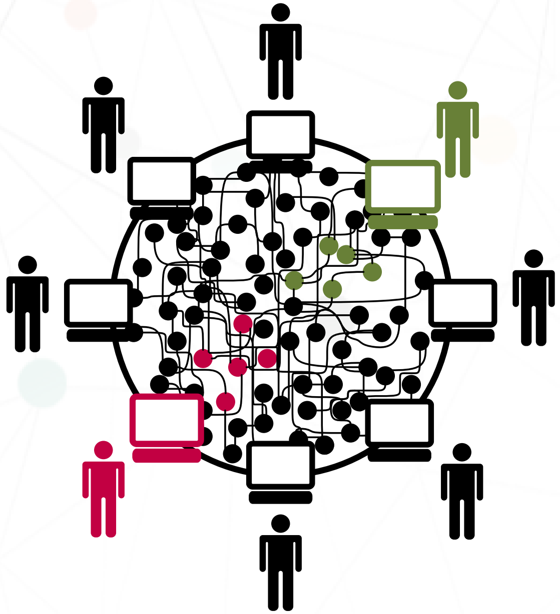
Specifying Requirements

Semantic Interoperability

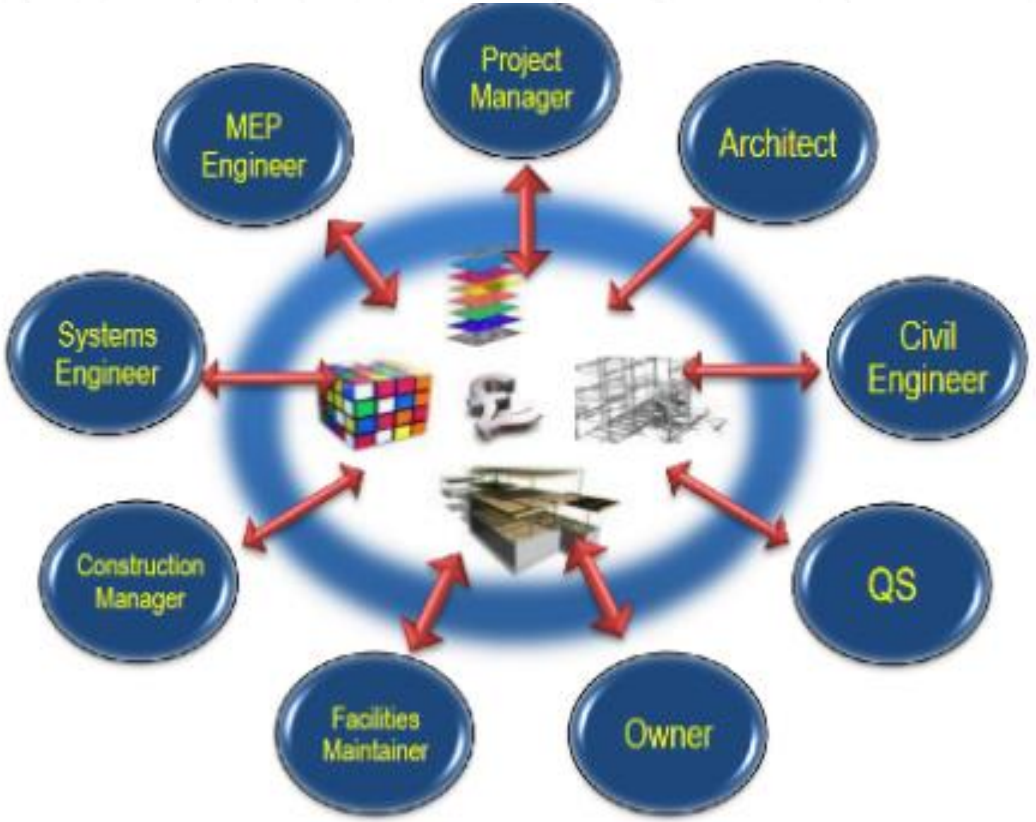


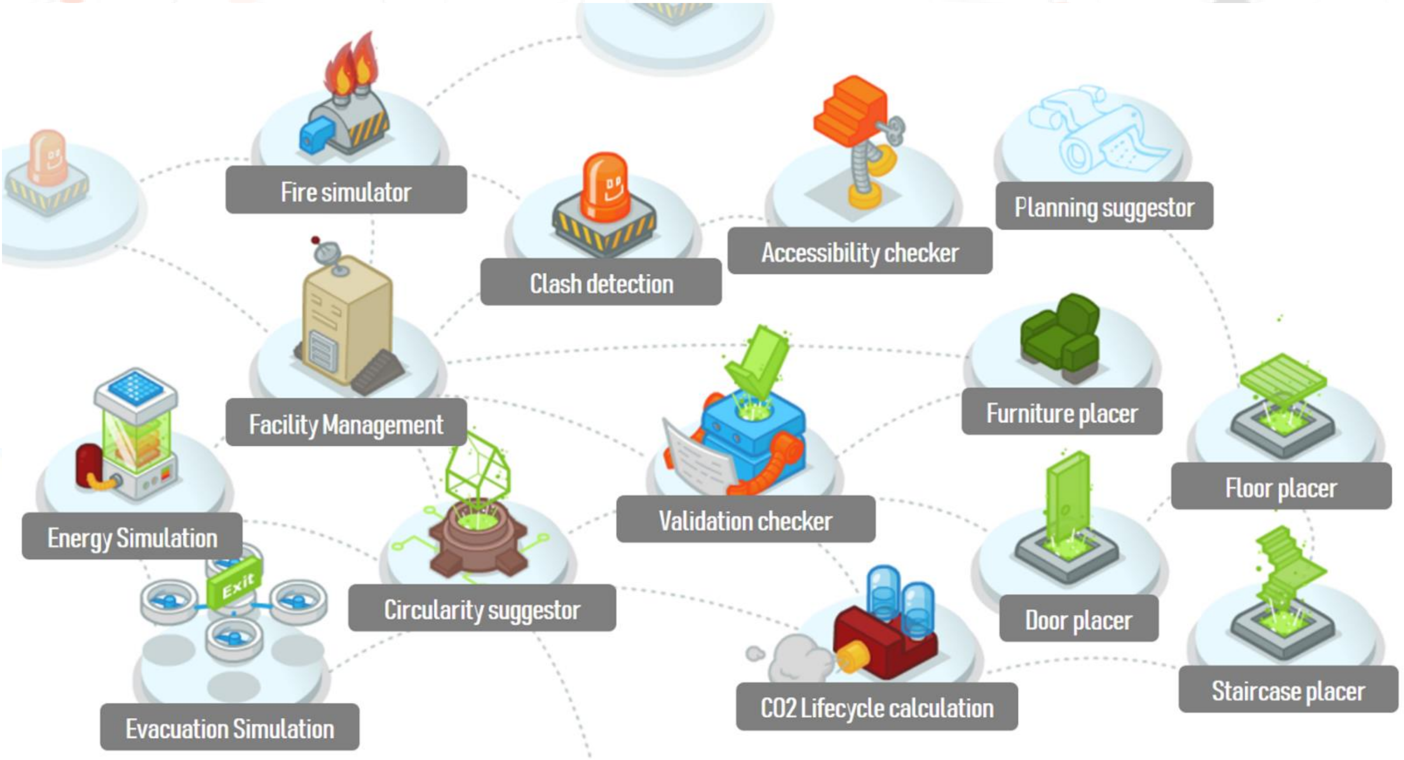
Future of BIM: Data federation





Future of BIM: Common Data Environments and BIM Bots





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Thank you for your attention

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http://bim4ren.eu/

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