



Building Information Modeling:
Innovazione e nuove frontiere per
infrastrutture e città sostenibili

28 Giugno 2019 – Polo Universitario di Viale
Pindaro Pescara

Procedure HBIM applicate al costruito storico: temi e problemi

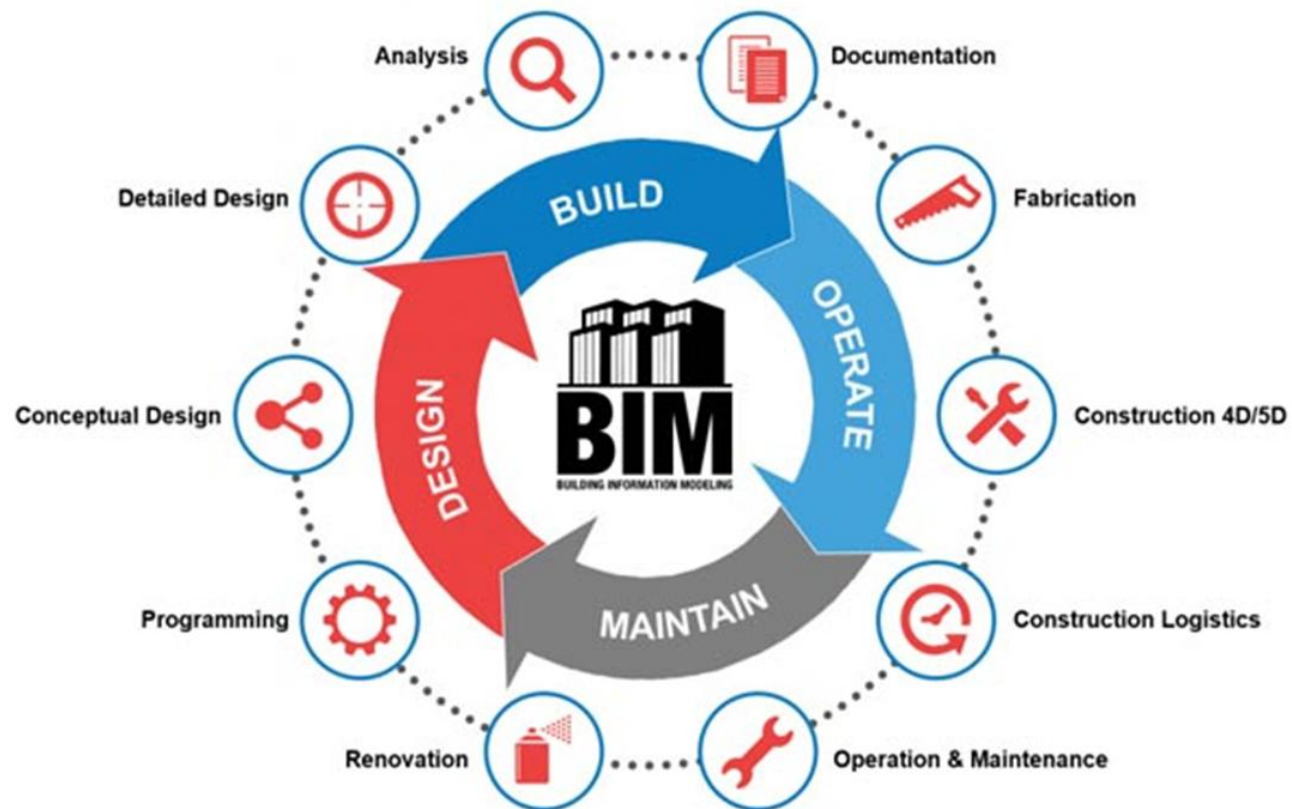
Stefano Brusaporci, Professore DICEAA Università degli Studi dell'Aquila



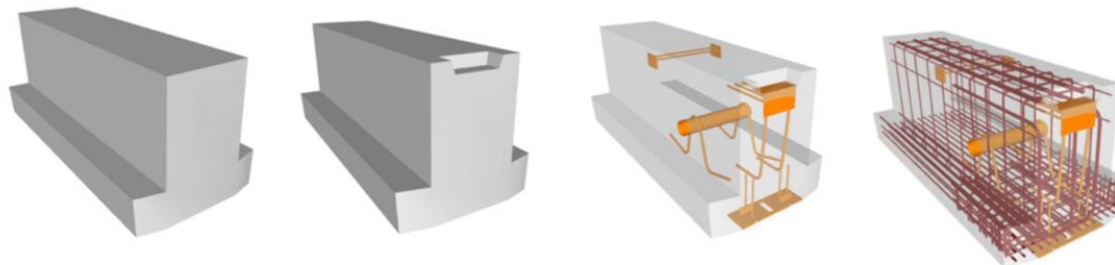
Co-funded by the Horizon 2020 programme
of the European Union



Procedura BIM



Procedura BIM



BIM / HBIM

1. 3D Modelling

2. DataBase

LoG

+

LoI

=

LoD

BIM

Procedure
dedicate a

edifici

NUOVI

vs

HBIM

Procedure
dedicate a

edifici

ESISTENTI

$$\text{LoG} + \text{LoI} = \text{LoD}$$



$$\text{LoD} = \text{LoI} + \text{LoG}$$



BIM **Parameterization**

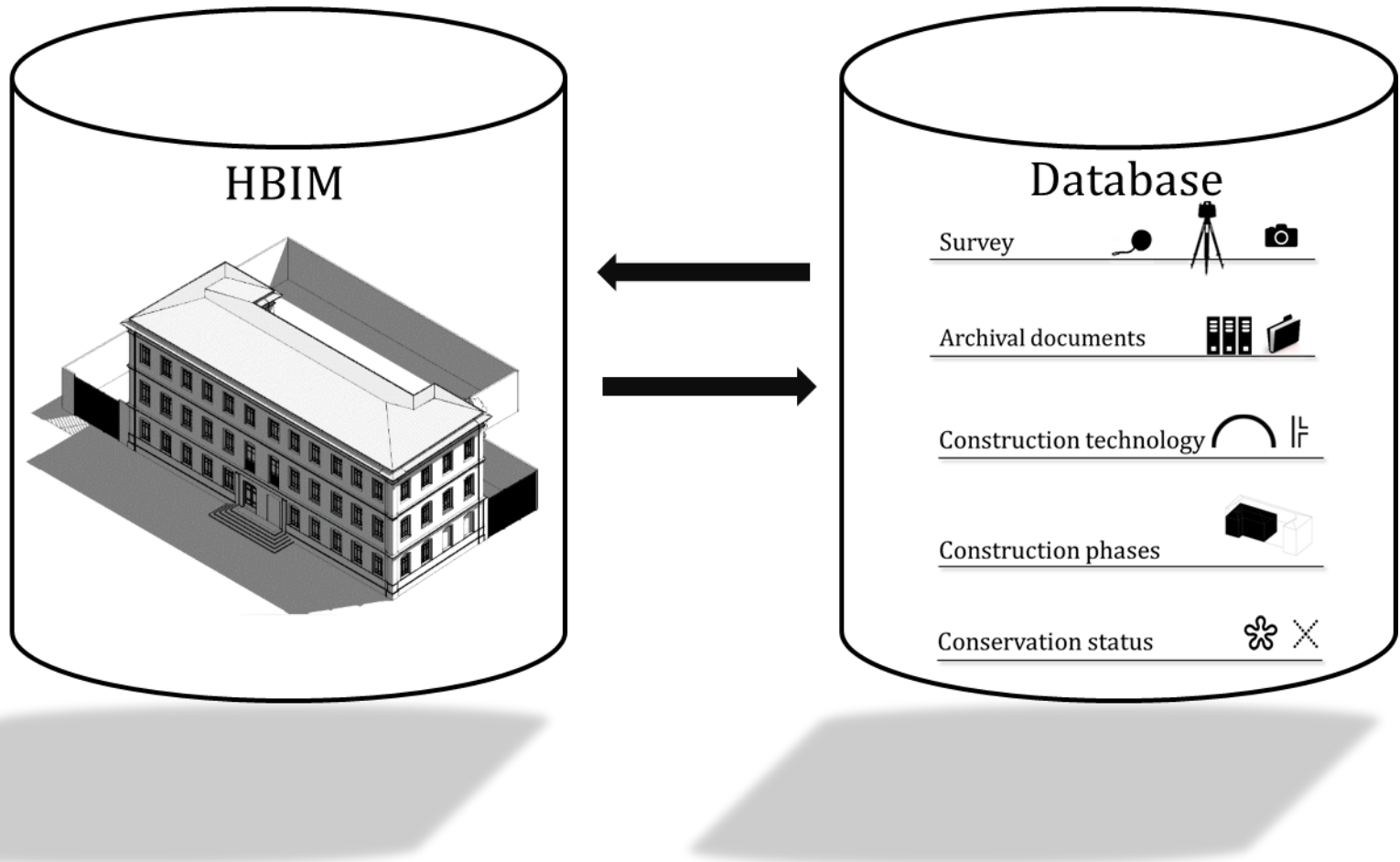
VS

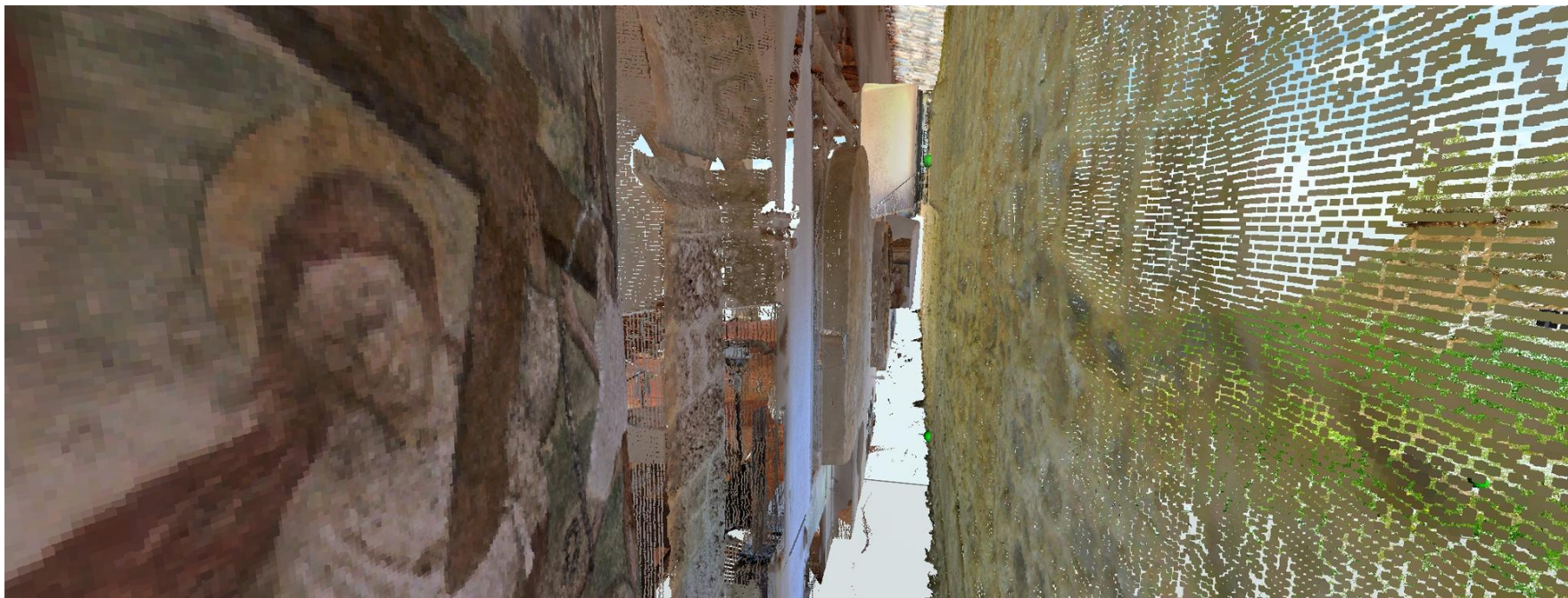
HBIM **Craftsmanship**

Use of parameterized
and typed objects,
deriving from libraries

Uniqueness of
historical
architecture

Procedure HBIM applicate al costruito storico: temi e problemi





Modello HBIM → *LOD variabili*

Procedura BIM

Progetto

da Concept a As-Built

Modello Predittivo

Procedura HBIM

Rilievo

da Realtà
a As-It-(Should)-Be

Modello Interpretativo

Procedura BIM

≠

Procedura
HBIM

Trasparenza



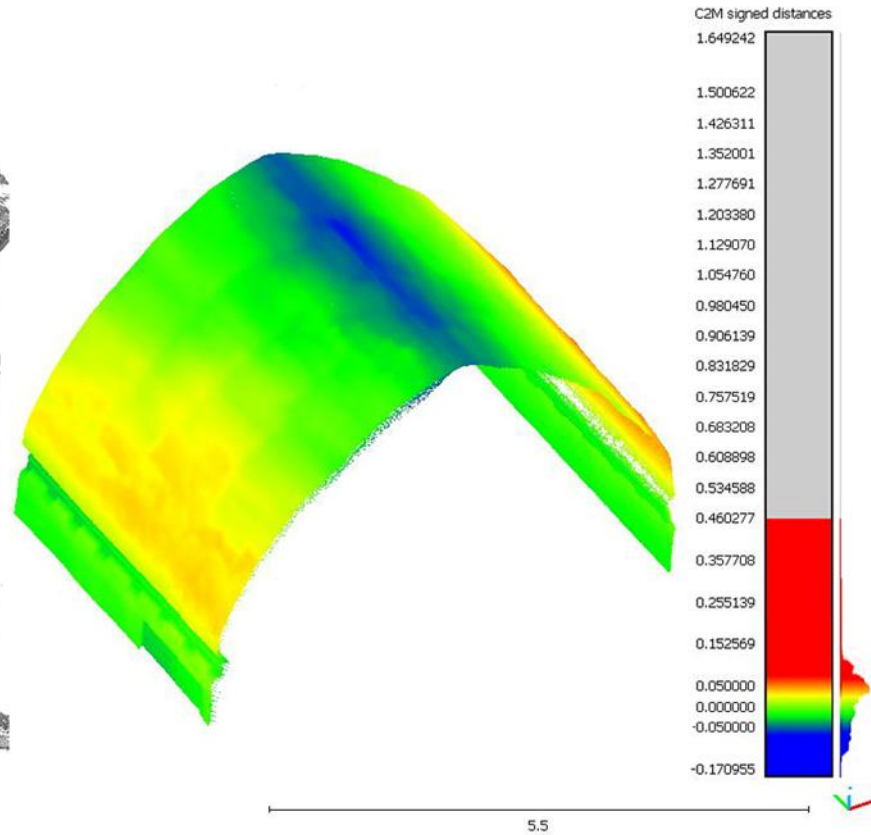
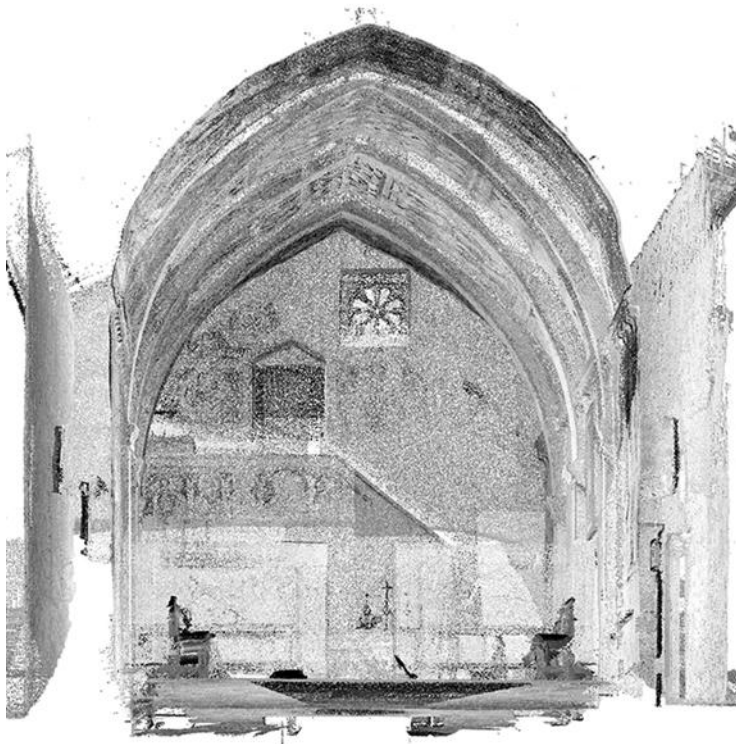
$$\boxed{\text{LoG}} + \boxed{\text{LoI}} = \boxed{\text{LoD}}$$

Affidabilità



$$\boxed{\text{LoG}} + \boxed{\text{LoI}} = \boxed{\text{LoD}}$$

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HBIM

?





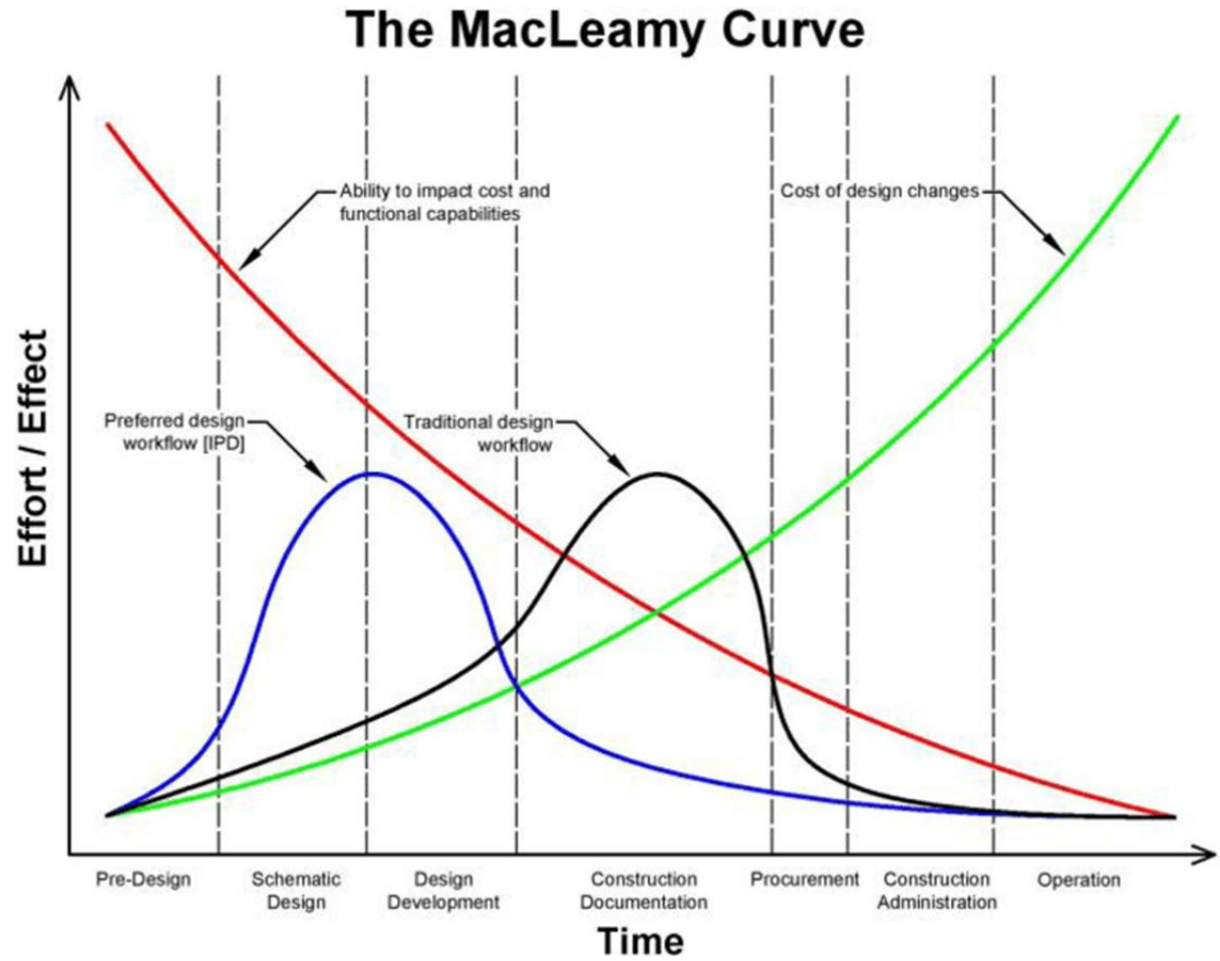
HBIM

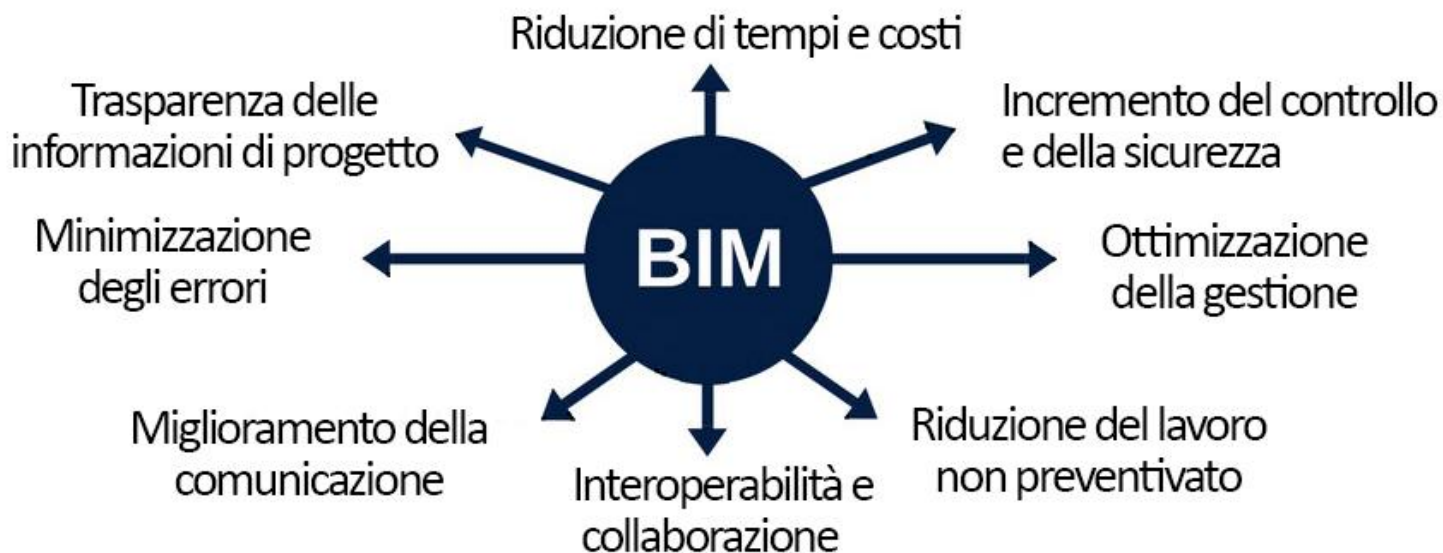
- **Modelli
interoperabili**
- **Oggetti
Computabili**



HBIM per il PROGETTO

(restauro, conservazione, manutenzione, gestione...)



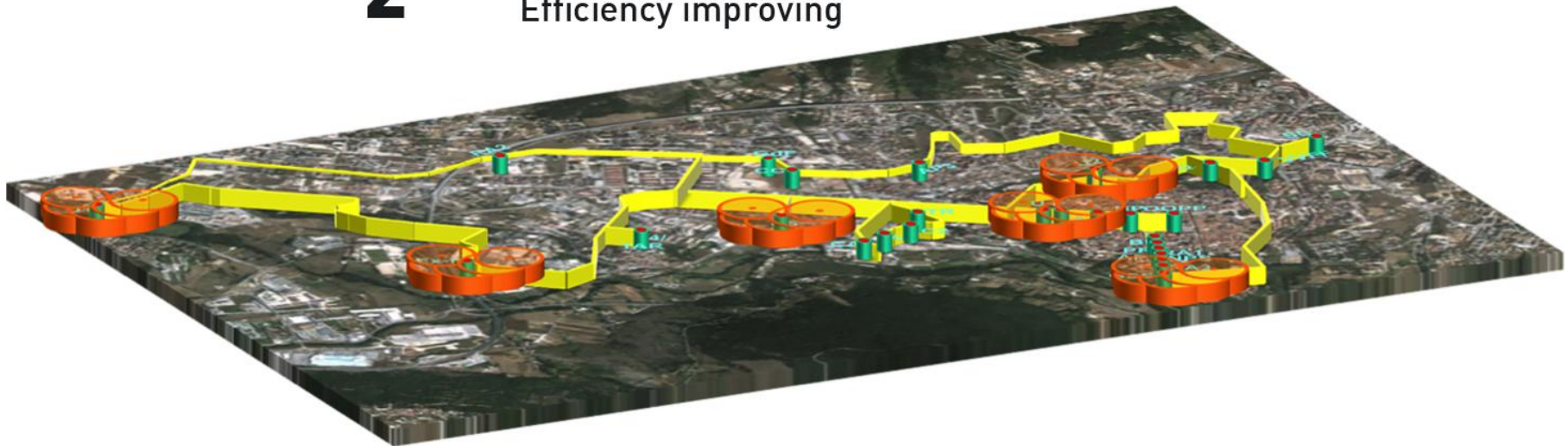


«L'Aquila Smart City»

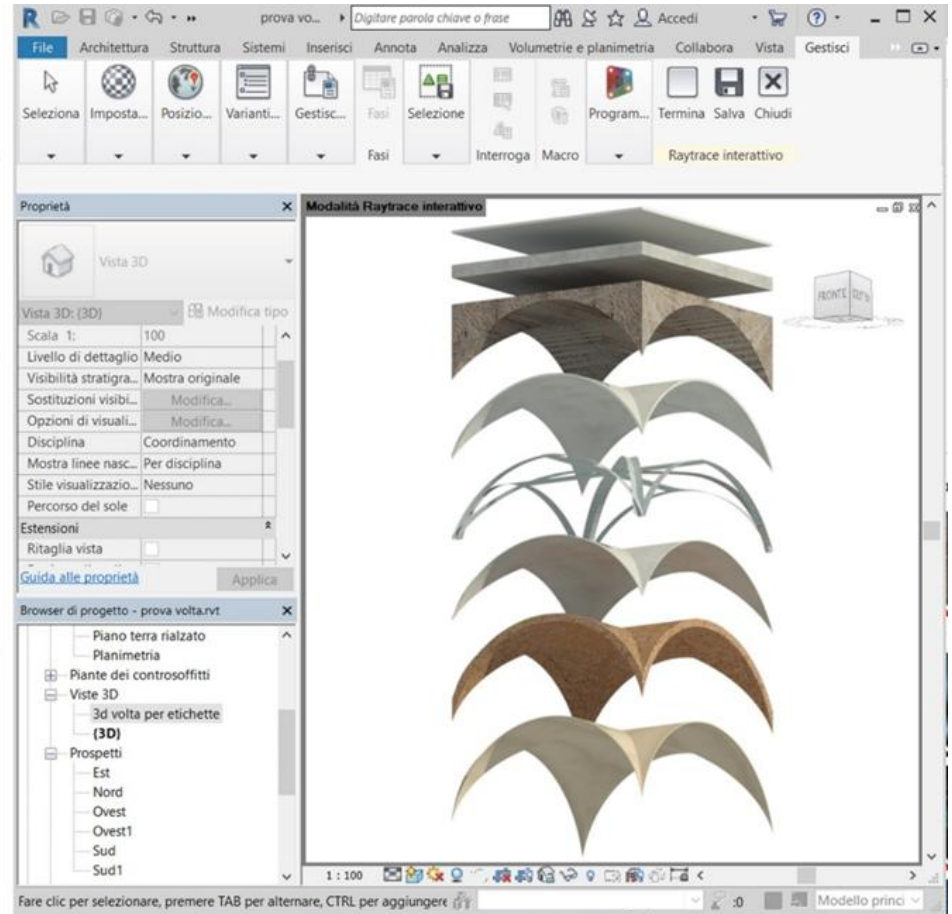
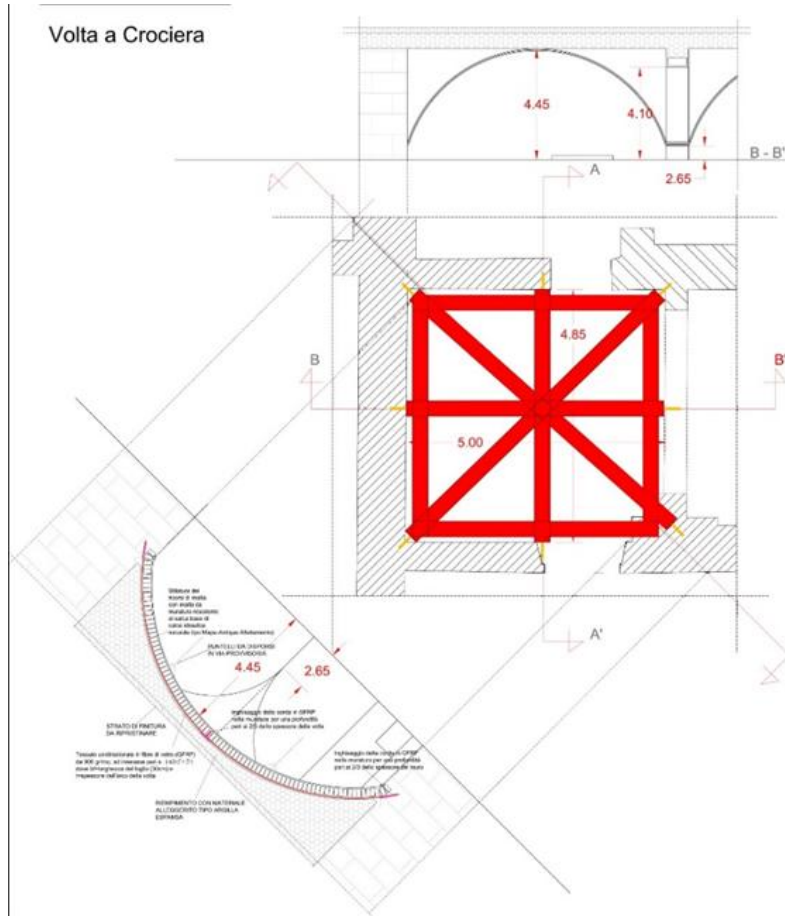
1 Structural monitoring
of buildings

2 Building Automation and Energy
Efficiency improving

3 Enhancement of cultural heritage
through ICT



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CONVENZIONE

DICEAA UNIVERSITA' DEGLI STUDI
DELL'AQUILA

E

IL COMUNE DI CELANO

**PER LA COLLABORAZIONE
NELL'AMBITO DI ATTIVITA'
FINALIZZATE ALLO STUDIO DI
PROCEDURE BIM PER LA
PROGRAMMAZIONE,
GESTIONE, MANUTENZIONE,
VALORIZZAZIONE DEL
PATRIMONIO COMUNALE**



LOIN: verifica della conformità delle informazioni richieste in base ai BIM Uses



Prof.
Stefano Brusaporci

GRAZIE