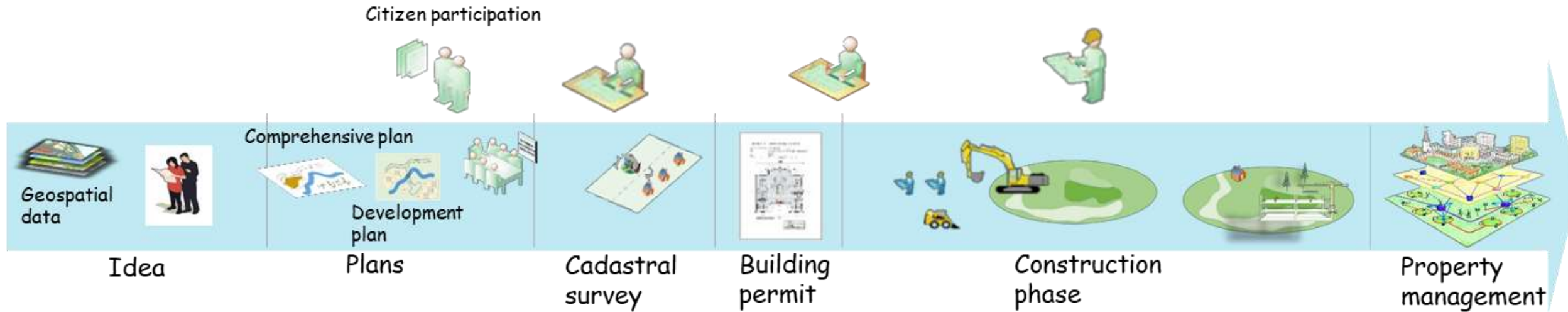
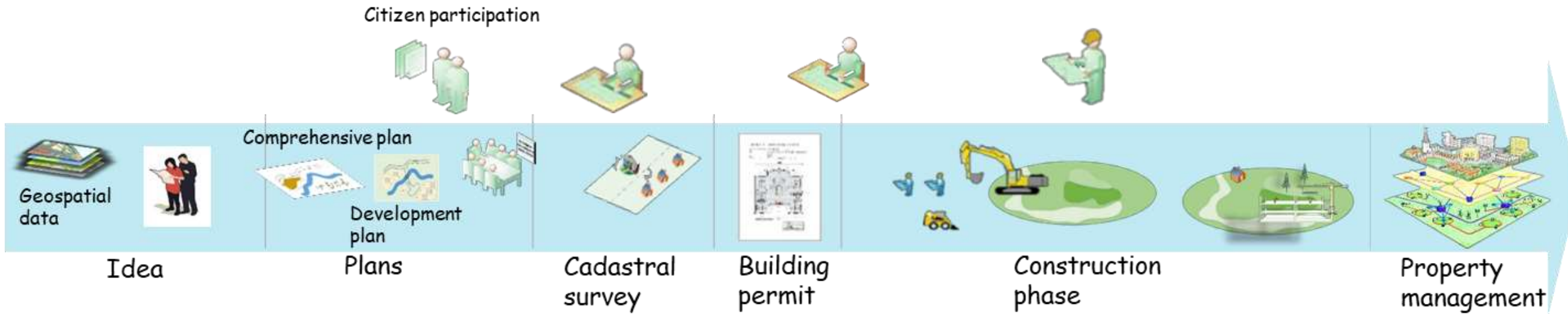


Land use planning, its trends and use of geospatial data



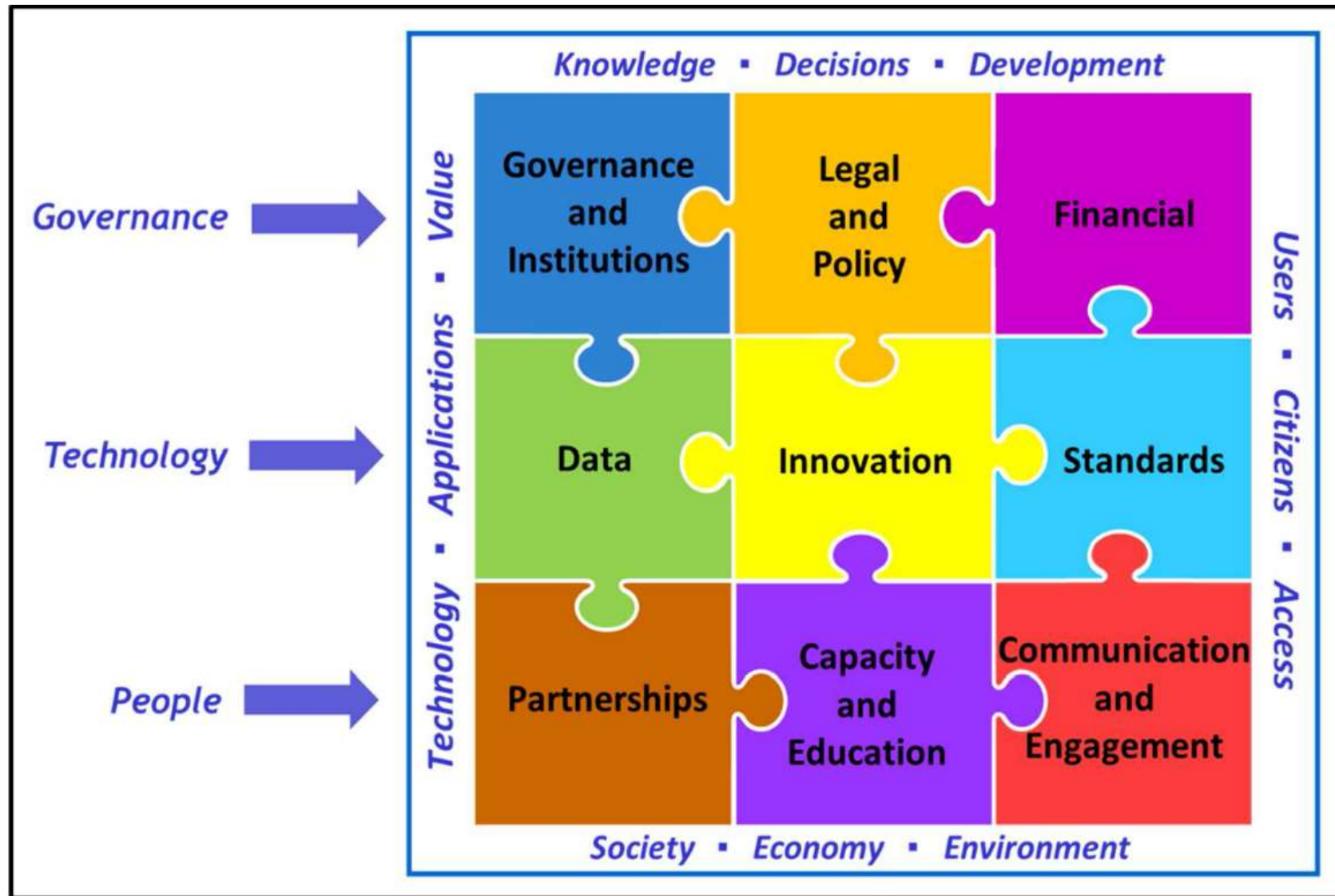
Geospatial data revolution



Drivers






- Digitalization – data-centric approaches
- New technology – data volume, quality and new data sets
- Collaboration – geospatial as a facilitator
- SDGs – the need/purpose of geospatial data

Integrated Geospatial Information Framework



Adopted by UN (UN-GGIM) 1 August 2018

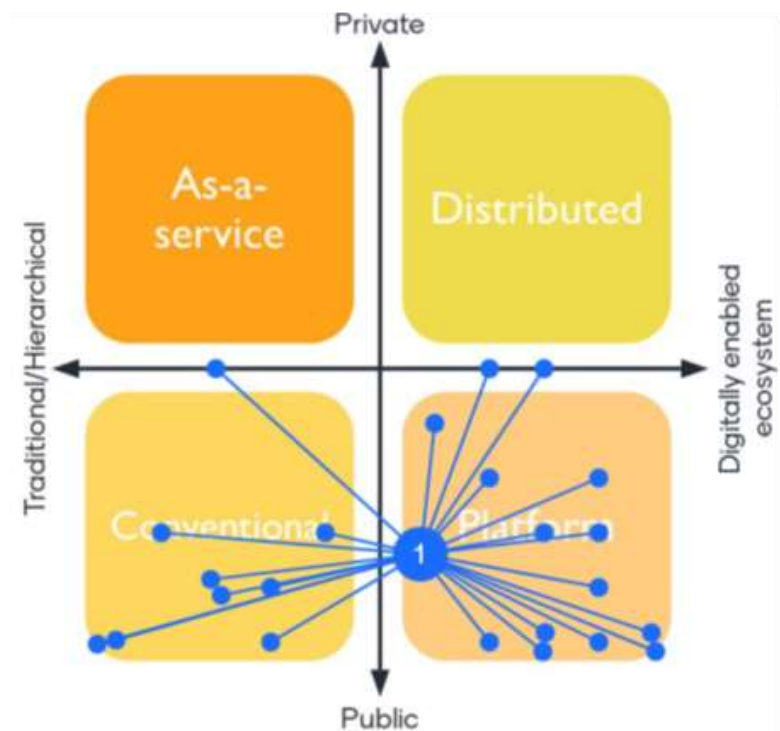
Open data

	Agriculture and forestry	0,20 billion EUR
	ICT	0,45 billion EUR
	Bank and finance	0,27 billion EUR
	Land use planning and development	0,46 billion EUR
	Public sector	0,14 billion EUR

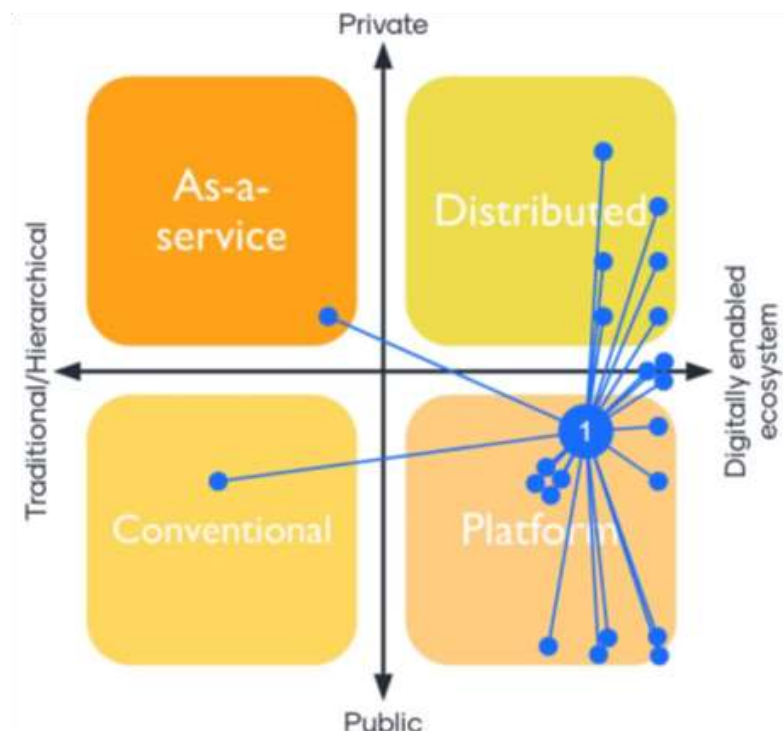
Sweden 2020

- EU Inspire Directive – geospatial data infrastructure
- EU Open Data Directive – high value data sets
 - **Geospatial**
 - Earth Observation and Environment
 - Meteorological
 - Statistical
 - Companies and company ownership
 - Mobility

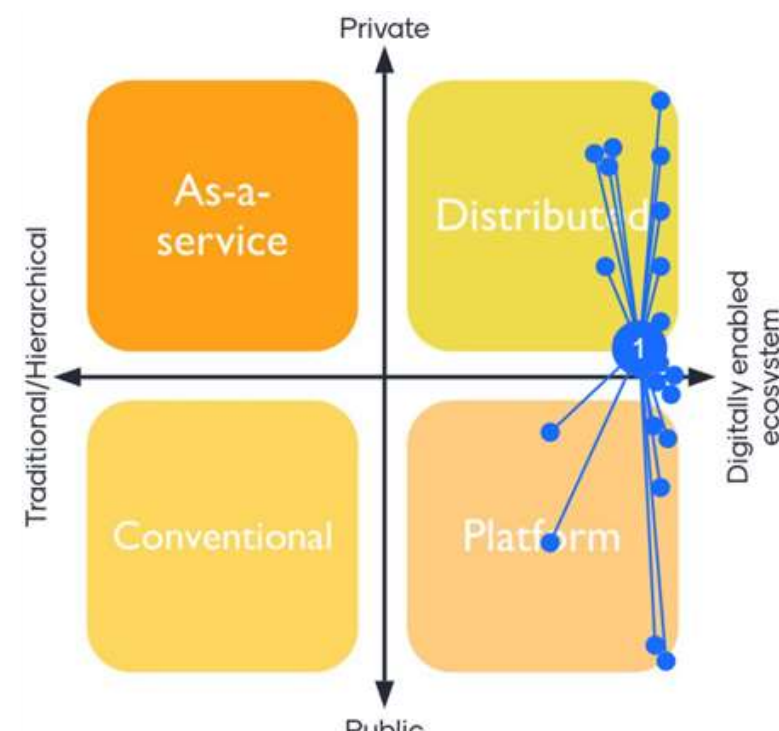
Scenarios on land administration



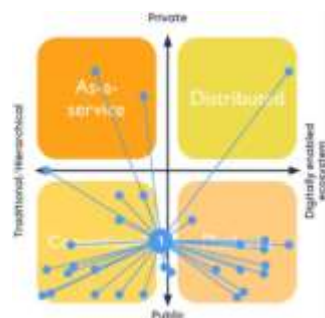
TODAY (JUNE 2021)



EXPECTED 2030

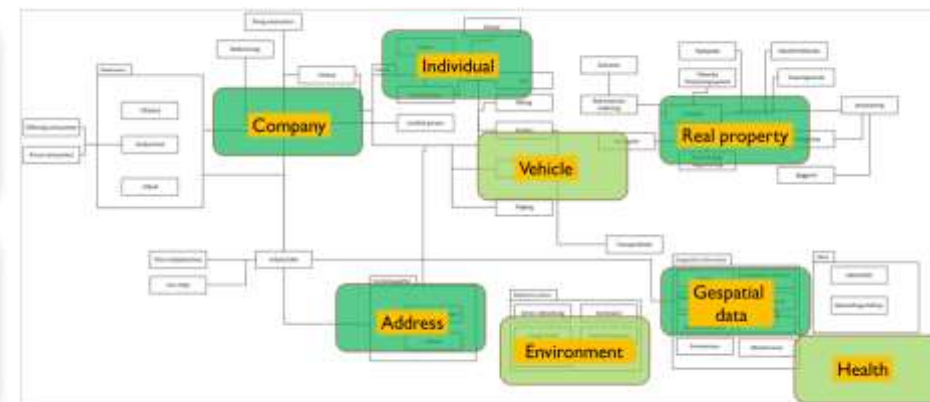
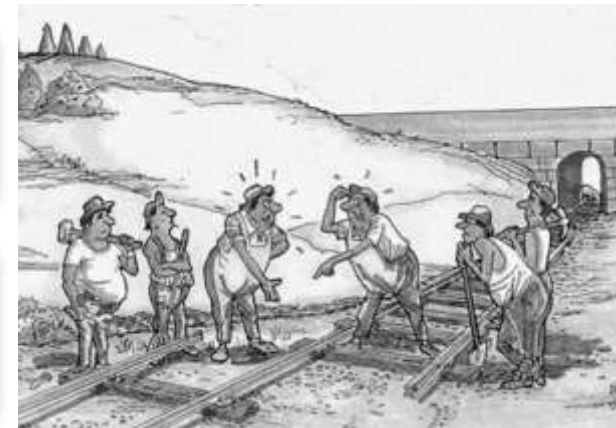


DESIRED 2030

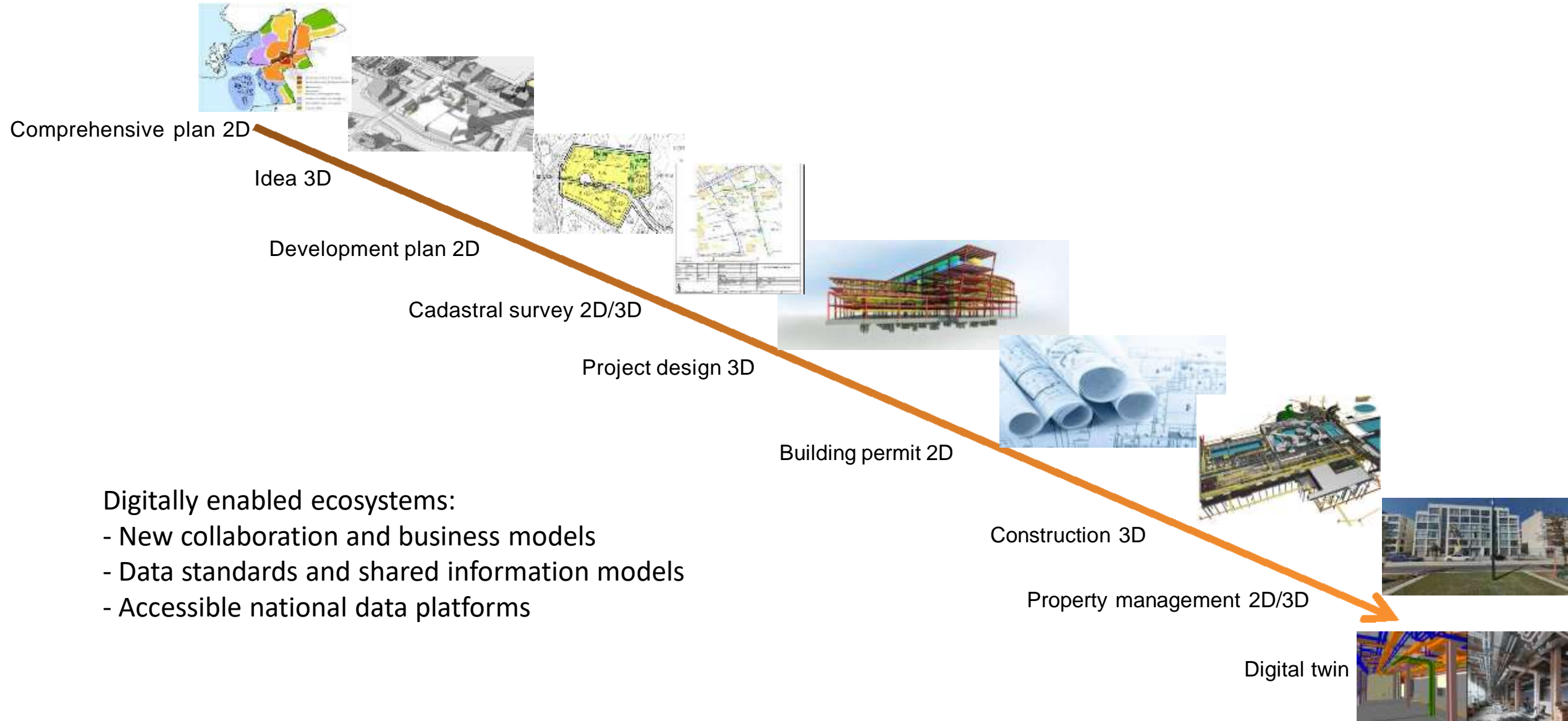


Nov 2019

Interoperability and government as-a-platform



Data interoperability, access and reuse



3D geometry representation

Closing the GIS/BIM gap

Development plan

2D



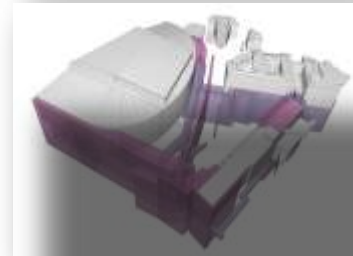
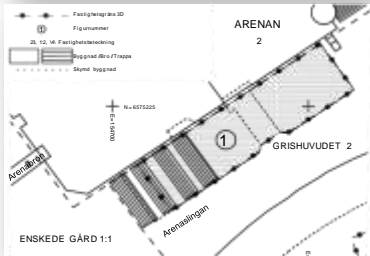
Challenge



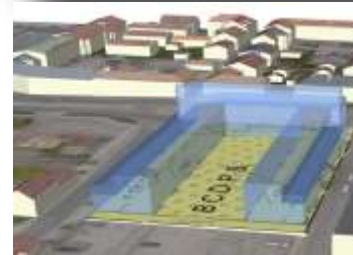
3D



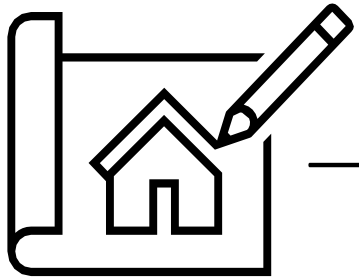
Cadastral plan



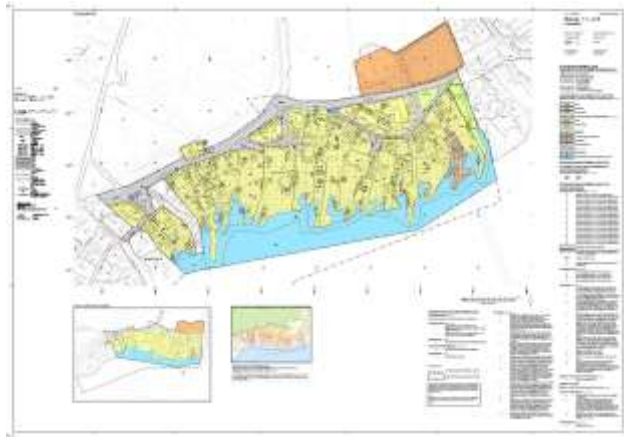
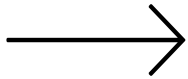
Building permit



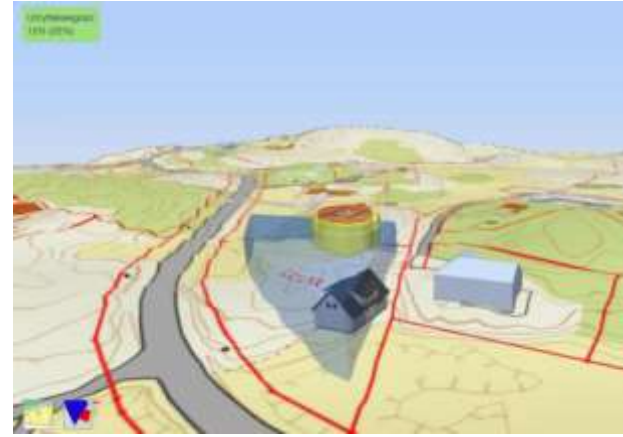
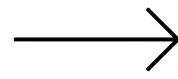
Future process for land use planning and building permit



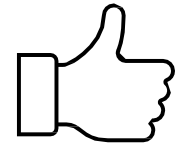
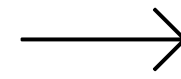
Investor/ Land development company



National platform for digital land use plans uploaded by municipalities

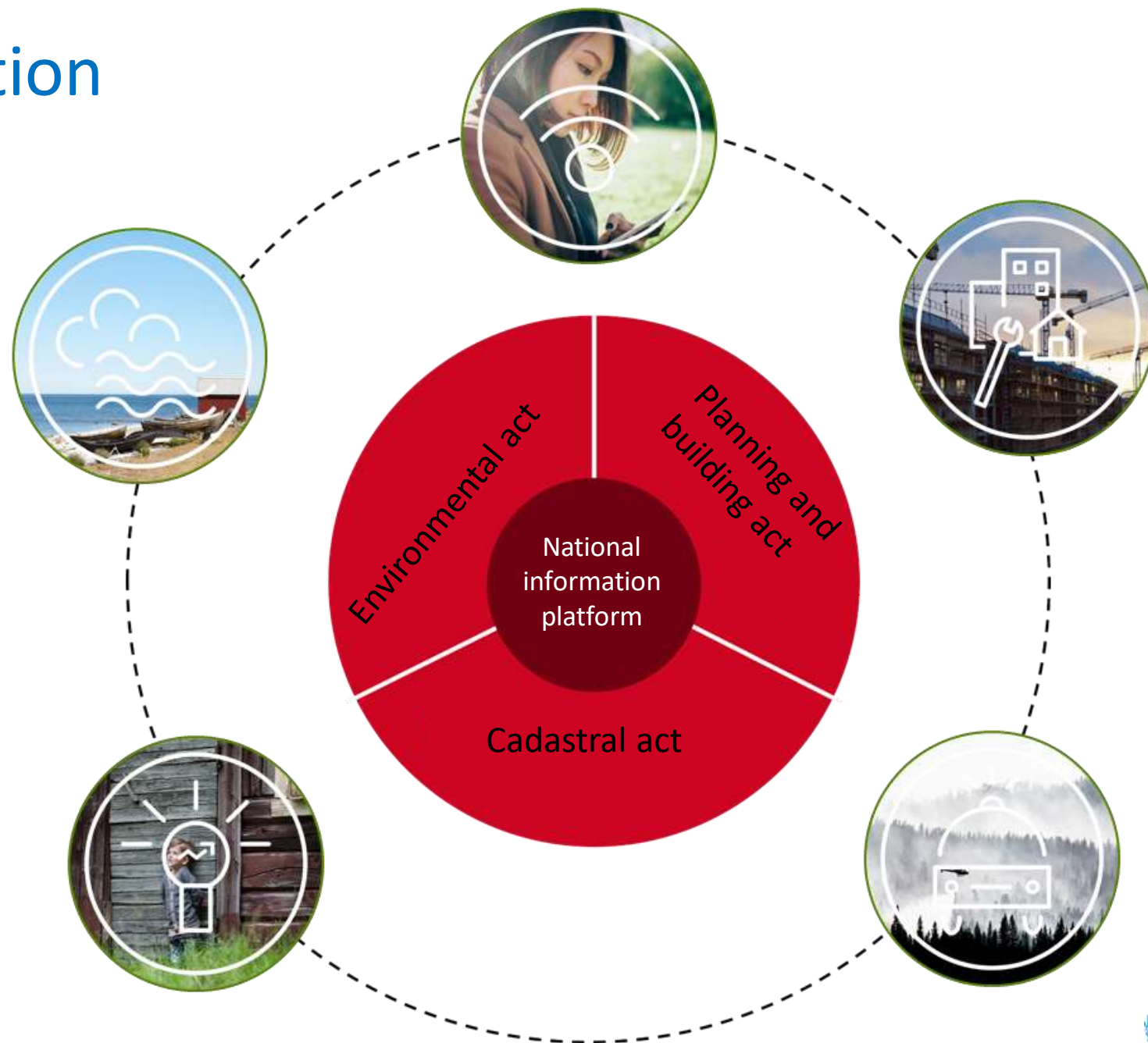


Interactive and automated analysis to ensure that the suggested building (BIM model) fulfill the digital land use plan regulations

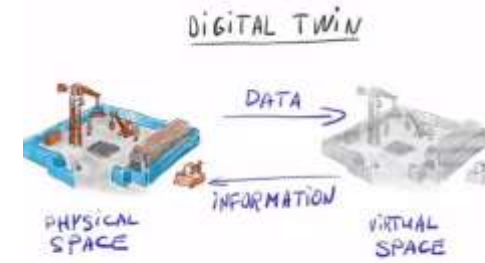


Municipalities issue building permit

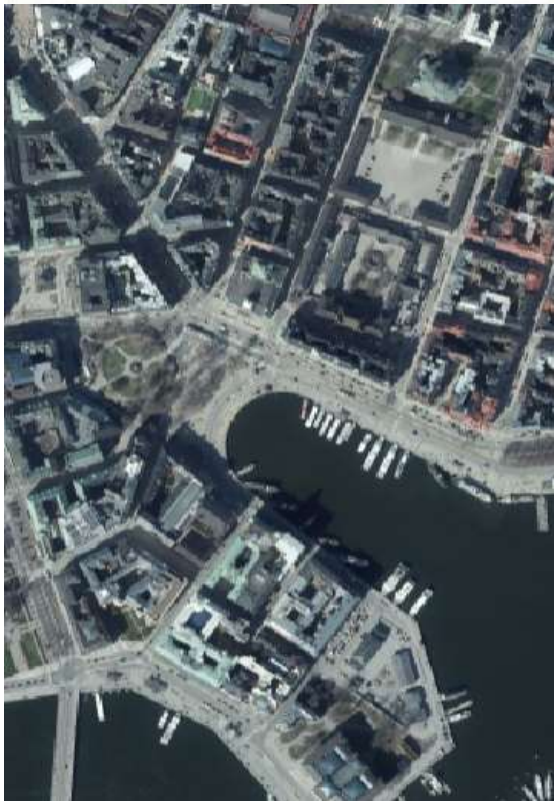
National information platform



Digital twin



Present



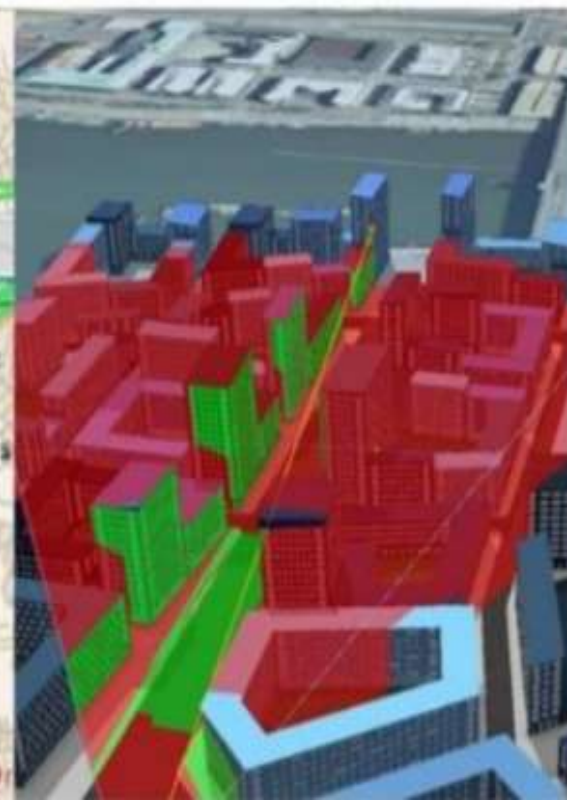
Understand

Real-time



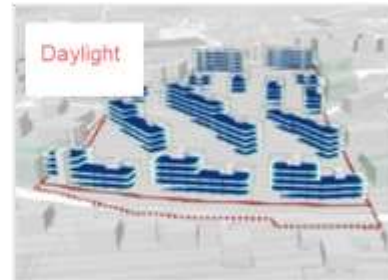
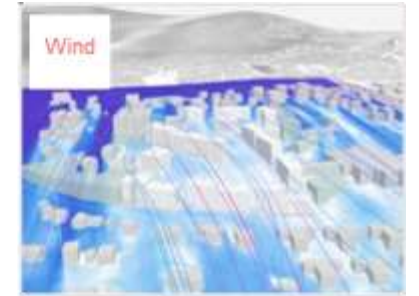
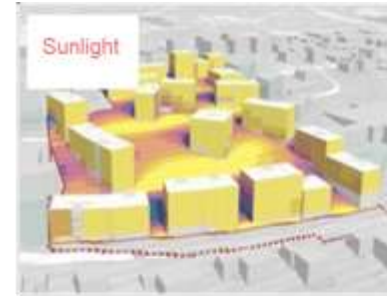
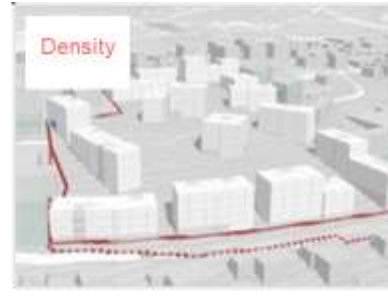
Guide/Manage

Simulated



Predict

Parametric design



Source: Spacemaker