



Victor Roig Segura
BIMETRIC

Source: <http://www.openmaint.org/>

Barcelona, 4th October 2018



Civil Engineer (Universitat Politècnica de Catalunya, 1985)

Professor at UPC since 2015 teaching BIM at EPSEB

CEO at BIMETRIC Lab, Consultancy firm on Lean Construction and BIM implementation.

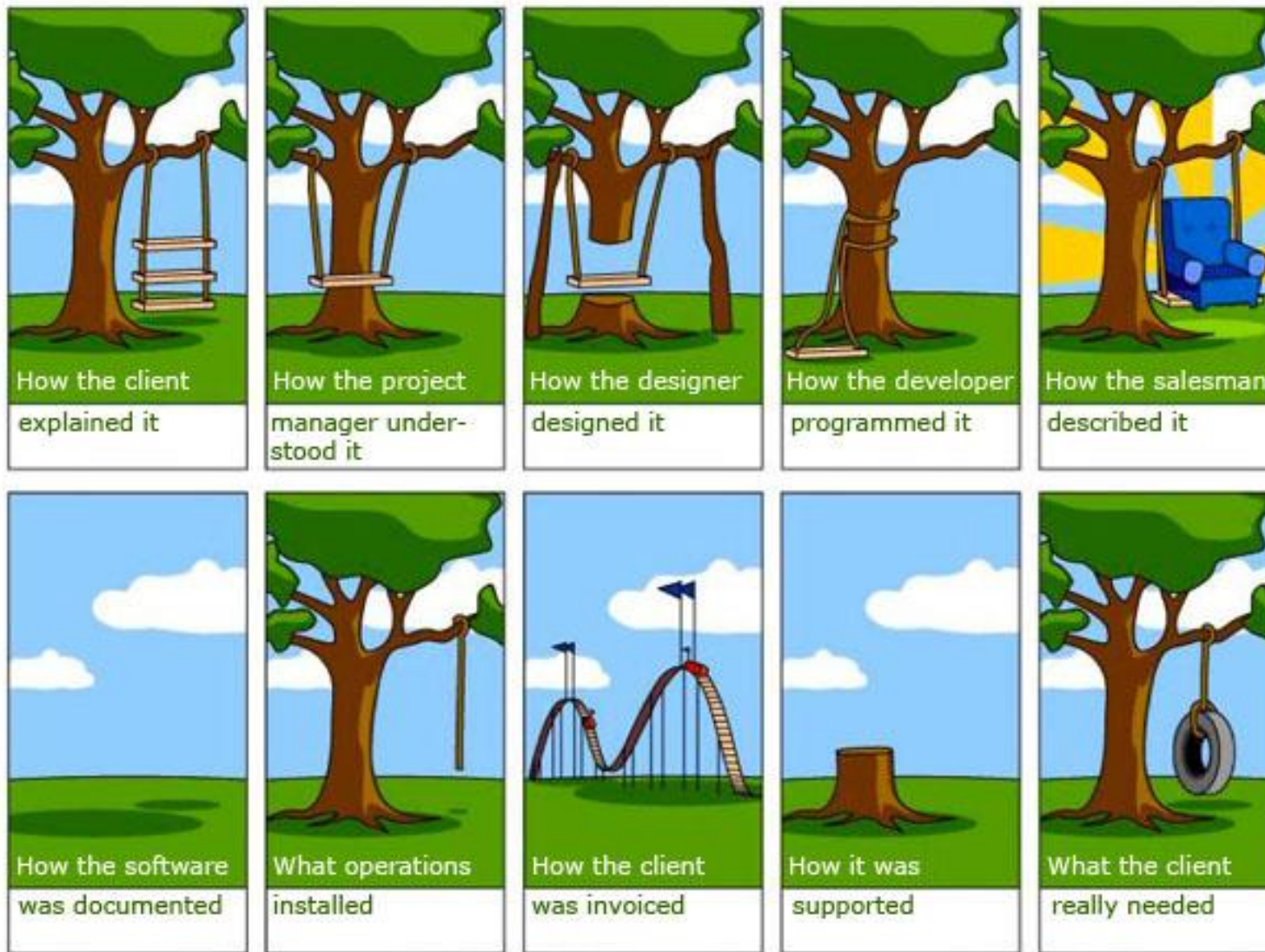
Member of Steering Committee of Comisió Construïm el Futur, lead by ITEC.

Member of Steering Committee of LIPS (Lean in Public Sector)

Member of Steering Committee of BIME Initiative, proposta de divulgació de BIM basada en la recerca

Main editor BIMDictionary (catalan and Spanish)

<http://bimexcellence.org/>



Lack of communication and shared understanding!!



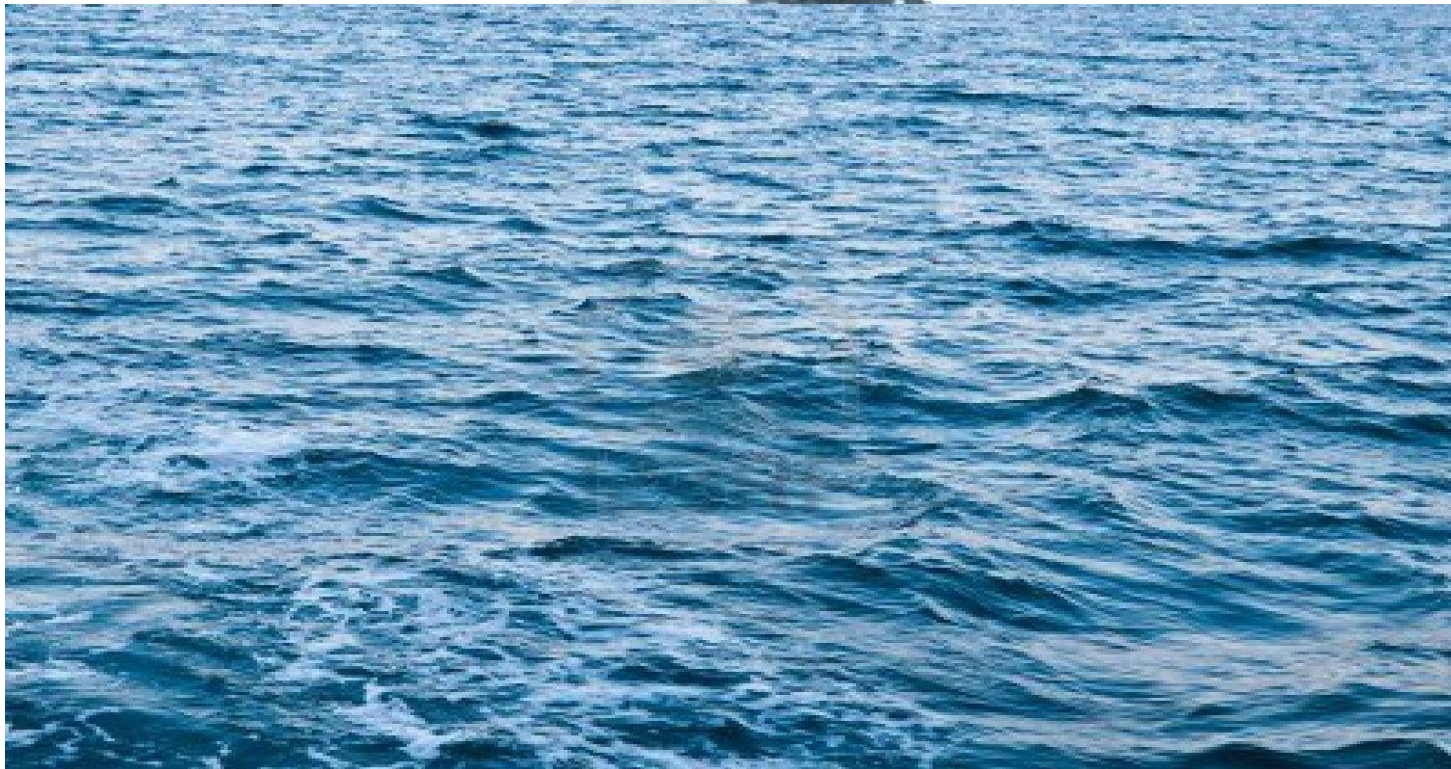
BIM is about Information through the facility life cycle

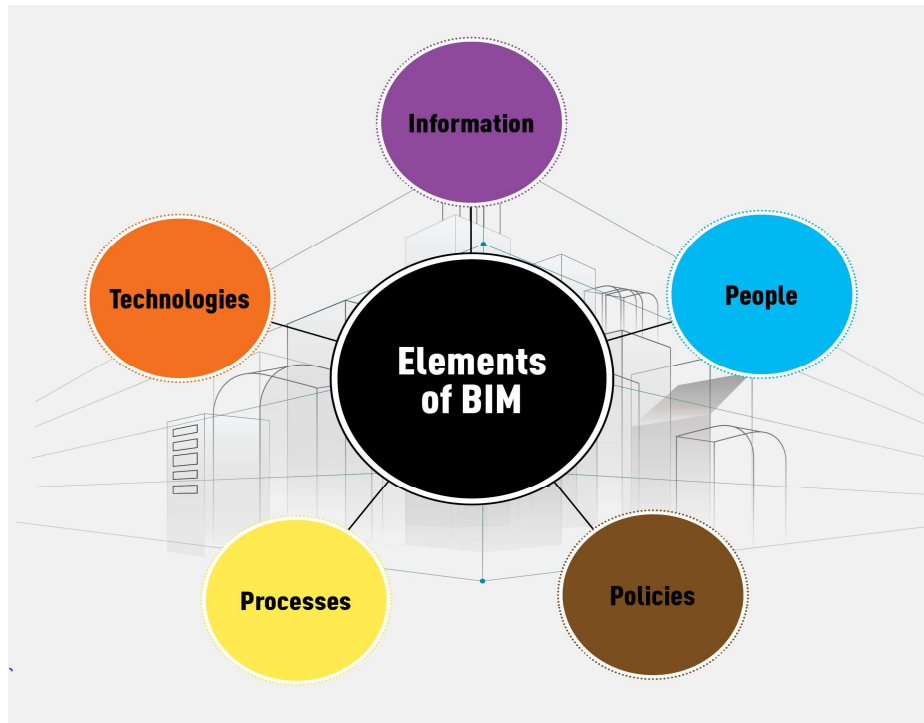
BIM is based on new technologies

WHAT IS SEEN

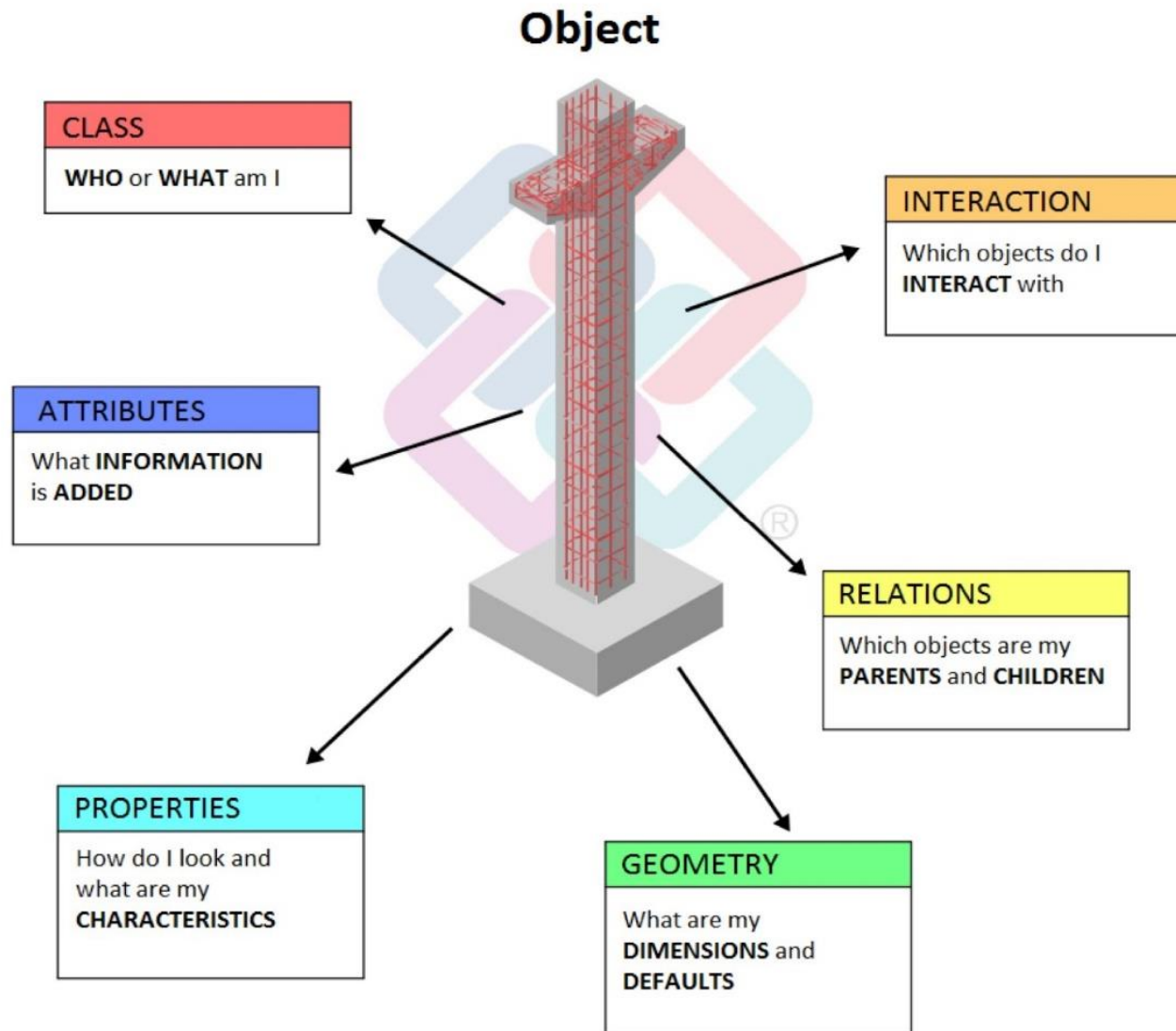
3D VISUALIZATIONS
COORDINATED DWGs
BASIC QUANTITIES

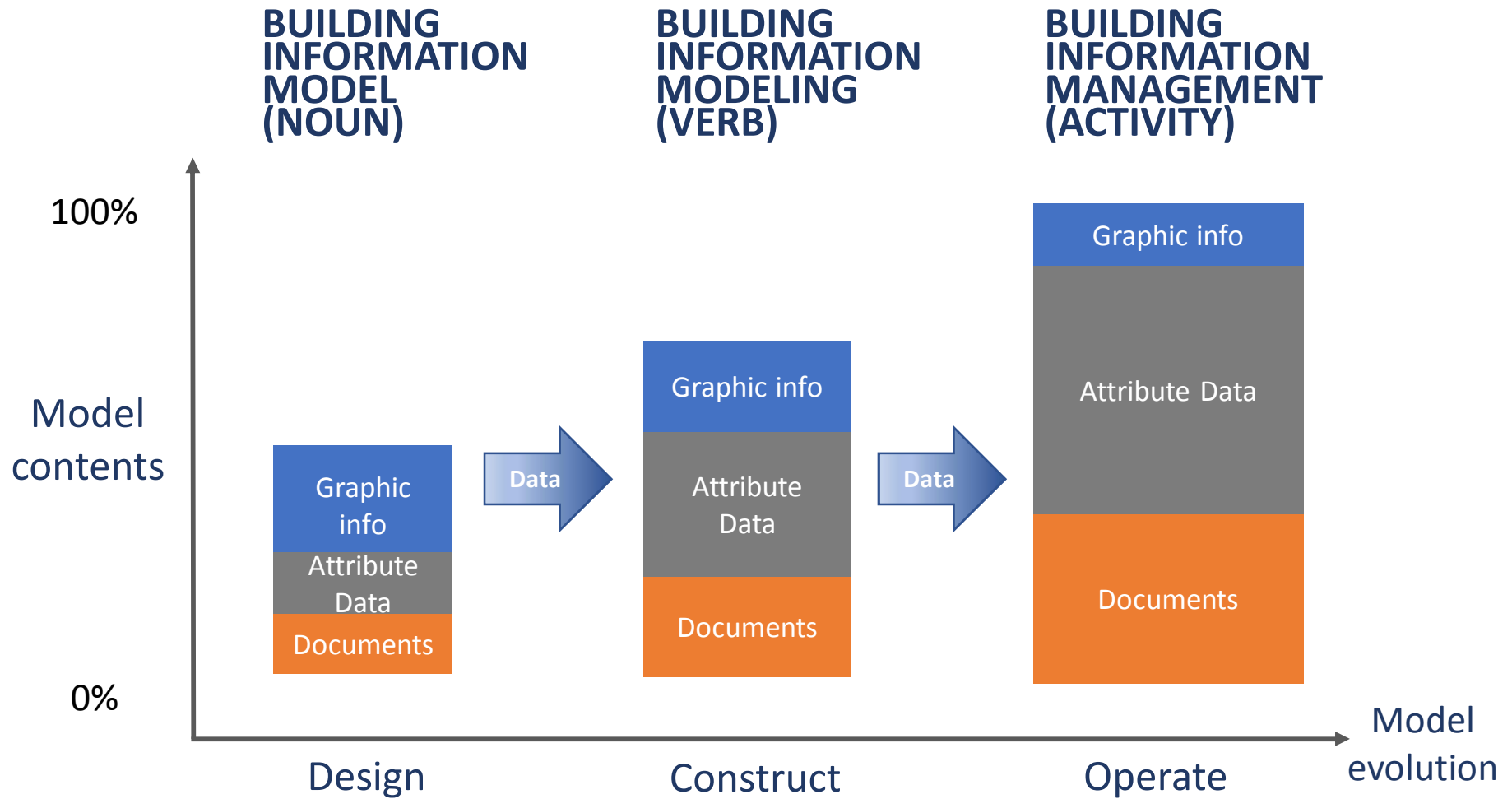
SOFTWARE
HARDWARE
TRAINING



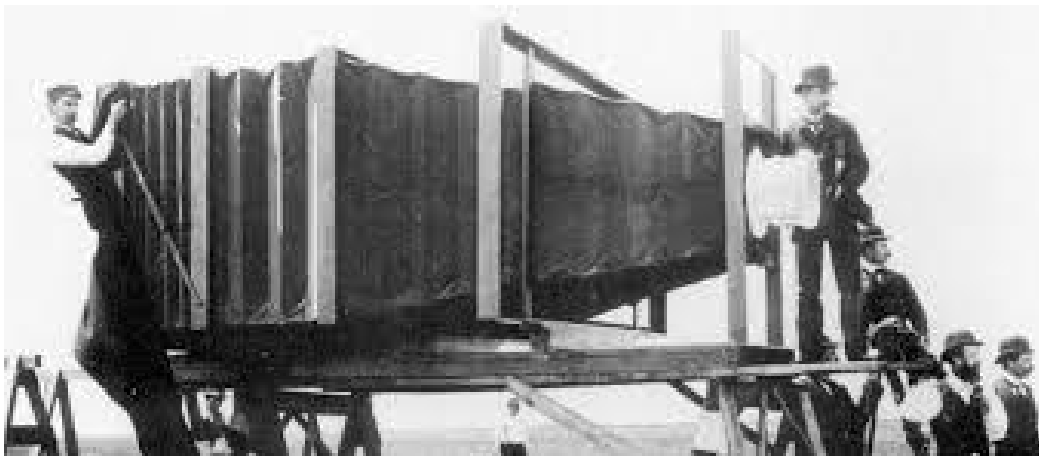


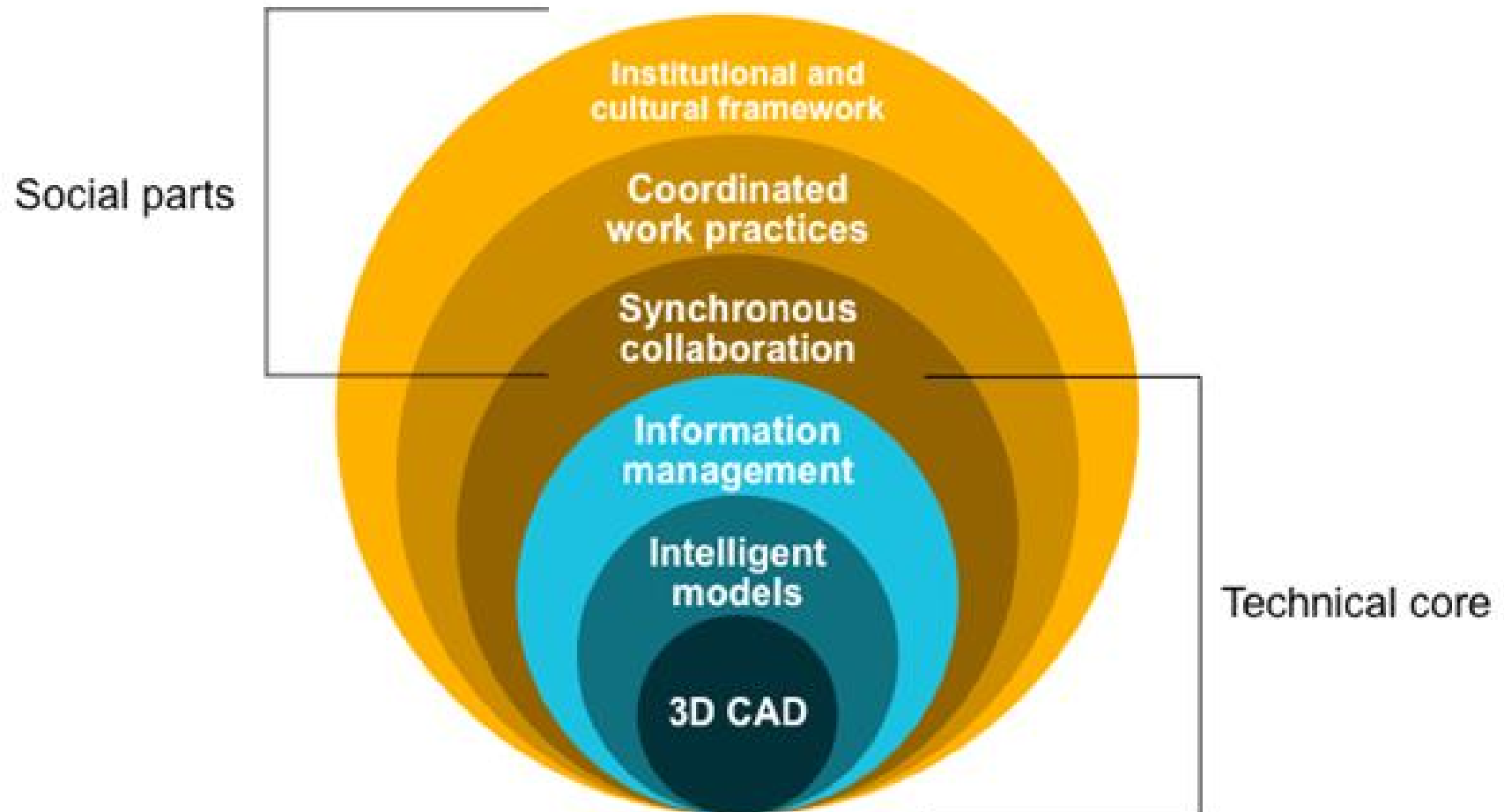
Construction Information Modeling (BIM) is a set of technologies, processes, and policies that allows multiple stakeholders to collaboratively design, build, and operate an installation in a virtual space.





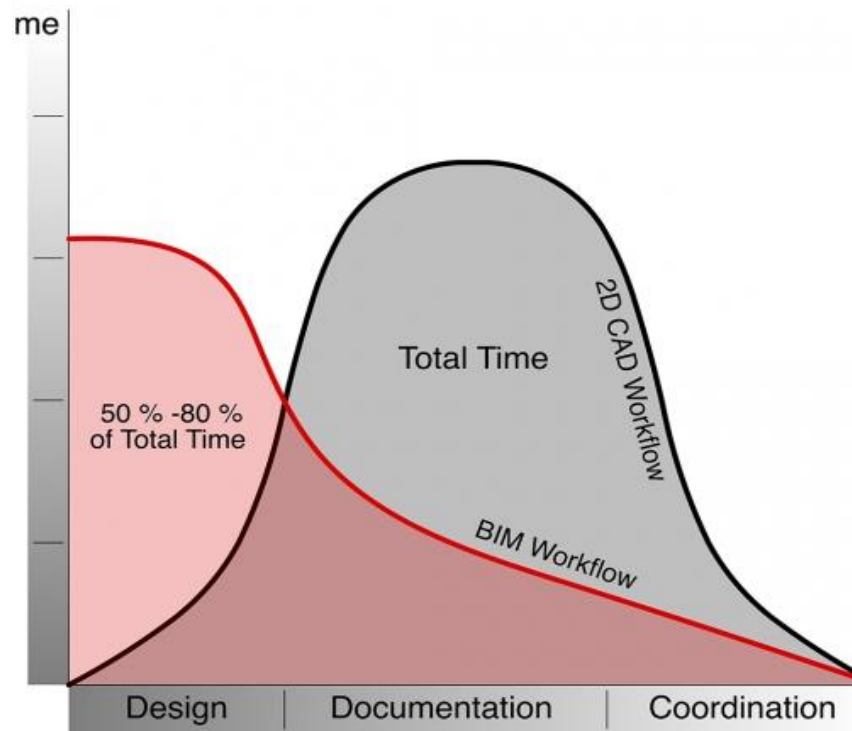
Repercussion of change at all levels of the business





BIM viewed as a sociotechnical system with a technological base and layers of social components

BIM requires a new process changing the borders



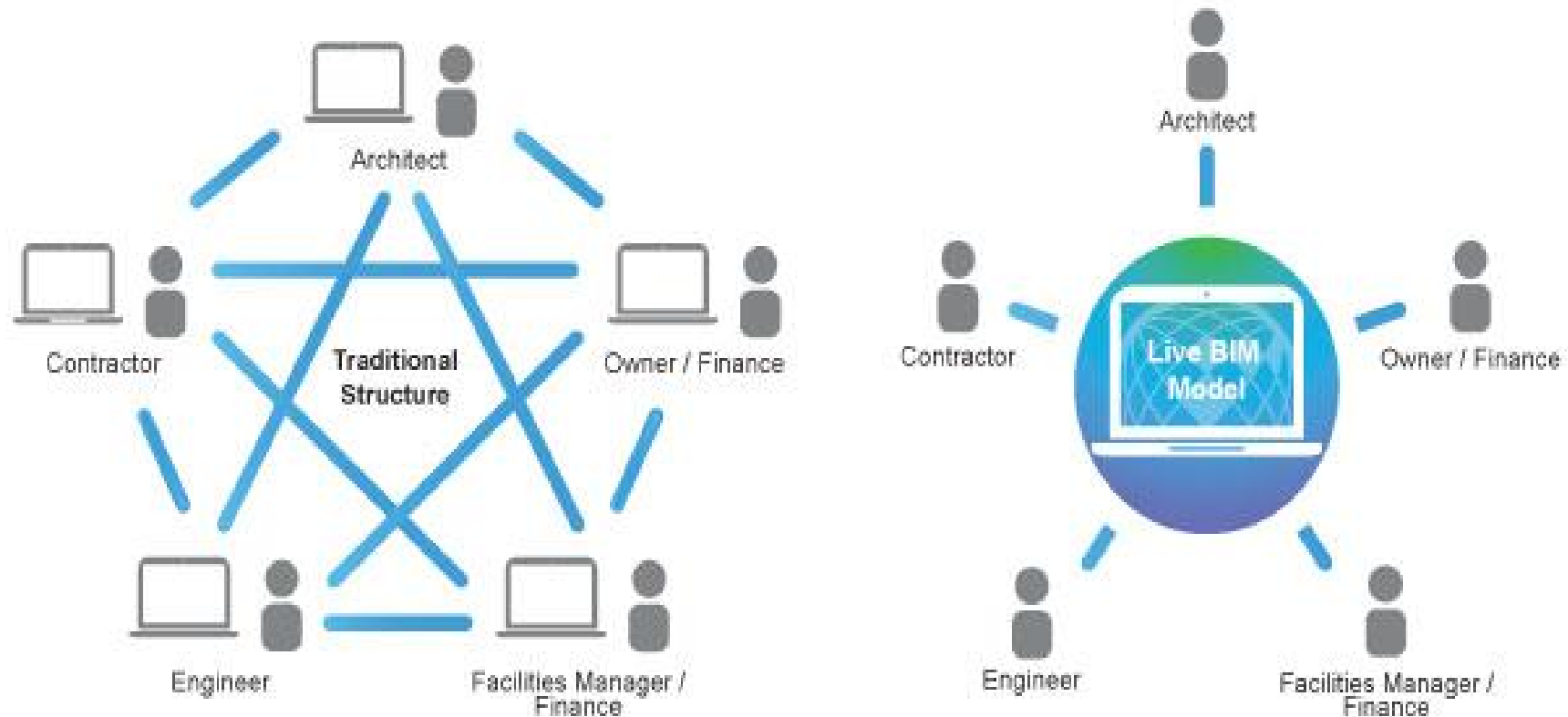
- Relative length of time of design phases



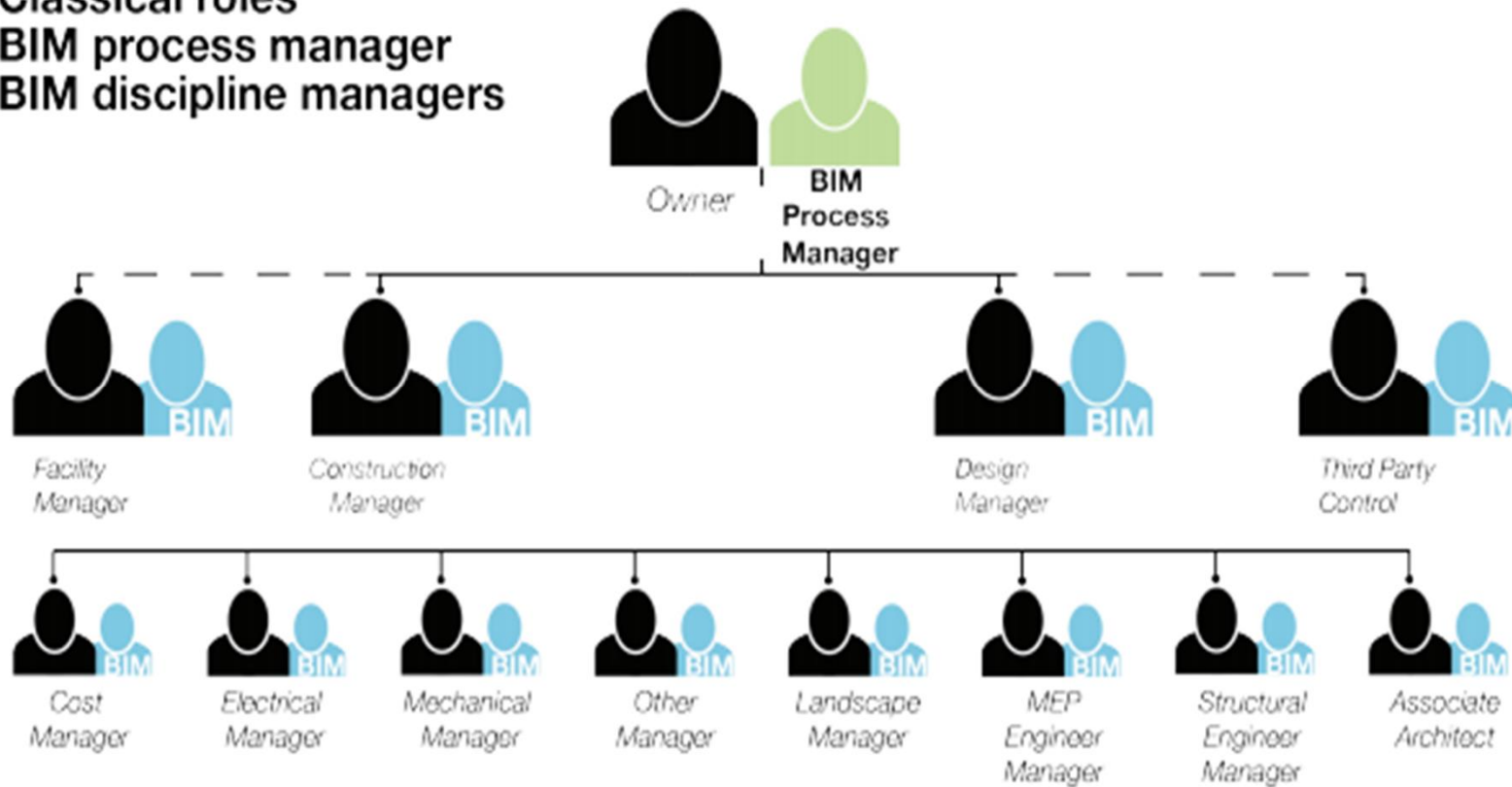
- Relative length of design phases in BIM Project



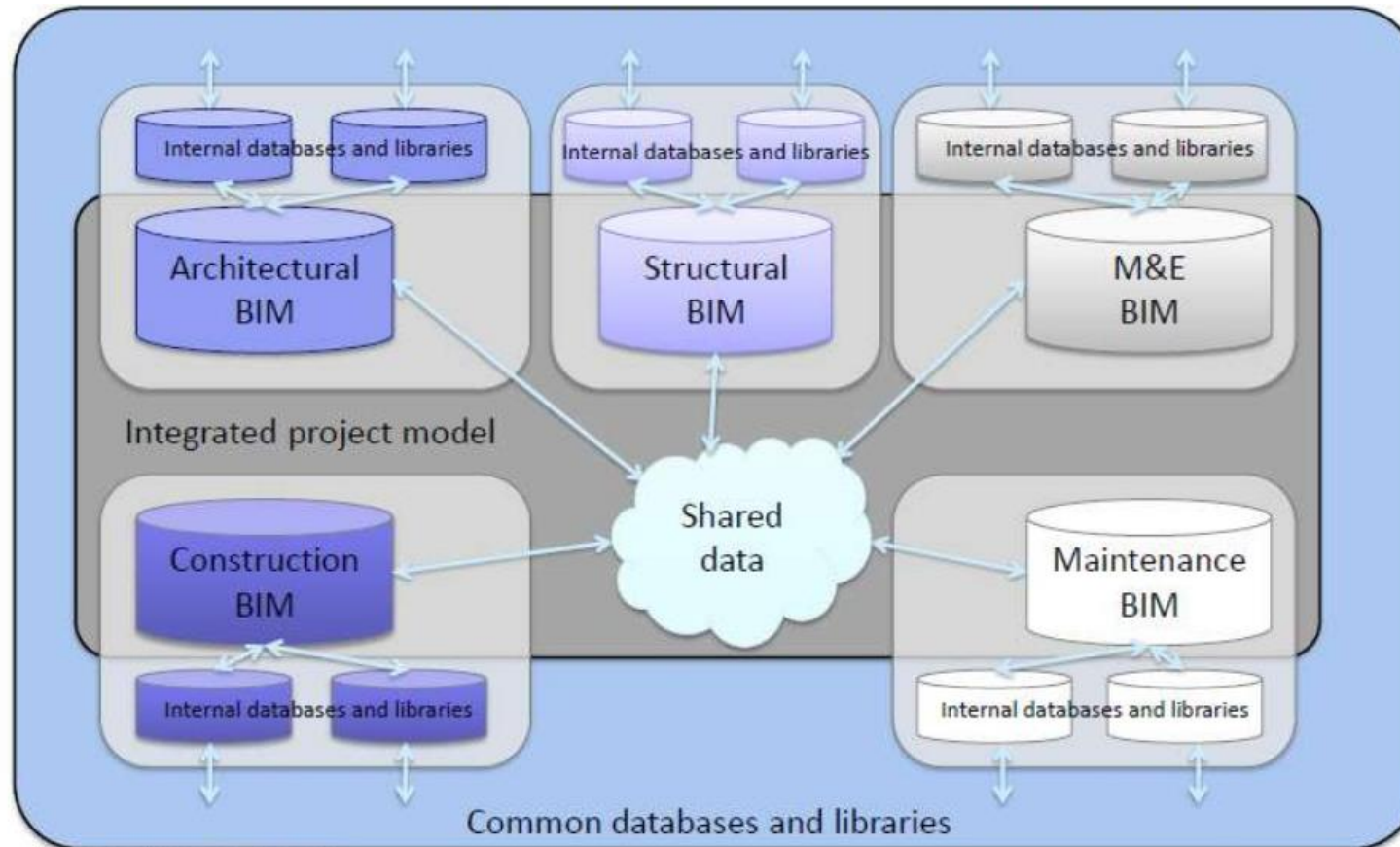
BIM establish new relations between stakeholders



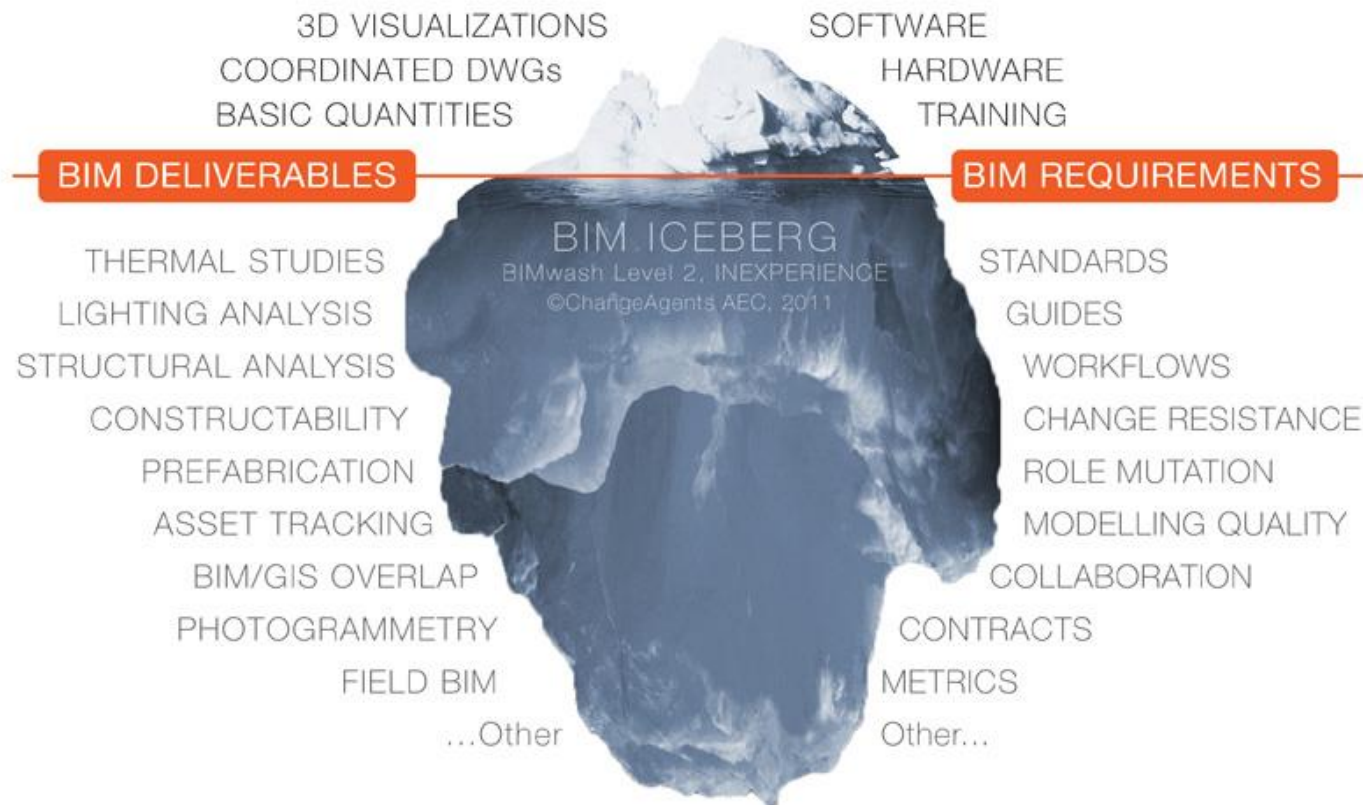
- Classical roles
- BIM process manager
- BIM discipline managers



New profiles or/and new capacities

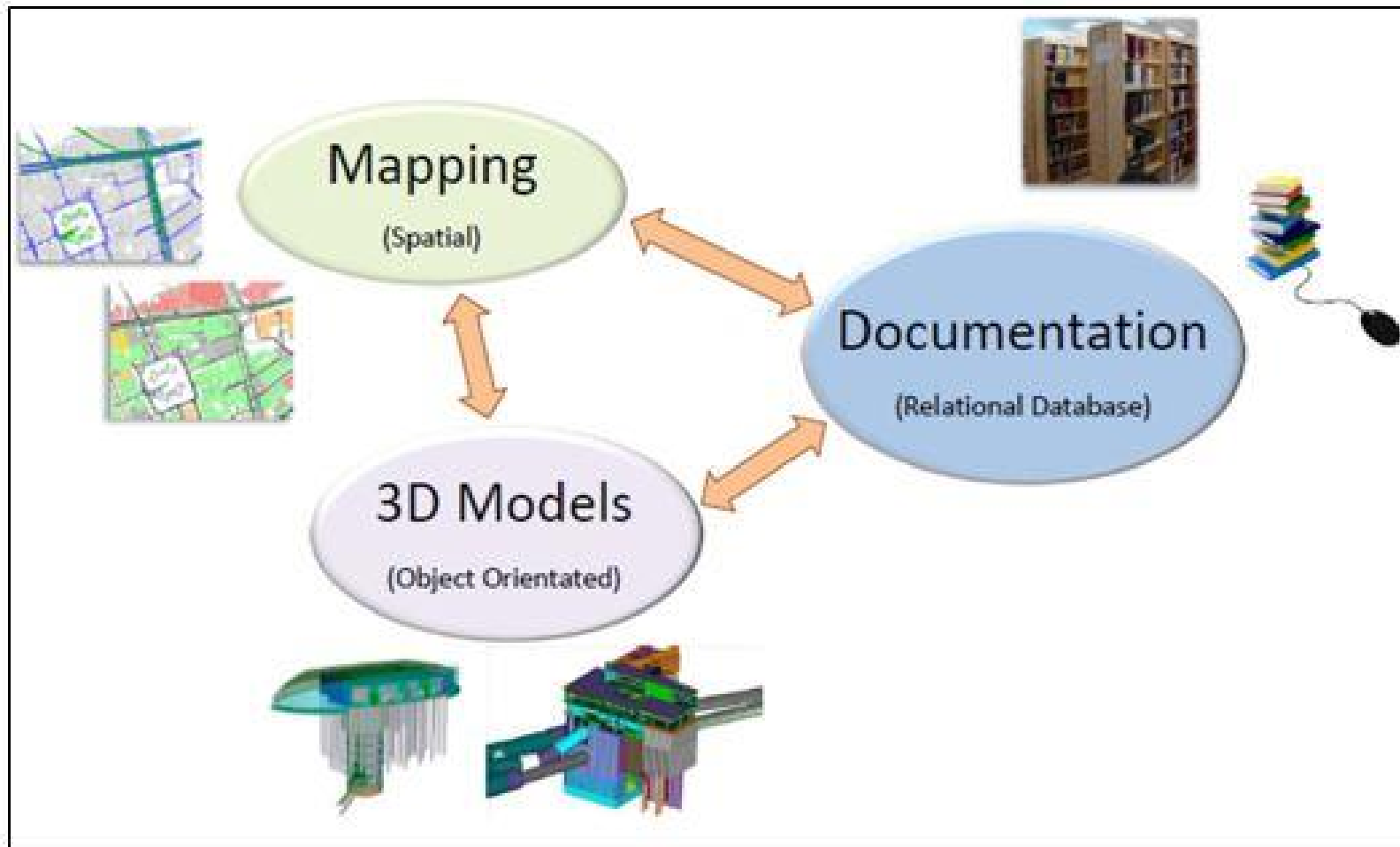


WHAT IS SEEN



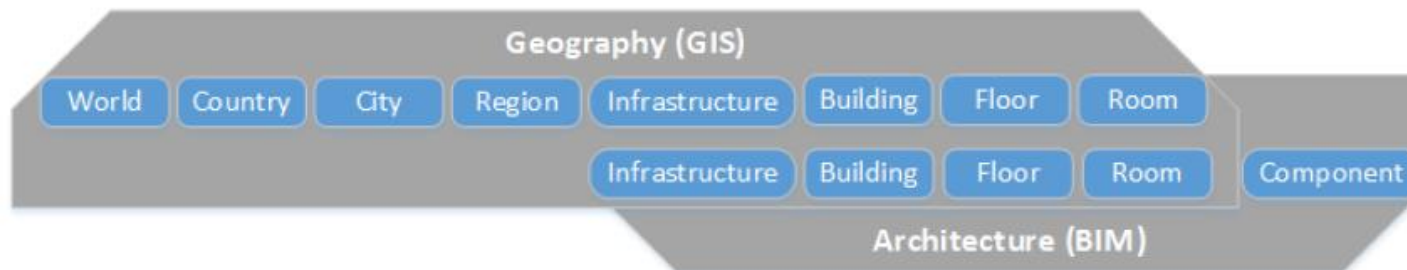
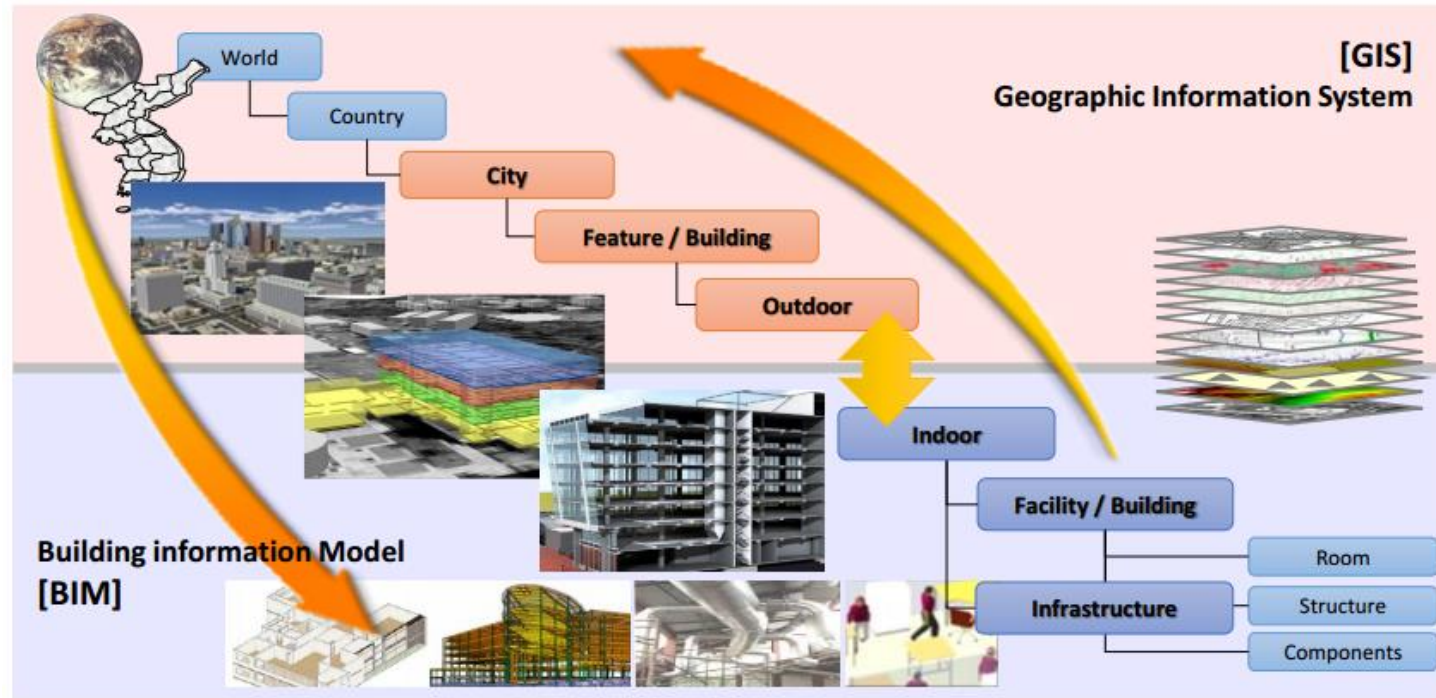
WHAT IS HIDDEN

Coordination between different sources of information

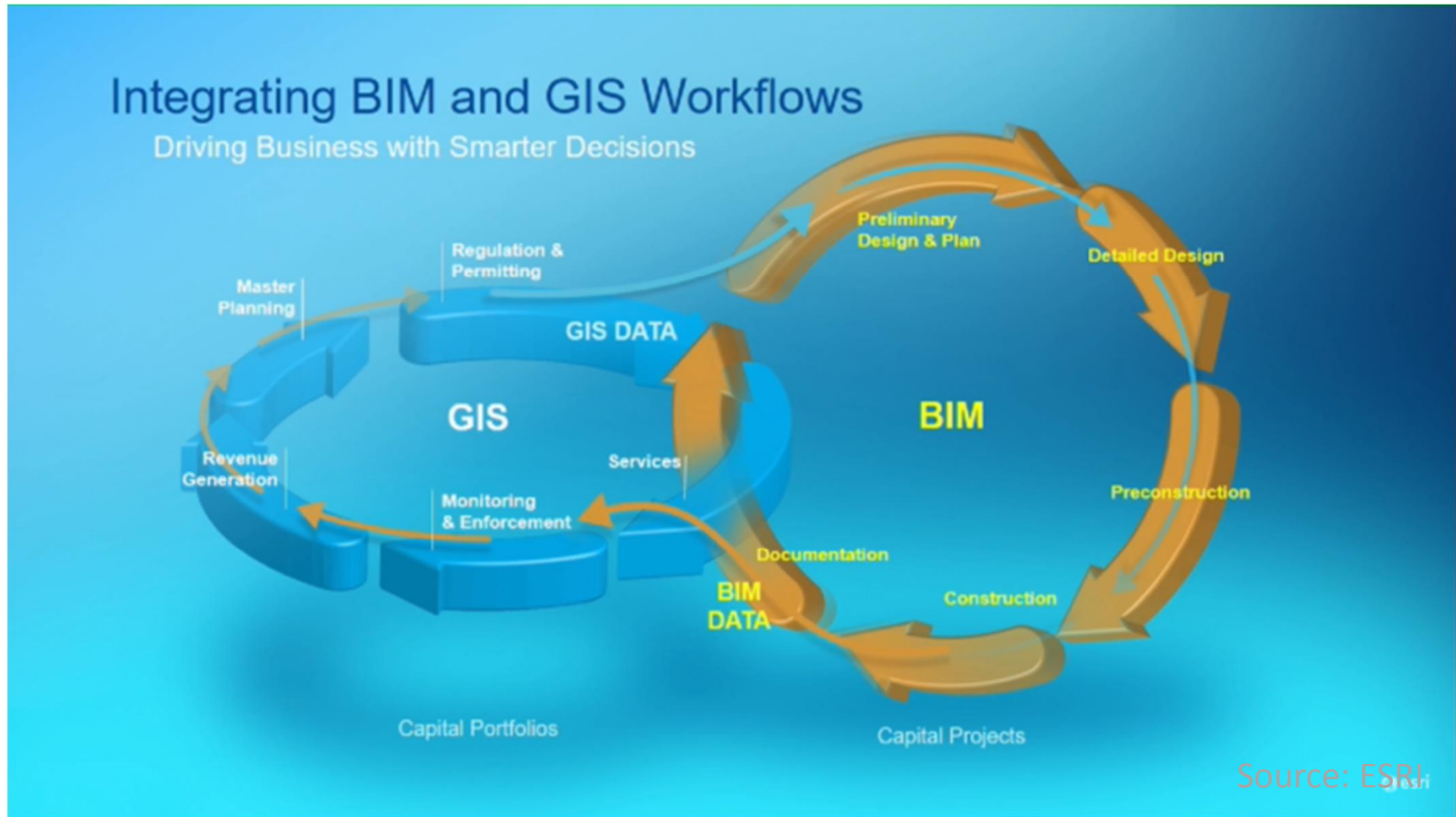


Source: Crossrail

Overlap between the fields of GIS and BIM



BIM AND GIS: BETTER TOGETHER





THANK YOU!

**BIM AND GIS
better together**

Victor Roig Segura
BIMETRIC
vroigs@bimetriclab.com

BIM and GIS interpret 3D modeling from two different perspectives, and they have matured in different ways. Currently, the development of BIM and GIS already has some overlapping areas. Meanwhile, the gaps between the two spaces are becoming gradually smaller. Consequentially, limitations and potentials exist at the same time for the future integration of BIM and GIS. GIS can be enriched with its true 3D by being integrated with BIM. The geometric and semantic information transferred from building modeling to a geospatial context will positively influence a series of current activities, such as site selection, safety management and environment impact assessment.

Therefore, openness and collaboration are the keys of the success of BIM and GIS integration. This not only applies to new standard or ontology development, but also indicates the attitudes of people from different domains. Previous studies show that demand driven, frequent communication and government initiatives are the three key paths to achieve open and collaborative integration work between BIM and GIS. For example, the recent emerging smart city study requires people from both domains to collaboratively work together to develop seamless ICT infrastructure. This paper also presented a wide range of applications via integration of BIM and GIS, and indicates the enormous potential of it.