

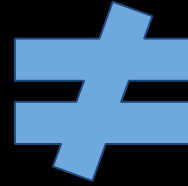
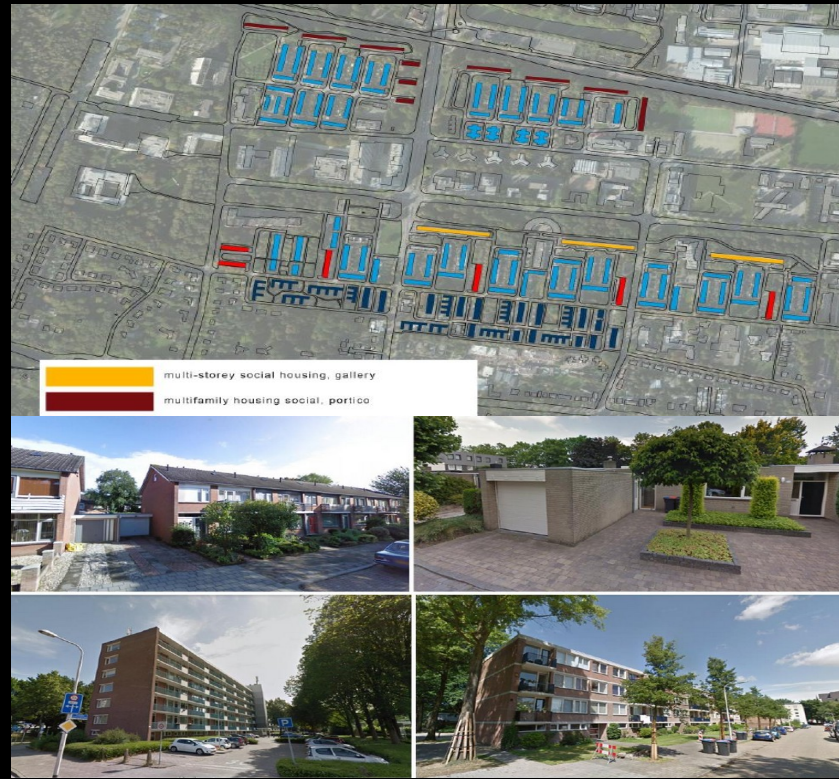
Platforms for EeB Renovation

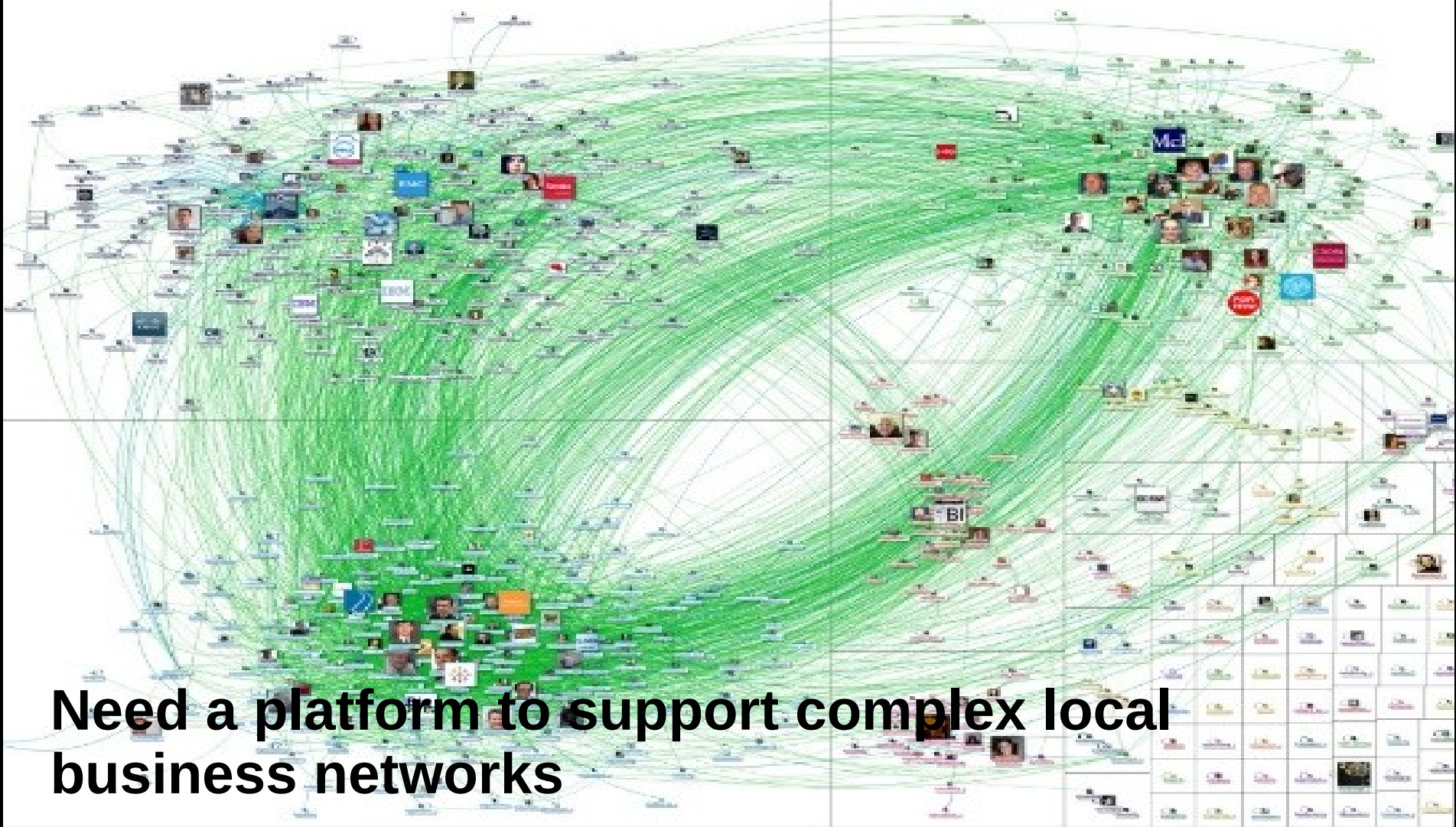
BIM-Speed project pitch

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timo.hartmann@tu-berlin.de

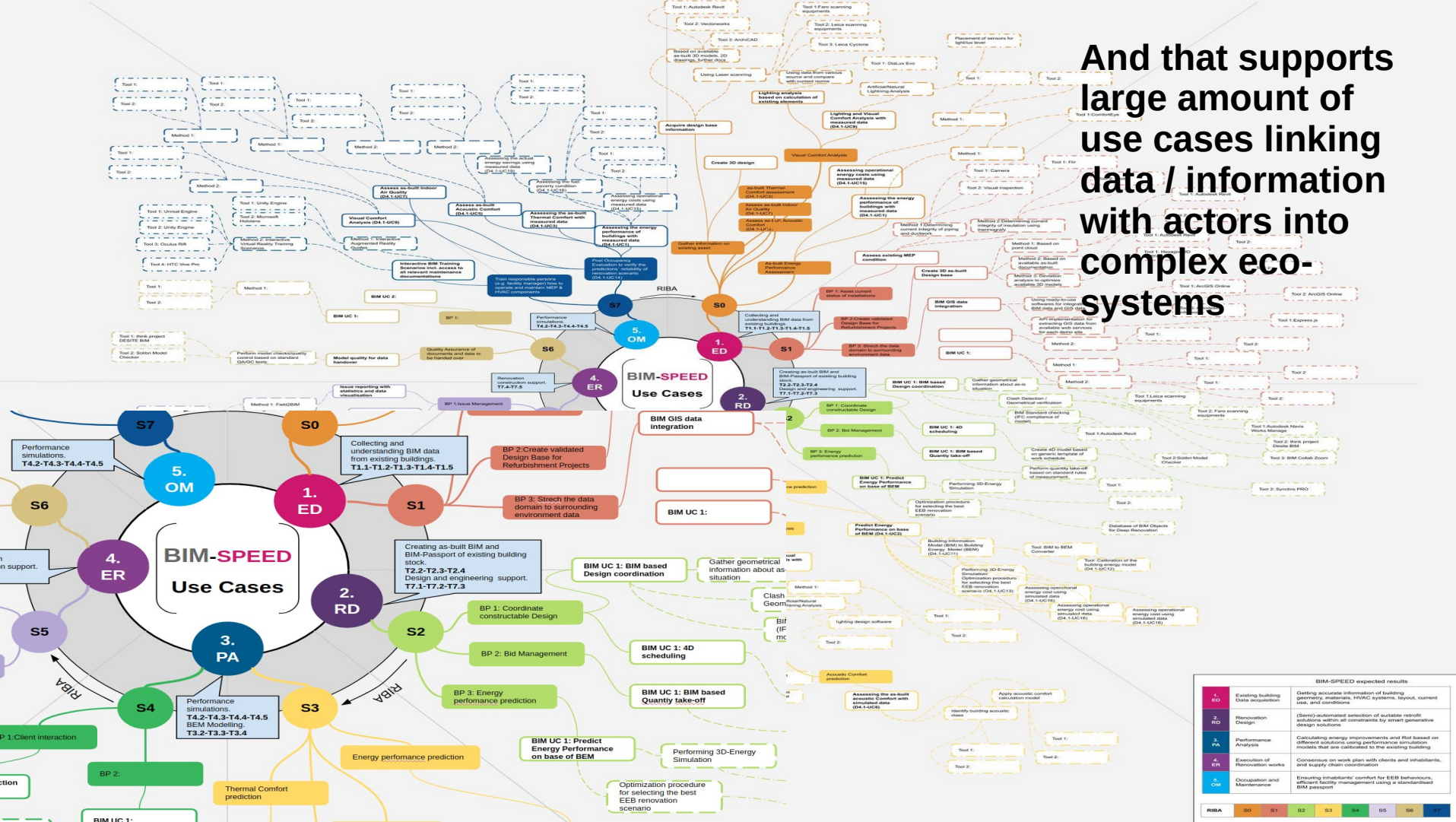


Why is it so hard to scale deep renovation efforts?





And that supports large amount of use cases linking data / information with actors into complex eco-systems


























BIM- SPEED will provide all stakeholders in the housing renovation market with holistic solutions:









1. An affordable cloud-base BIM platform

2. A set of inter-operable BIM tools


3. Validation and standardised procedures for implementing renovation solutions with guaranteed energy performance and inhabitants' comfort





	ANTONY_FRANCE	79 
	BARLAD_ROMANIA	74 
	BERLIN_LICHTENRADE_GERMANY	7 
	BERLIN_TEMPELHOF_GERMANY	74 
	BERLIN_TUBerlin_GERMANY	76 
	FRIGENTO_ITALY 	74 
	GDYNIA_POLAND	95 
	JAZDY KONNEJ_WARSAW_POLAND	75 
	MALKO TARNOVO_BULGARIA	77 
	MASSY_FRANCE	79 


	BERLIN_LICHTENRADE_GERMANY > Variants
	Scan-Dateien
	IFC-Dateien
	Grundlagen Pläne
	20190221-Neubau (Dachvariante 2-fach Keil) (kopieren).rvt
	20190604-Ist 60(Revit 2019) (kopieren).rvt
	20190212-Aufgestockt (gedämmt mit Balkon, gleiche Dach) (kopieren).rvt
	20190219-Aufgestockt mit neuen Dach (Variante 1-fach Keil) (gedämmt) (kopieren).rvt
	ufgestockt mit neuen Dach (Variante 2-fach Keil) (gedämmt) (kopieren).rvt




KROQI service example
A "toy" service, used to illustrate the basics of implementing KROQI services.



  Go to the service

Files naming convention tool
This service can be activated on folders in order to create and check naming conventions ...







  Go to the service  Run the service

Third-party services

CSTB
le futur en construction


Semantic model checker
► CSTB Sophia Antipolis
Semantic model checker



 



  Go to the service

BIM SPEED

Weather data service



  Go to the service

<https://bimspeed.kroqi.fr/login/#!/>





Reno-Inst Ontology:

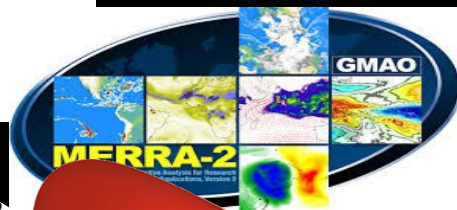
An ontology for installation of components in building renovation projects

LCA-C Ontology:

An ontology for LCA/LCC assessments in renovation projects

BEM-Reno Ontology:

An ontology for BEM development in renovation projects



BIM SPEED







Model Folder

Resnet101

Backend

OPENCV

Target

CPU

Confidence: 0,15

NMS: 0,5

Size: 700 X 700

Inference

Save Results



Remove

Image number: 33

Image Validation (22).jpg

Inference (ms): 6688,55

Id	Class	Confidence
0	Boiler	1,000
1	Radiator	0,258

Resnet101

OPENCV

CPU

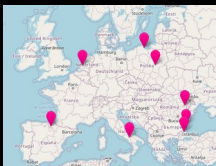
Confidence: 0,15

NMS: 0,50

Size: 700 X 700



How can we establish the eco-system that is required around the platform:



12 demonstration projects (building renovation)
10+ illustrative apps and services integrated in the platform



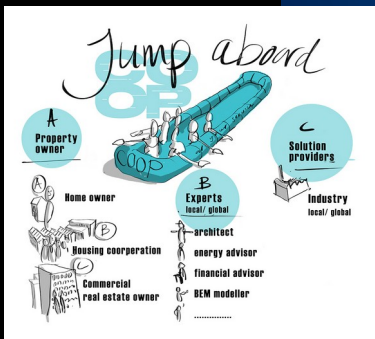
Formalization of 20+ BIM-Speed use cases for
BIM for renovation

<https://ucm.buildingsmart.org/>



Detailed training material

<https://www.bim-speed.eu/en/training-materials>



BIM-Speed competition

<https://www.bim-speed.eu/en/competition>



But this will not be enough ...



What is the required scope –
renovation, all projects, infra?

What are business drivers,
requirements and needs?

What does it take to establish a
European cloud platform and
eco-system for building
renovation?

Who will provide, manage,
maintain, market, finance it?

Do we need an EU solution or
are we Okay with international
offers?



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