

BIM BASED FM IN FINLAND

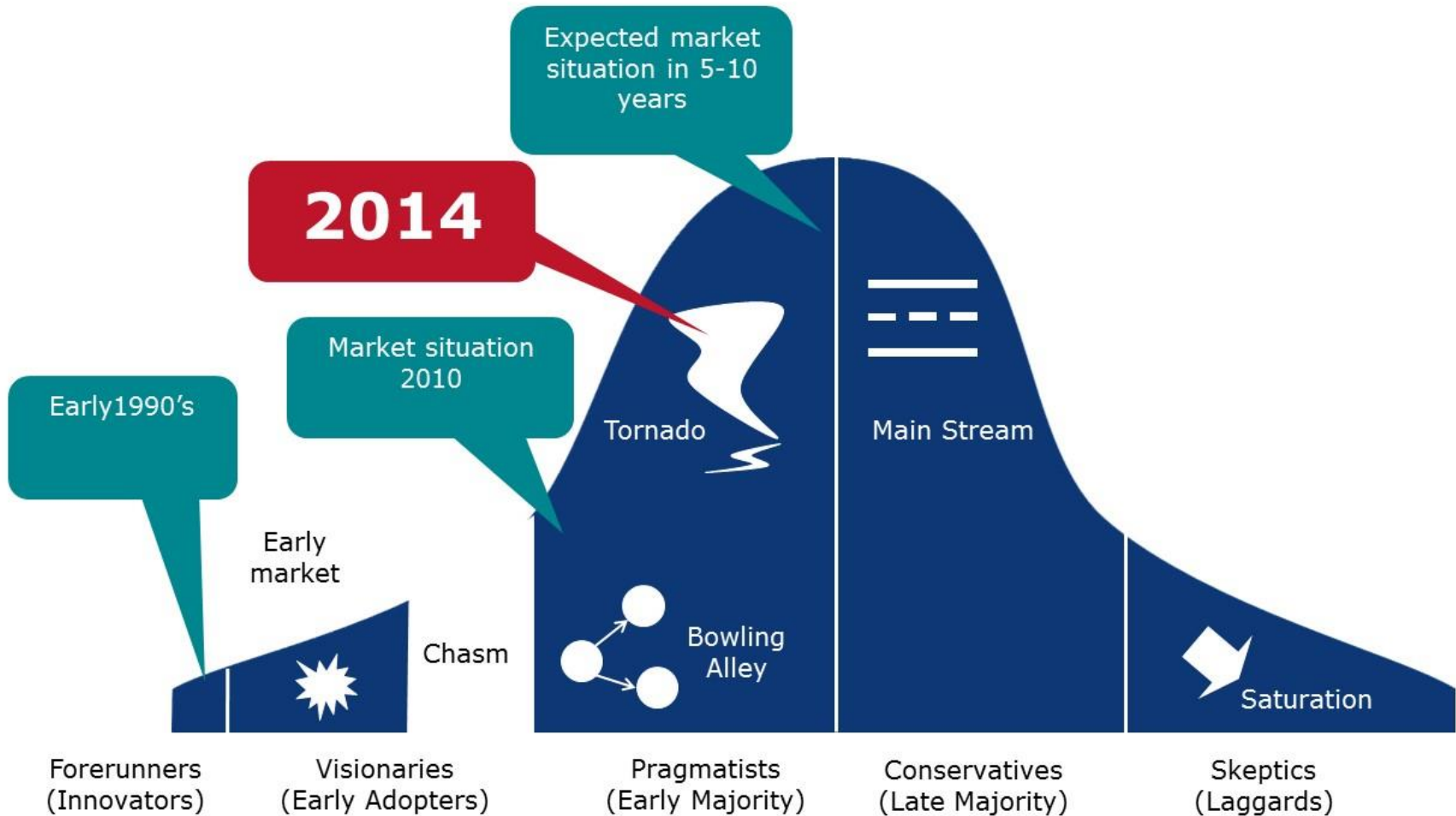
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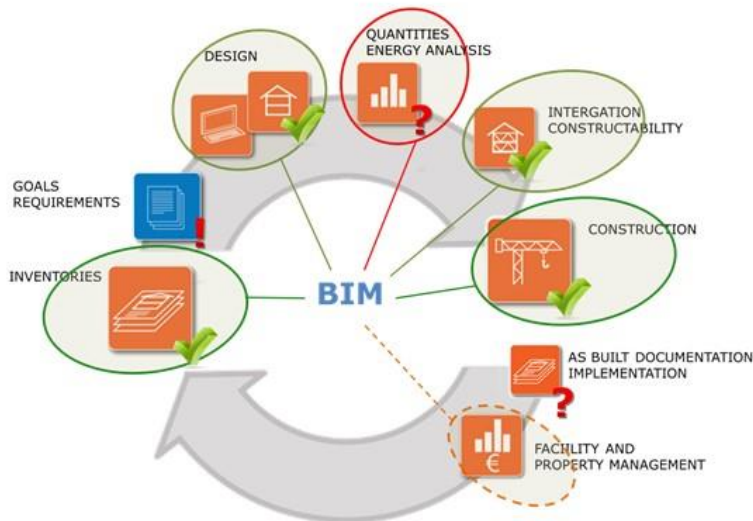
BIM Market Transition in Finland



BIM - Where are we now?

BIM in Buildings

- BIM is coming into mainstream – hundreds of projects have been done already
- IFC is a standard requirement
- Mainly used in Design and Construction
- Not adapted in Operations and Maintenance
- Thousands of actors – market is quite heterogeneous
- Poor FM penetration



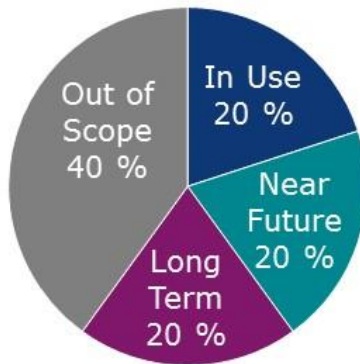
BIM in Infra Structures

- A dozen of pilot projects has been carried out
- LandXML-based data transfer is in use, but not widely adapted
- Market is driven by a few large Clients
- Inframodel3 is required by the large Clients from May 2014 – this has big impact to the market
- The implementation scope is wide – from inventories to maintenance

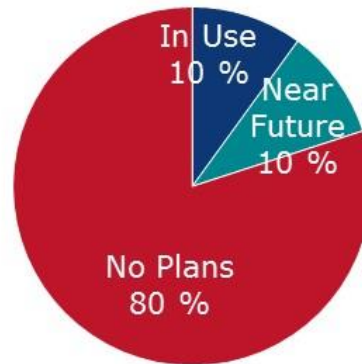
Use of BIM in Building Projects

The overall adaption is 20-30% of the volume

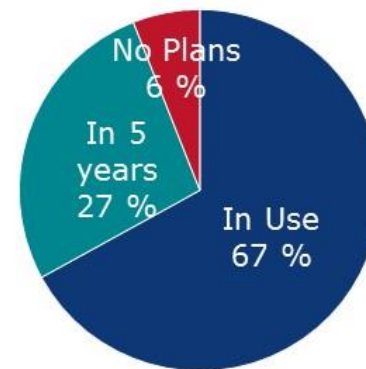
BIM in Public Sector



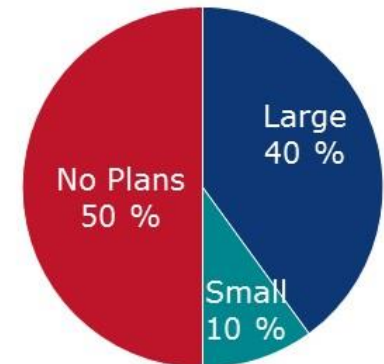
BIM in Private Sector



AE's



Construction



Use of BIM in FM

0%?

Guidelines

COBIM2012

www.buildingsmart.fi

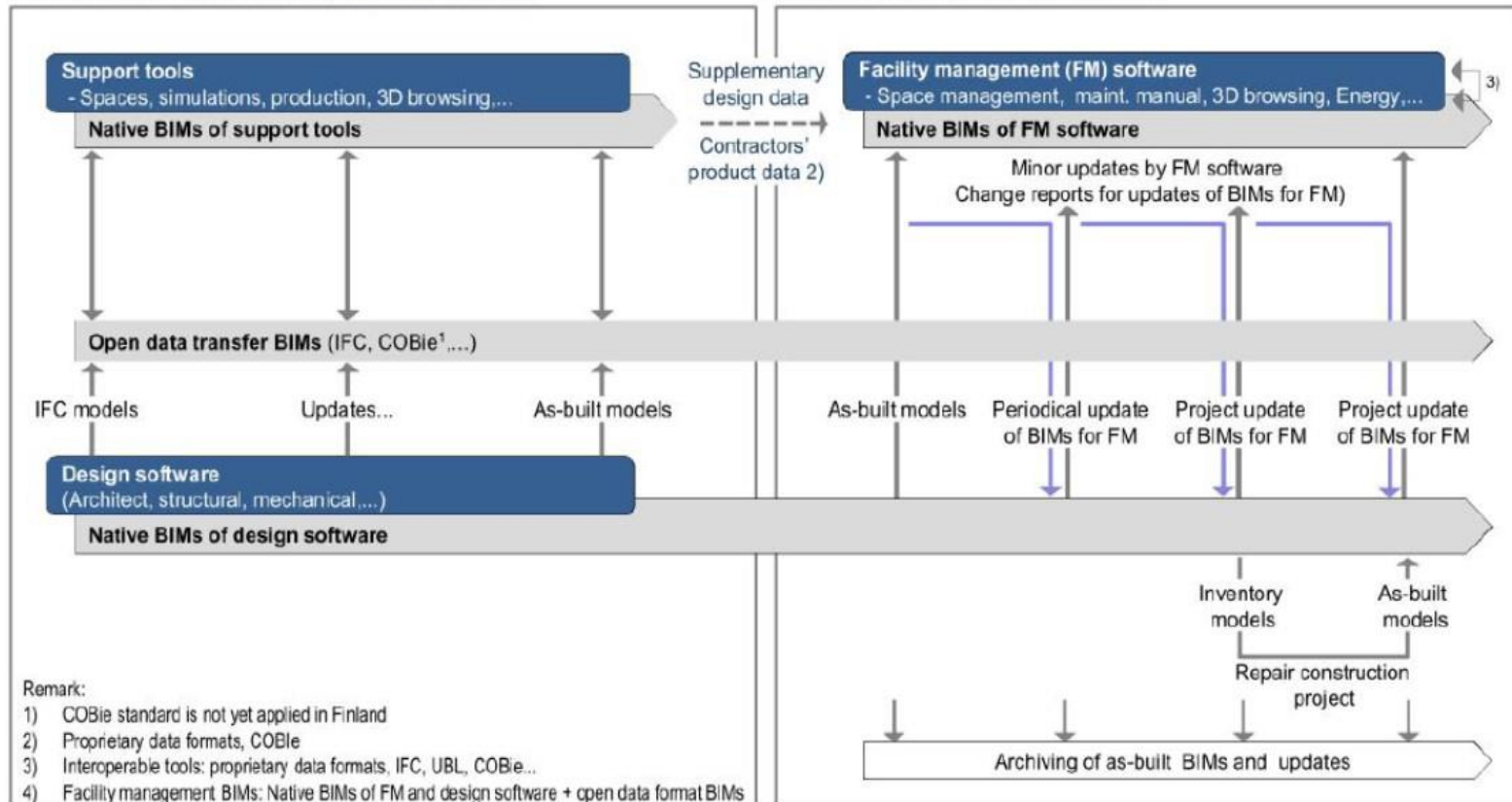
BIM Management Process during building life cycle

Construction project

Operation and facility management

▼ Targets for life cycle data management of the building

▼ As-built data from the construction project



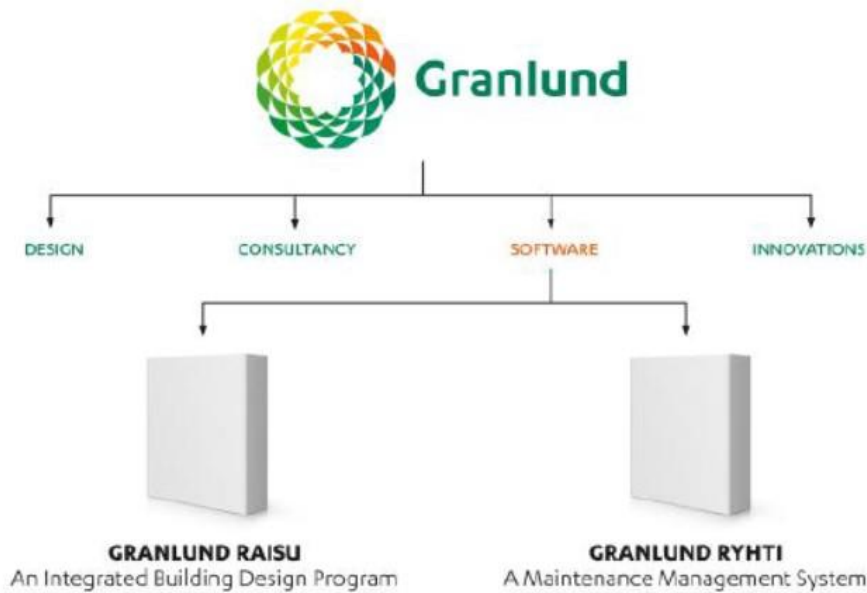
Less energy gives more

BIMinFM / Tero Järvinen



Design

Maintenance



Less energy gives more

Design Your Buildings

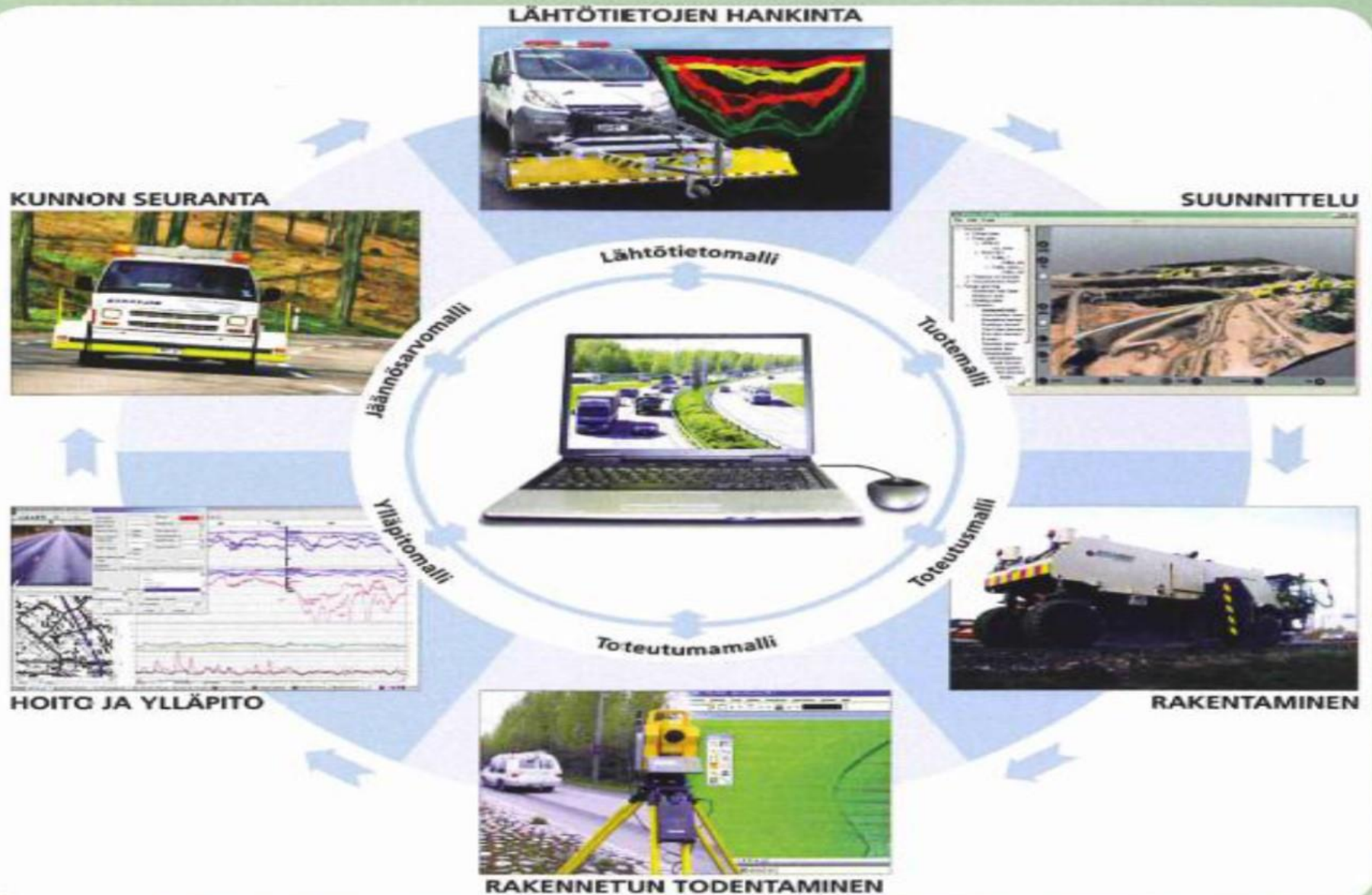


Infra FM Pilot: KT 51 Kivenlahti-Kirkkonummi

- Existing 2-lane road upgraded to 4-lane highway
- Optimizing of the site works
- Continuous Model
- Site Implementation 05-09/2012
- BIM based Maintenance



Infra FM Pilot: KT 51 Kivenlahti-Kirkkonummi



Infra FM Pilot: KT 51 Kivenlahti-Kirkkonummi

Optimization of
Maintenance

Planning of the
works site

Work site
implementation

Initial Data for Maintenance Planning

- Registry information
- Service Level Measuring
- Visual Damage Mapping

Initial Information for Design

- Registry information
- GPR studies
- Site visits



Infra FM Pilot: VT6 Parikkala

- Existing 2-lane road that has problems with gross section sloping
- Working in “non-site environment”
- Continuous Model
- Site Implementation 08-09/2012
- BIM based Maintenance



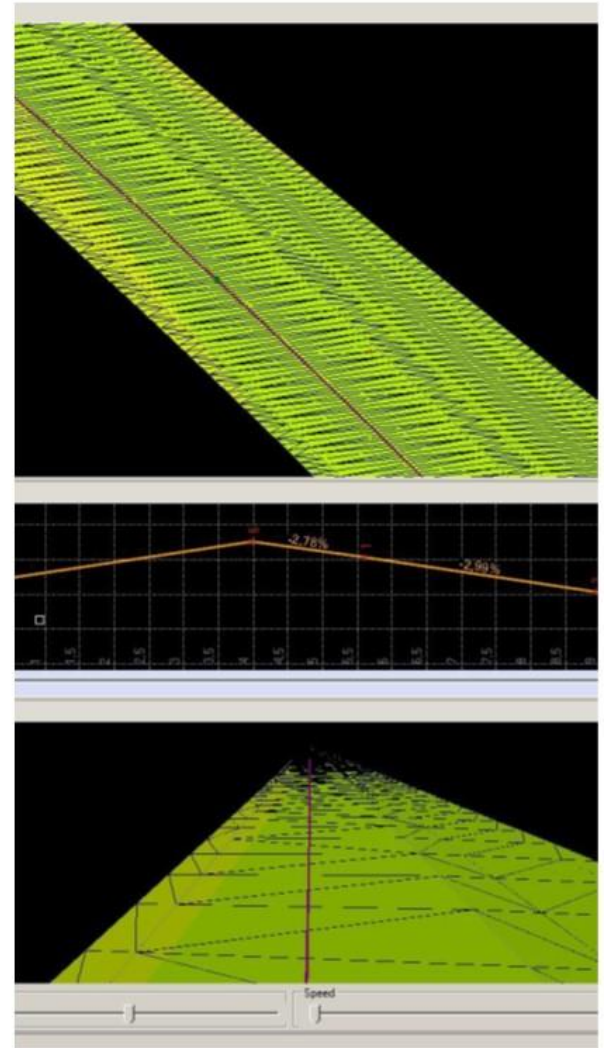
Infra FM Pilot: VT6 Parikkala

Maintenance Procurement

- Initial Data thru mobile mapping
- Planning of the new alignment on existing road surface
- Initial model
 - The client had precise information about masses and costs which was based on BIM
 - Contractor carries out the site works according the BIM!

Collecting Data

<https://www.youtube.com/watch?v=pU2Rp1fe5U8>



THANK YOU

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