### Digital City Rotterdam

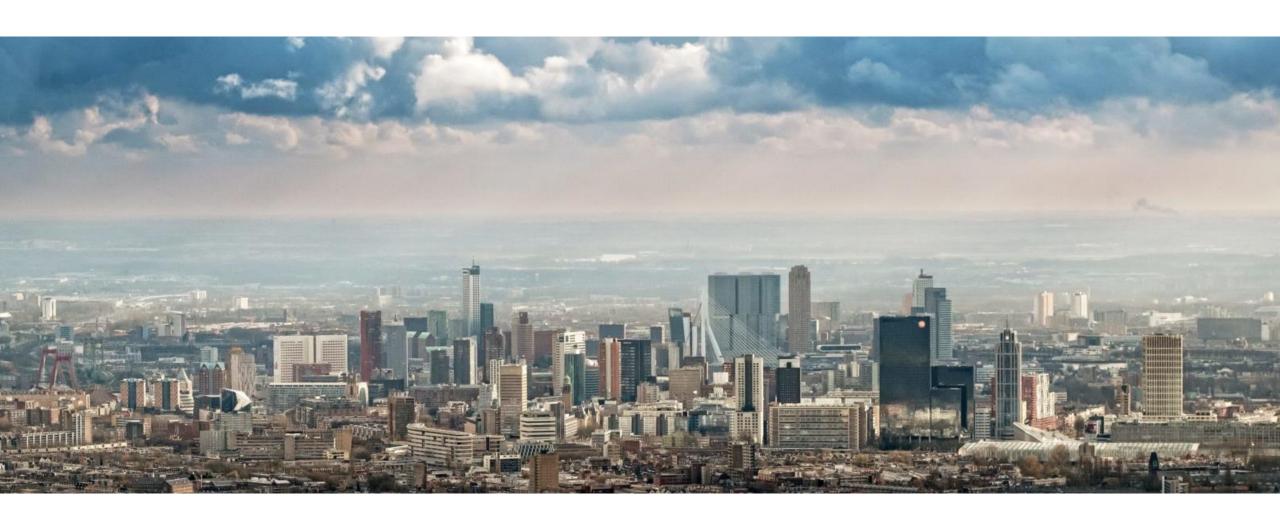
New technologies.
Smart collaborations.



Joris Goos Research and Business Intelligence



#### Rotterdam



#### Where are we?

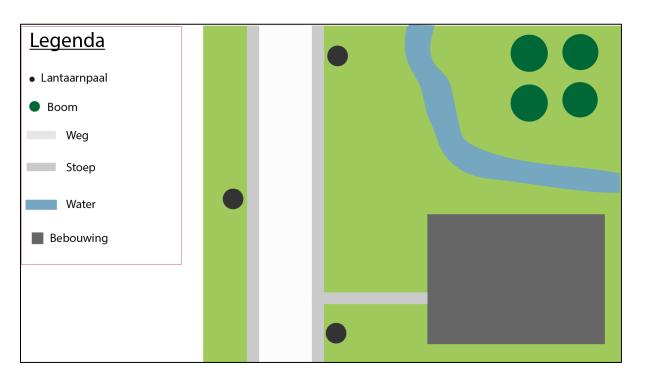






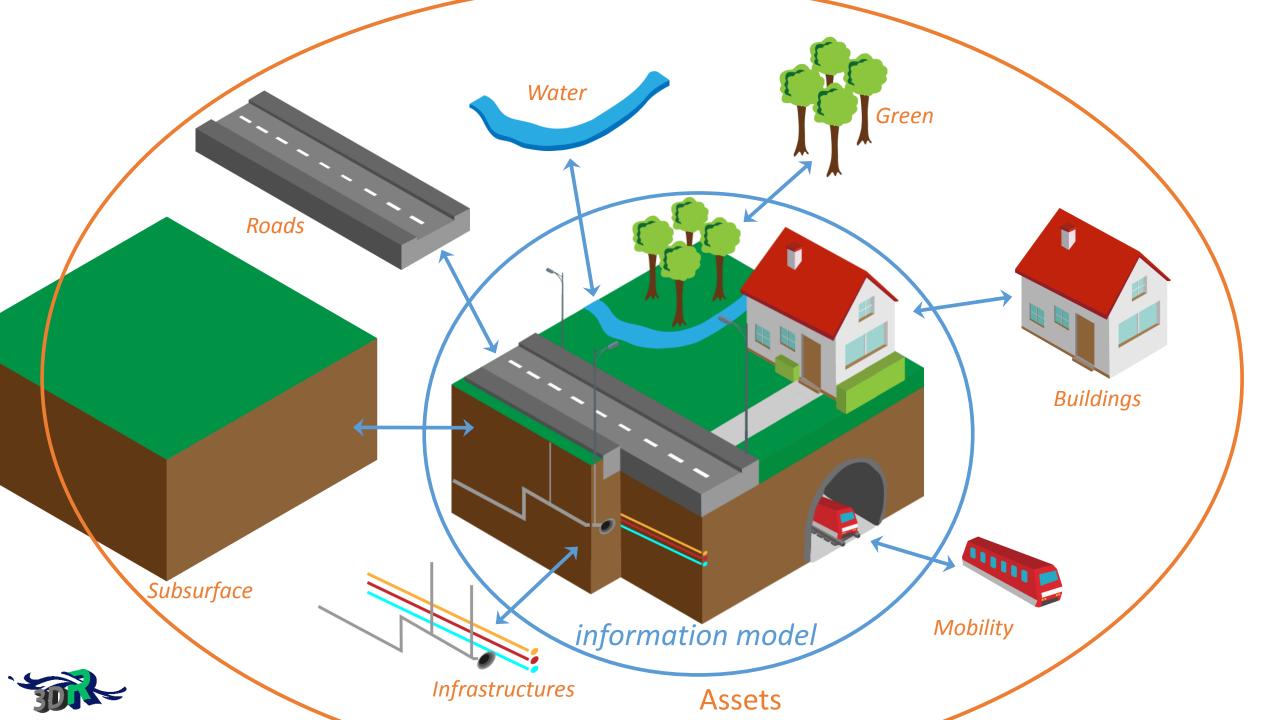
### Rotterdam 3D City Model







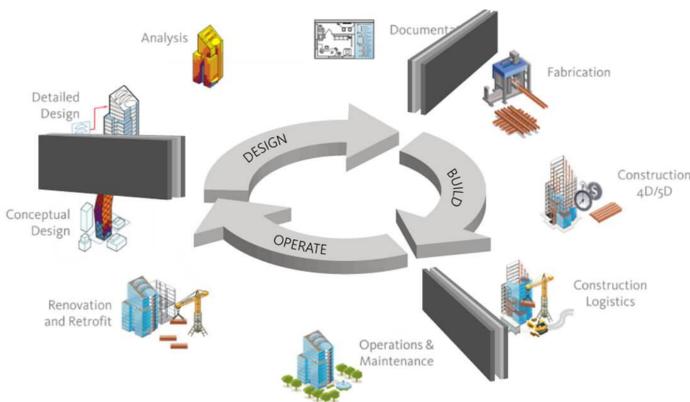




# Asset management, Building Information Management, Systems Engineering

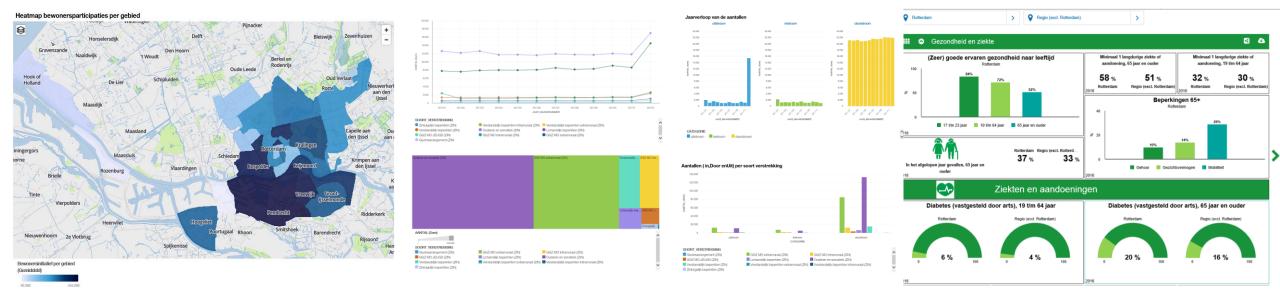
Digital information cycles in City Development and City Management



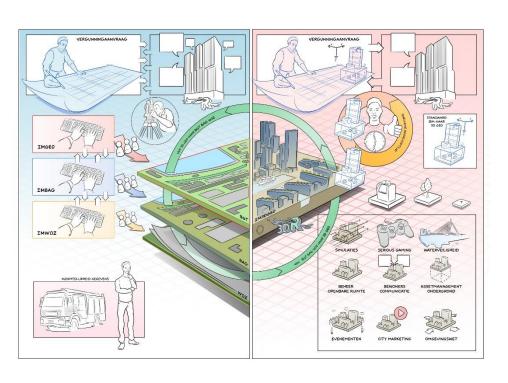


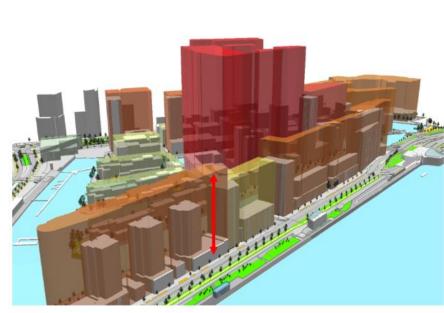
#### Business Intelligence

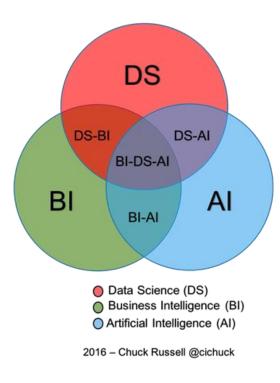
Datacollection, -design, -analysis, -management, -visualisation, ...

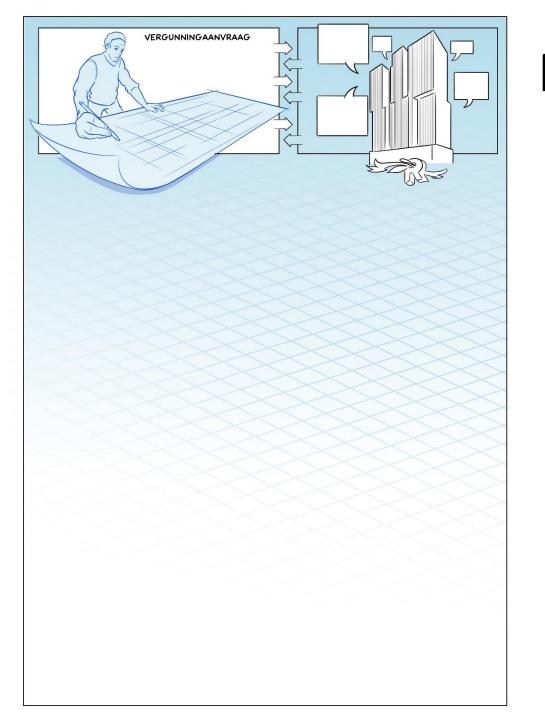


#### Where are we going?



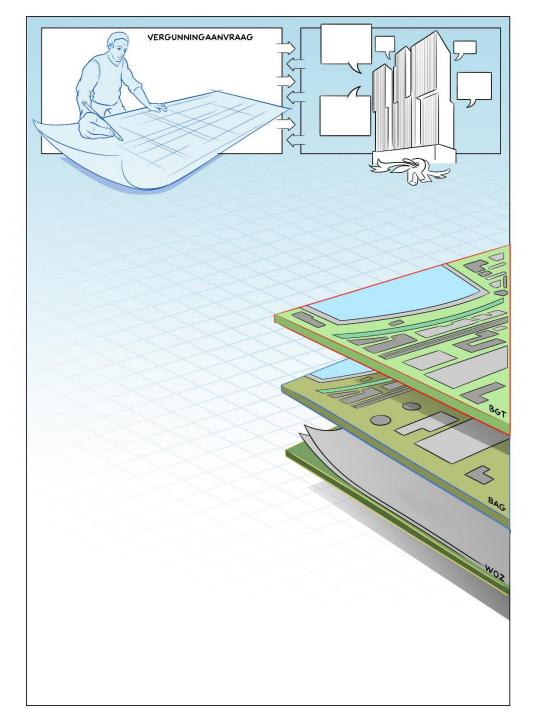




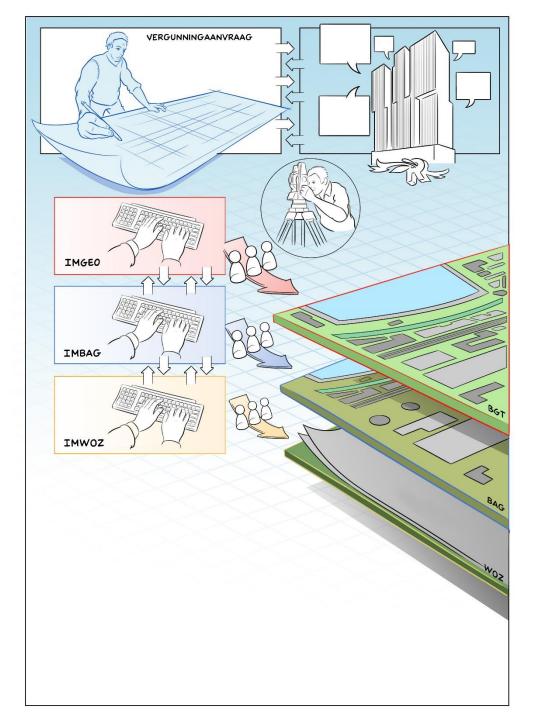


## Rotterdam 3D City Model

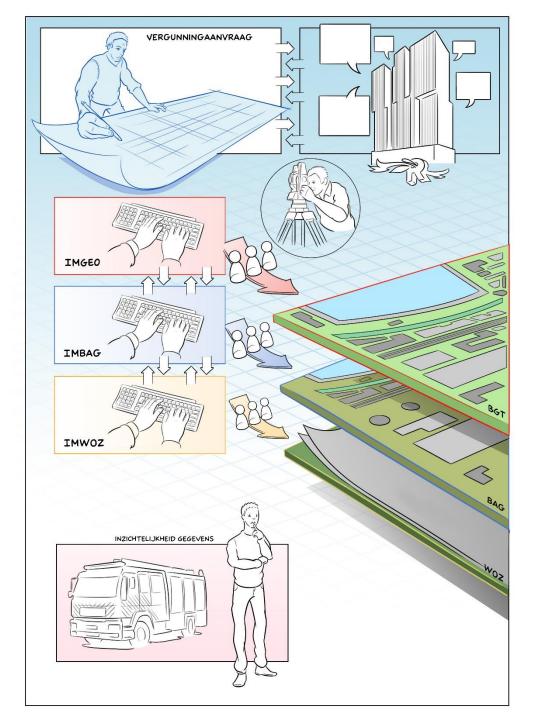




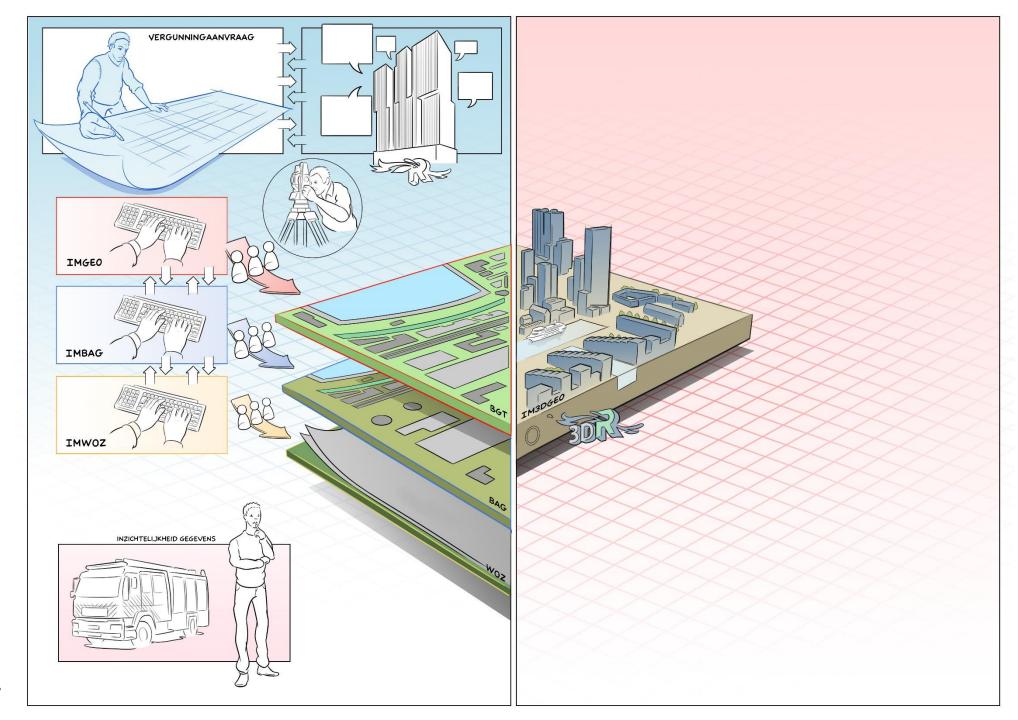




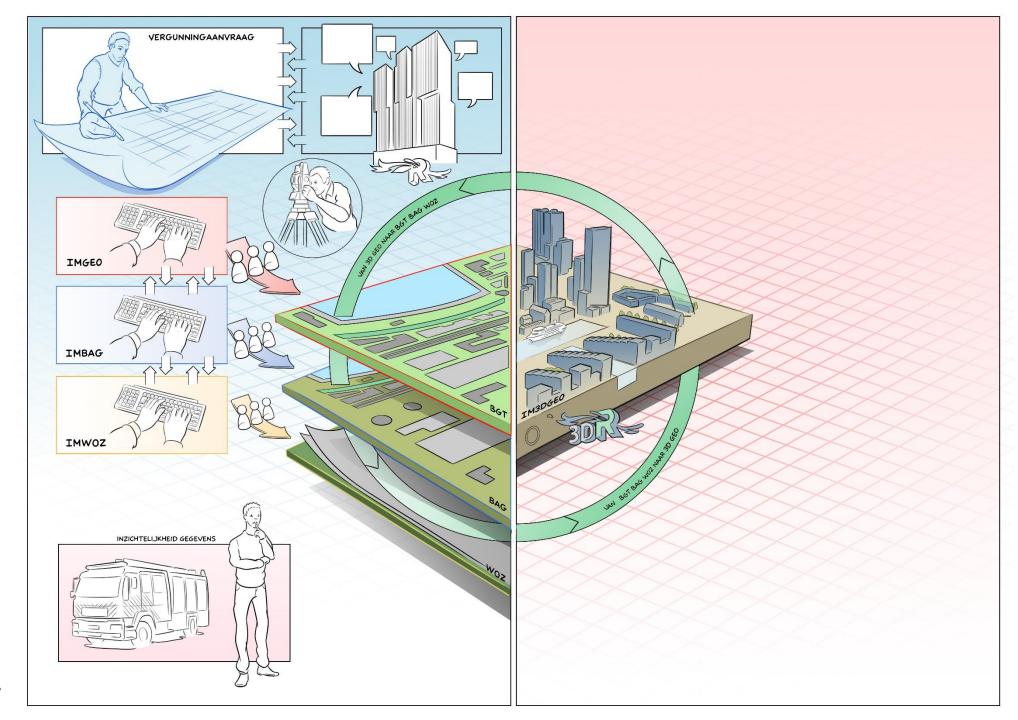




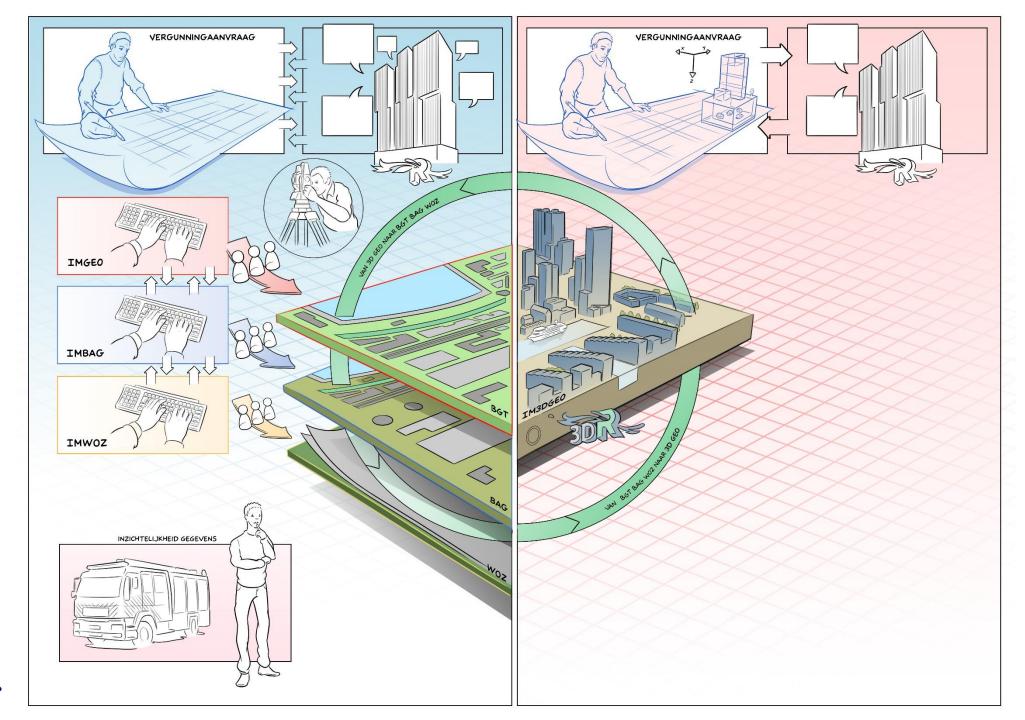




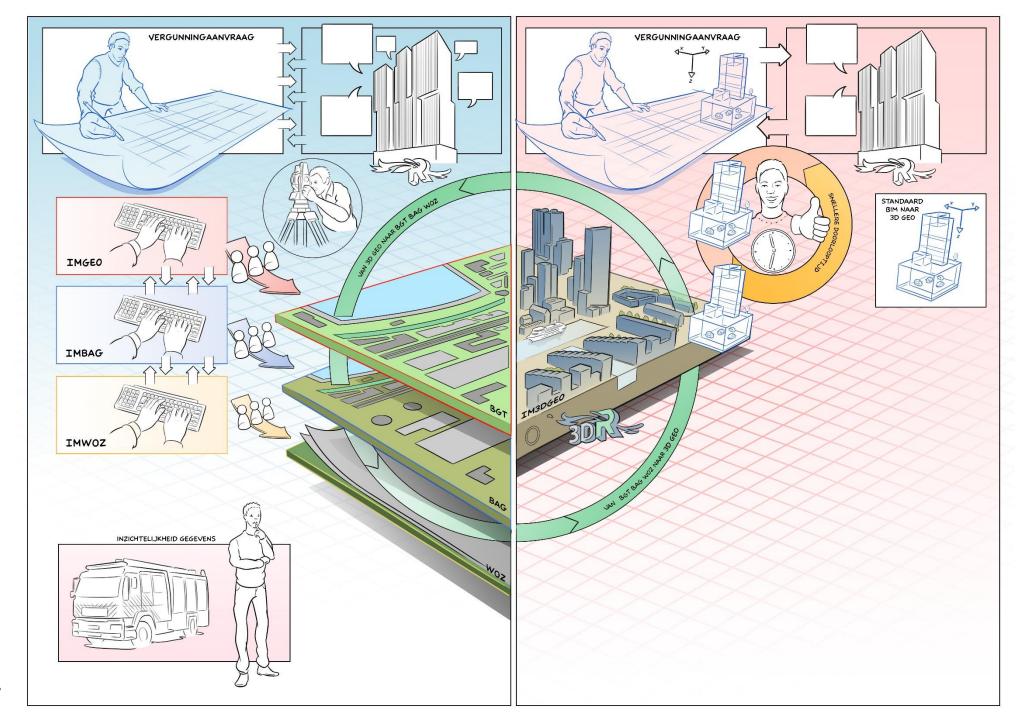




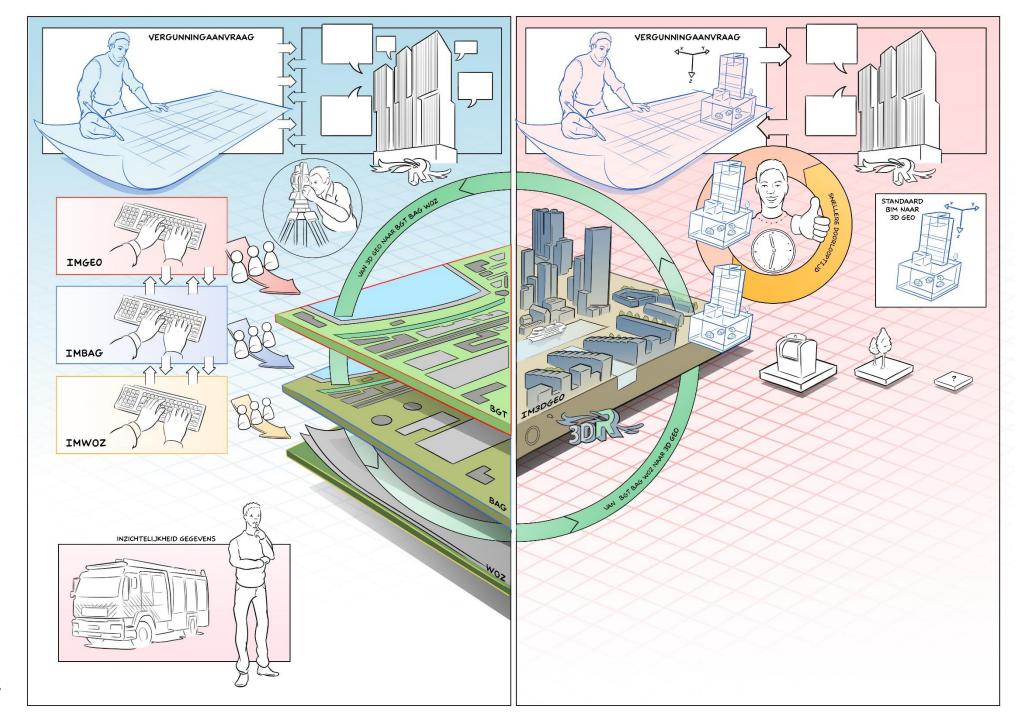




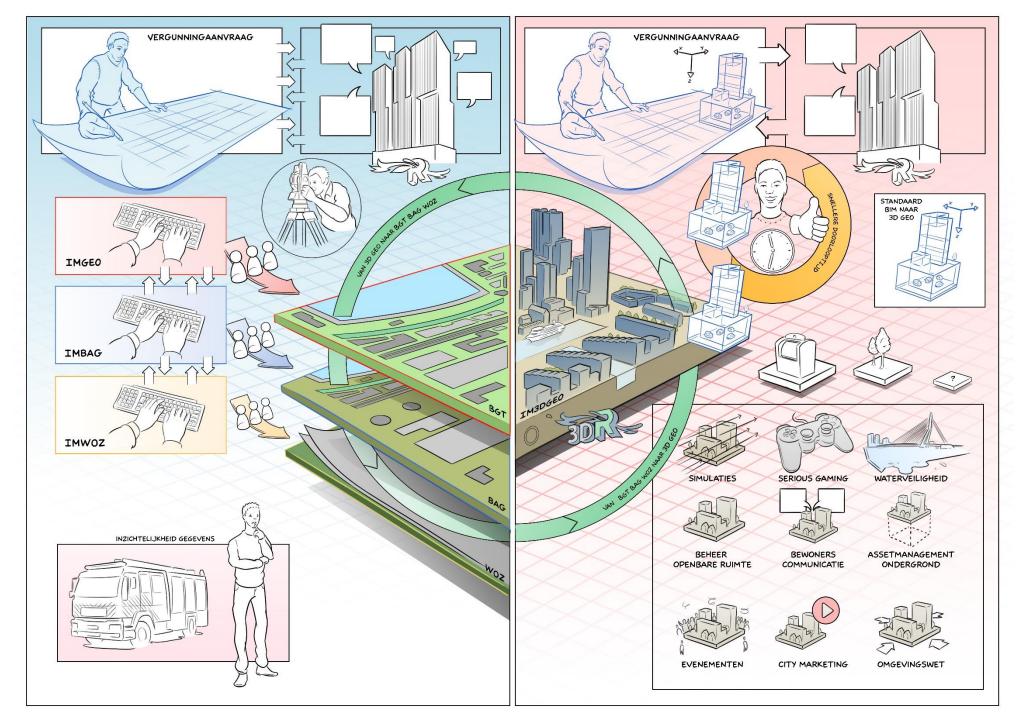








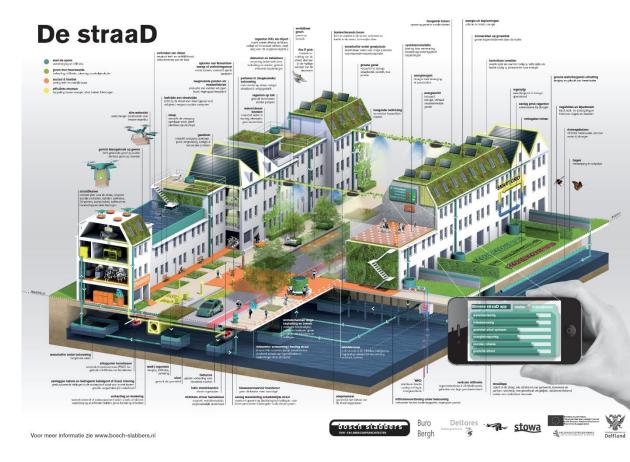






# Asset management, Building Information Management, Systems Engineering





#### Business Intelligence

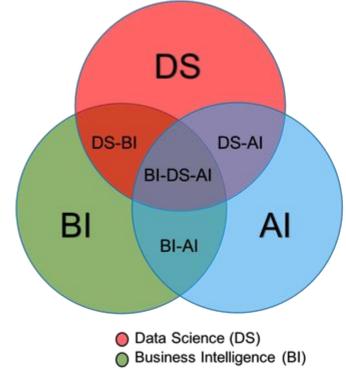
Knowledge driven change management

Data Science

Cloud computing & Selfservice

BI and GIS





O Artificial Intelligence (AI)

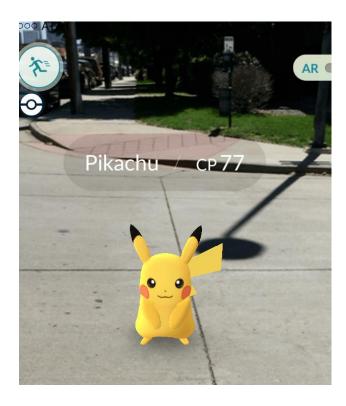
2016 - Chuck Russell @cichuck

Methods/Techniques	Discipline
Unsupervised Machine Learning	Al
Reinforcement Learning	AI
Reporting/Decision Support	ВІ
Multi-Dimensional Analysis	ВІ
Natural Language (Query)	BI-AI
Data Management	BI-DS-AI
Big Data Management	BI-DS-AI
Inferential Statistics	DS
Predictive Modeling	DS
Supervised Machine Learning	DS-AI
Descriptive Statistics	DS-BI
Data Discover/Query	DS-BI
Data Visualization	DS-BI

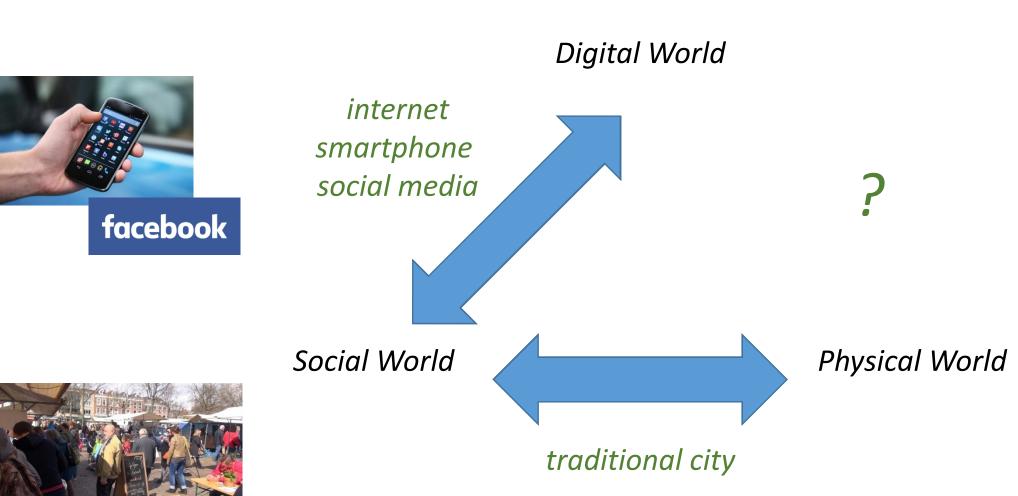
#### Digital City Innovation

An information and communication platform open to all





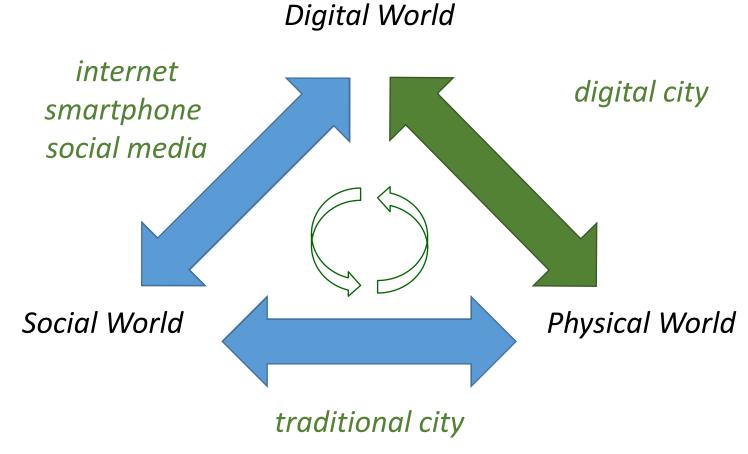
#### Integration of 3 worlds





#### Integration of 3 worlds

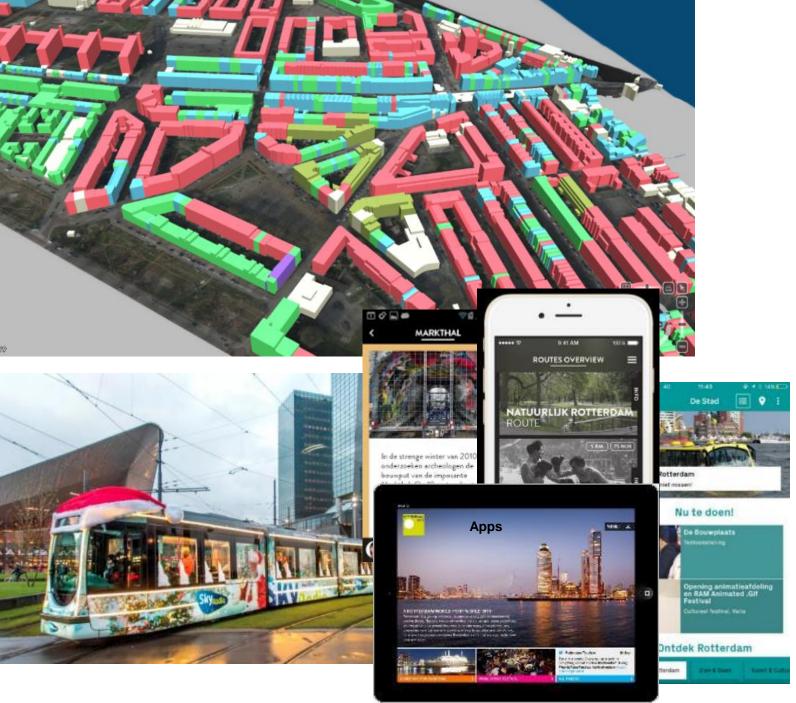








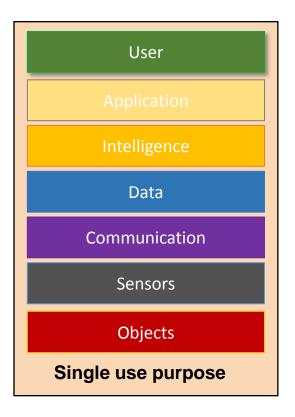


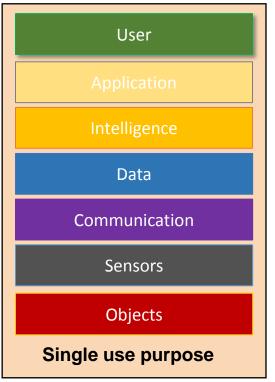


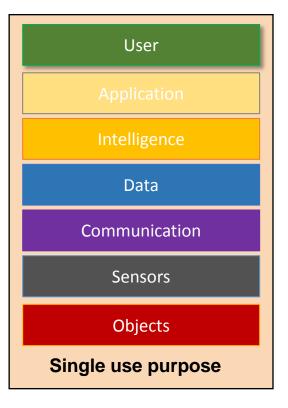




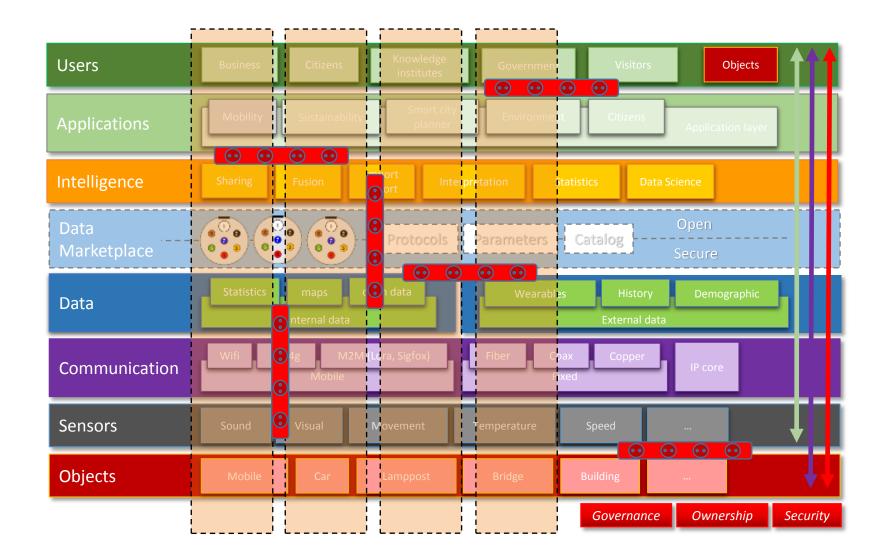
#### From single purpose to integration







#### From single purpose to integration





#### Some of many partners

*Knowledge institutes* Private sector Cities





























































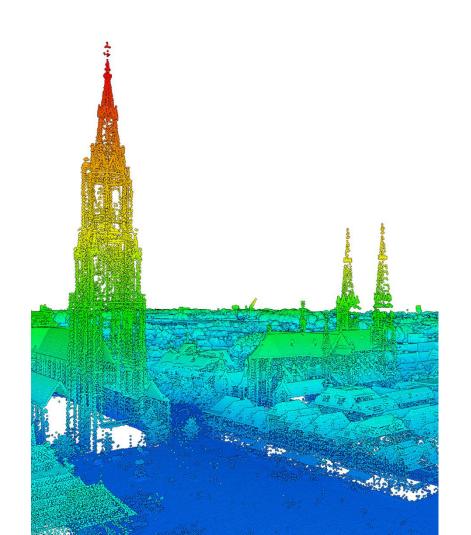








#### More information



The Rotterdam City Model, from innovation to implementation – by Jane Hermans-van Ree @ 3D GeoInfo 2018, October 2<sup>nd</sup>.

Excursion to Rotterdam, October 3<sup>rd</sup>.

#### Digital City Rotterdam

New technologies.
Smart collaborations.

Thank you



