

BIM 2.0

**Građevinske dozvole i
direktna veza s izvedbom**

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DANI ARHITEKATA 7

ZADAR TRAVANJ 2023



ESTONIJA


- 1,3 milijuna stanovnika
- IT sektor 7% BDP-a
- **99% javnih usluga su online**
- Digitalni potpisi štede 2% BDP-a
- Online glasanje na izborima od 2007. godine
- Pokretanje tvrtke u roku par sati
- 100% digitalno izdavanje građevinskih dozvola
- *The most advanced digital society in the world.* – WIRED magazine



1) 12,000

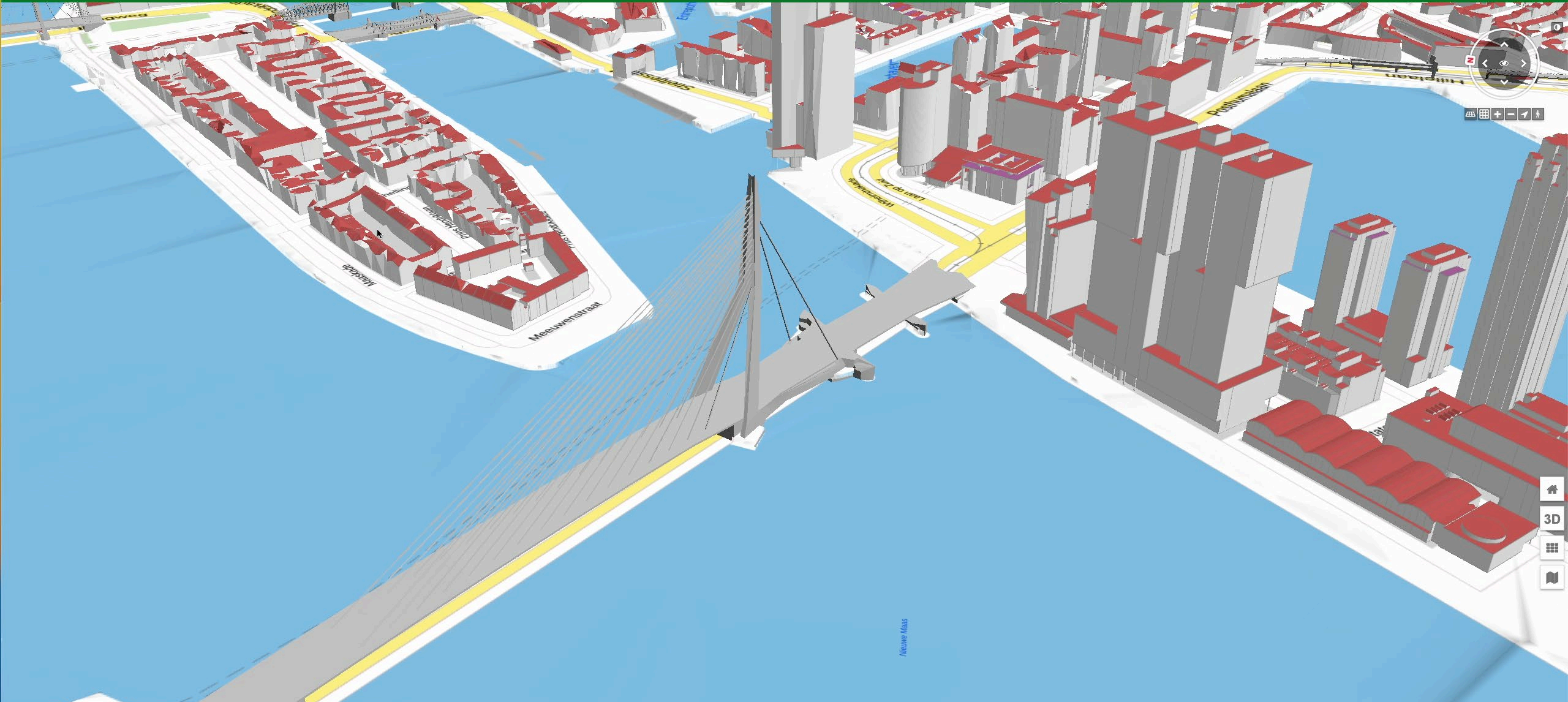
2) %?

1) 12,000

2) 100% 

Koraci

- Digital twin cijele države (LOD 1)
- Razvoj klasifikacije (standarda) –sporazum Estonije, Češke i Danske – ožujak 2020. godine
 - Dijeljeno vlasništvo i odgovornost upravljanja i razvoja strategije
 - Besplatna usluga za građane
 - Intelektualno vlasništvo, copyright i svi ostali podaci se dijele bez ograničenja
 - Model zajedničkog upravljanja implementacijom isprobanih međunarodnih standarda (ICMS, IPMS, IFRS)



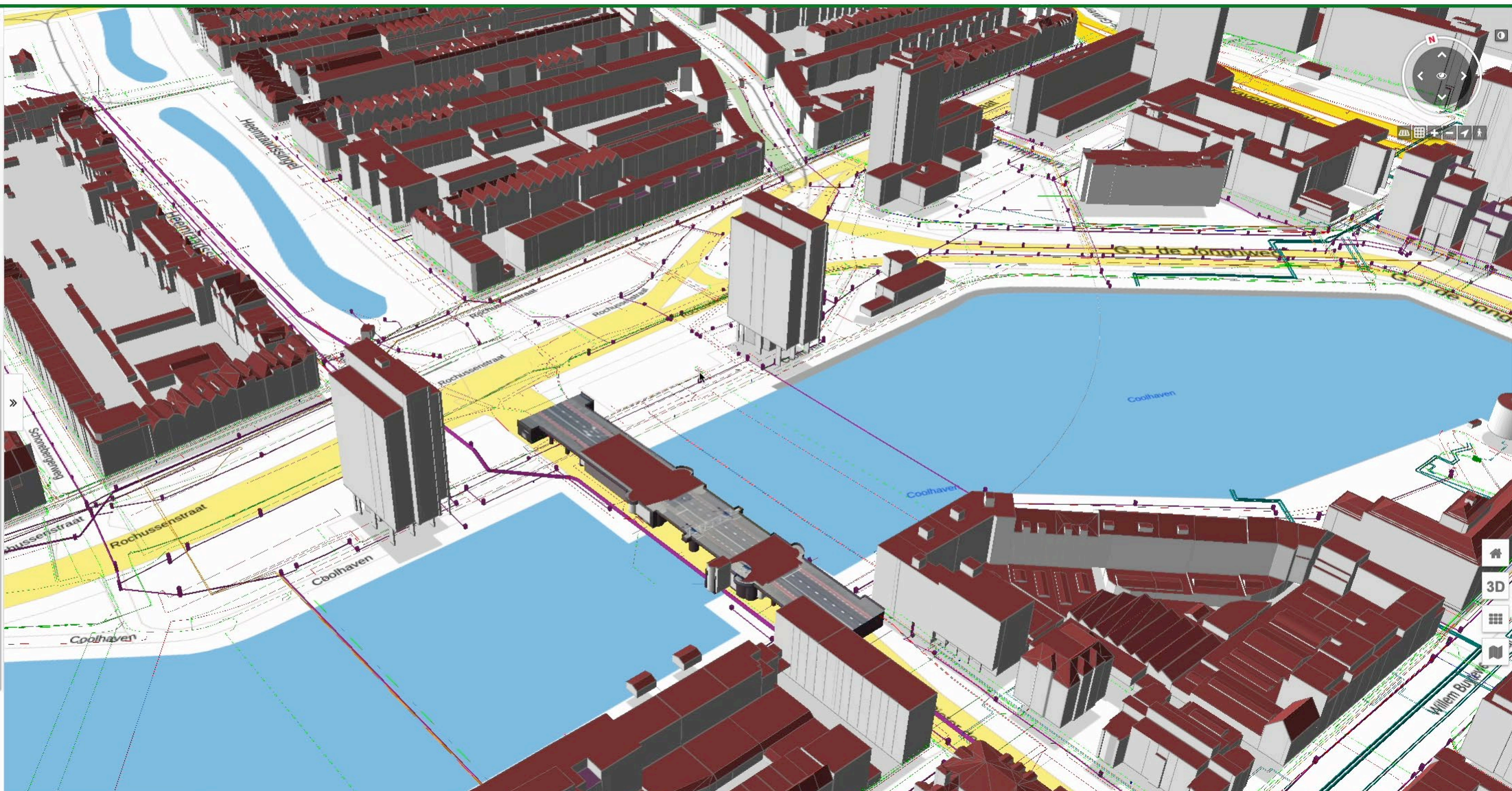
Content

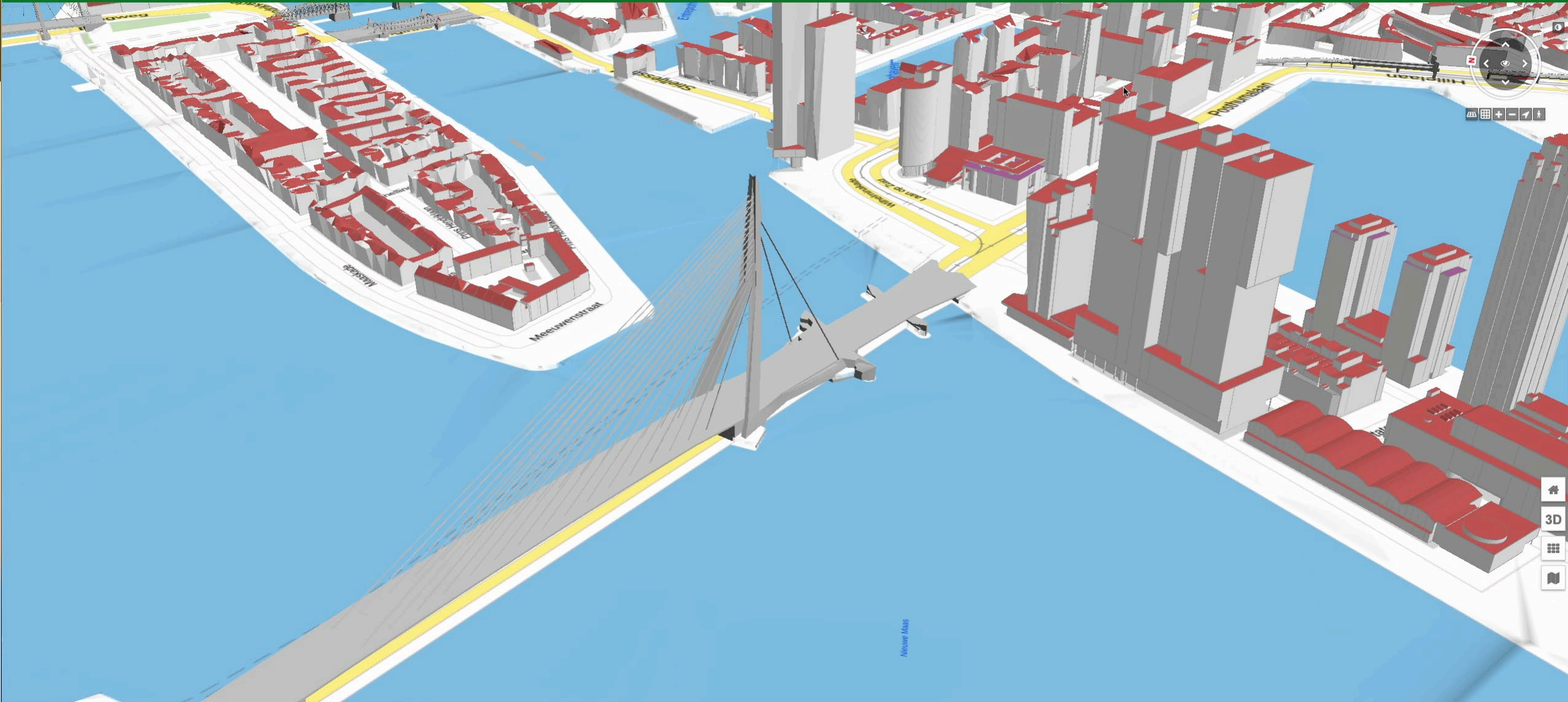
- Others
- City heating
- City heating
- Drinking water
- Drinking water
- Telecom
- Telecom
- Electricity
- Electricity
- Casing
- Casing
- Ondergrondse objecten

BIM models

- Aelbrechtskade
- Vennipertoren
- Zouwepad

Create PDF
Create Link
Reset settings







The checks

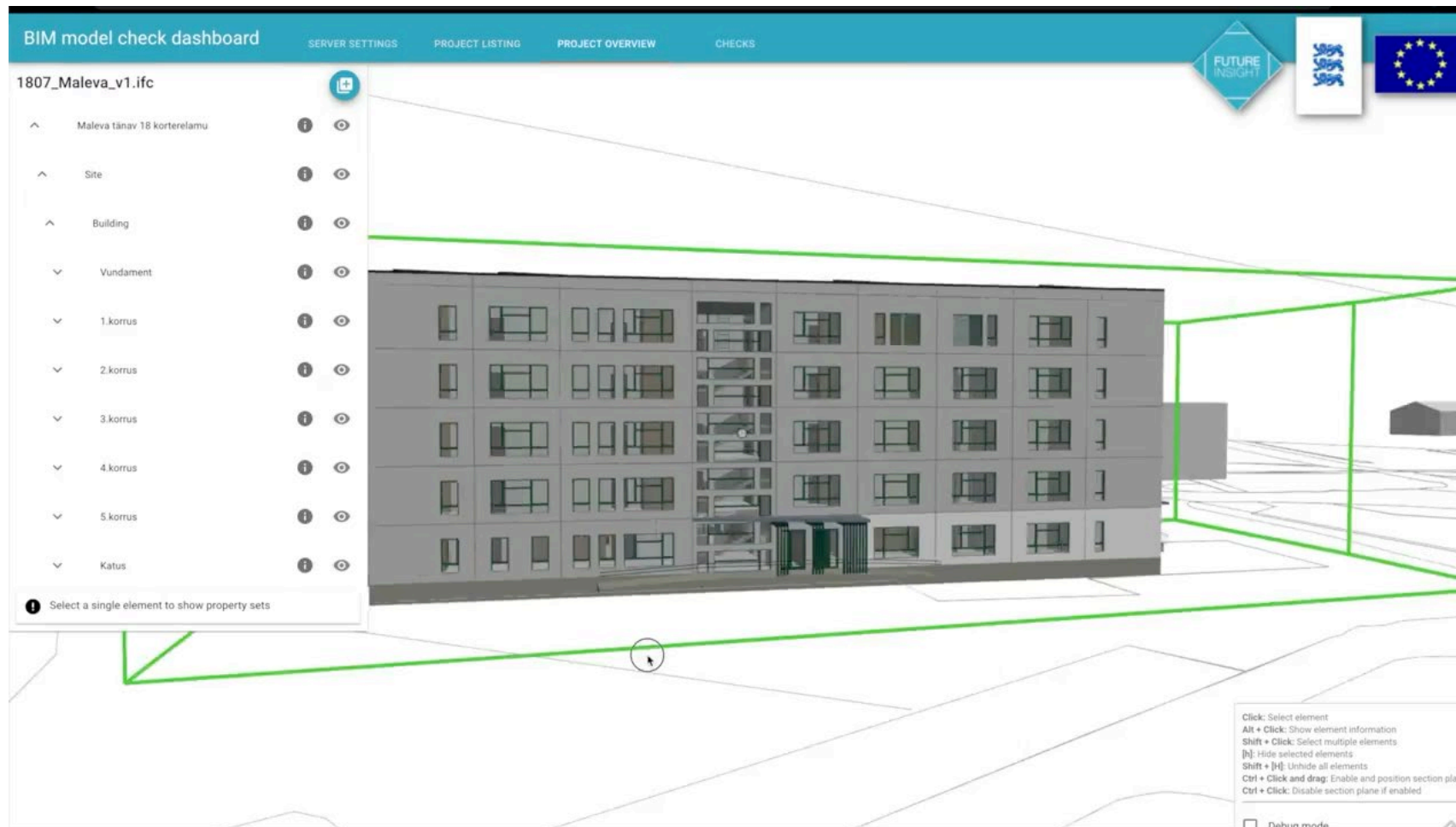
01. Building maximum height
02. Evacuation routes
03. Facade materials
04. Maximum ground area
05. Location in bounding box
06. Safety barriers / fall protection
07. Spacing minimum door width
08. Maximum storeys above ground





Integration Building Registry

The screenshot displays a web-based BIM validation interface. At the top, there is a navigation bar with the user name 'Eesnimi Perekonnanimi Asutuse Nimi', a search bar 'Teenuste otsing', language options 'In English' and 'Ha rusekom', and a 'Väljun' (Logout) button. Below the navigation bar is a progress bar with four stages: 'project data', 'bim validation' (the current stage), 'payment', and 'confirm'. The main area features a 3D perspective view of a multi-story building model. The building's interior is highlighted in green, and a red error message is overlaid at the bottom of the view. The error message reads: 'Evacuation route report false negative. Distance to nearest fire door is more than 30 meters.' To the left of the error message is a red warning icon, and to the right are navigation arrows. A vertical sidebar on the left side of the interface contains various icons for navigation, including 'E-Ditus', 'Infoportaal', 'Minu ehitised', 'Dokumendid', 'Keskkond', 'Võrgud', 'Ehitustegemine', 'Järelevalve', 'Haldus', 'Tugi', 'Seaded', and 'Suhetlus'.



Design for Manufacture and Assembly (DfMA)

Zašto DfMA?

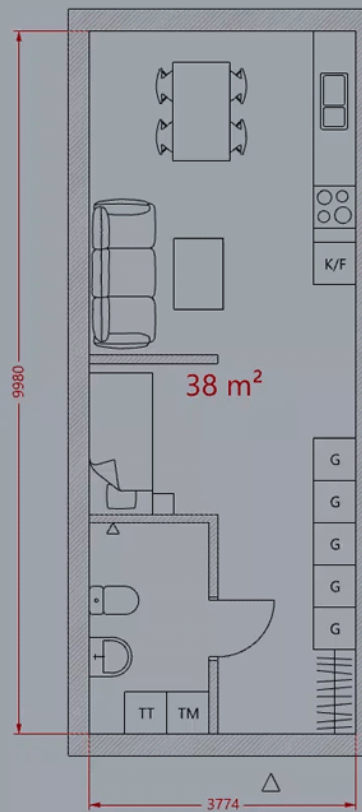
1. Niska produktivnost građevinske industrije
2. Operativni zastoji (ovisnost o vremenskim prilikama i drugim vanjskim faktorima)
3. Nedostatak radne snage

Rješenje

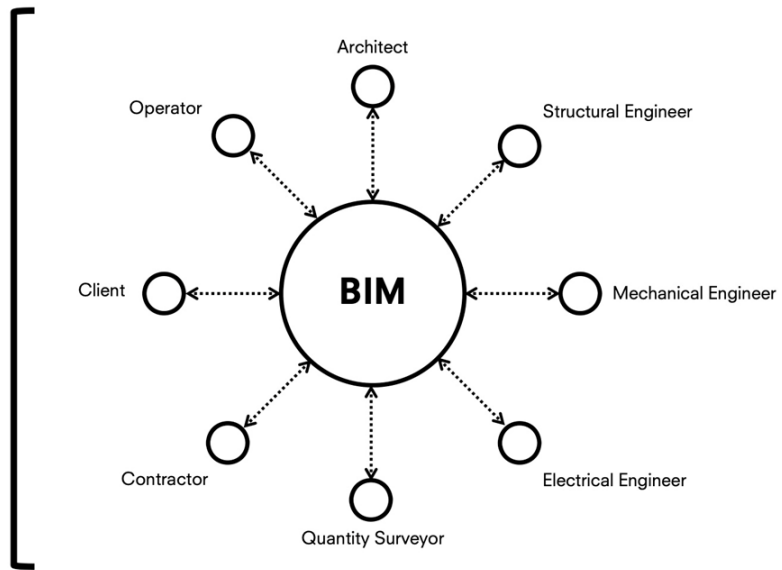
1. Prefabricirana proizvodnja povezana s alatima za projektiranje
2. Prve primjene – case studies*:
 1. Cca. 25% uštede u ukupnim troškovima
 2. 40-90% radova izvedeno u tvornicama (kvaliteta, brzina izvedbe)

* Case studies: Circle Hospital (Reading), Heathrow Terminal 3 FC Centre (London), Optimum Switch Data Centre, EcoCanopy Primary School Projects...

Finch

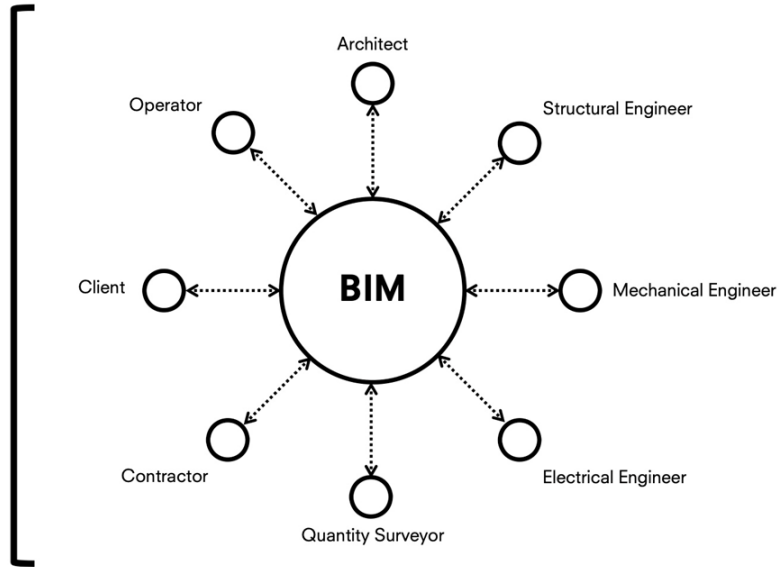


Today =

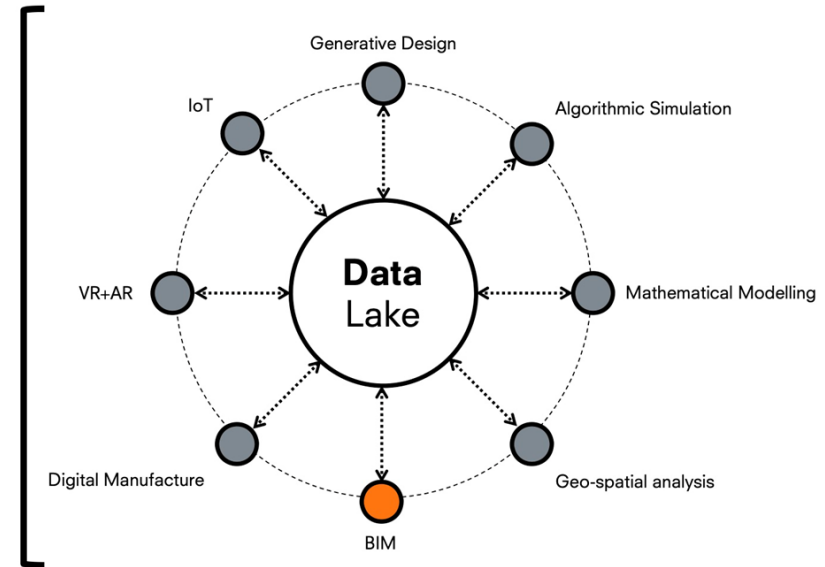


Izvor: Jamie Johnston *Disruption is almost inevitable: The question is how we as an industry choose to respond*, BIM Show Live 2019

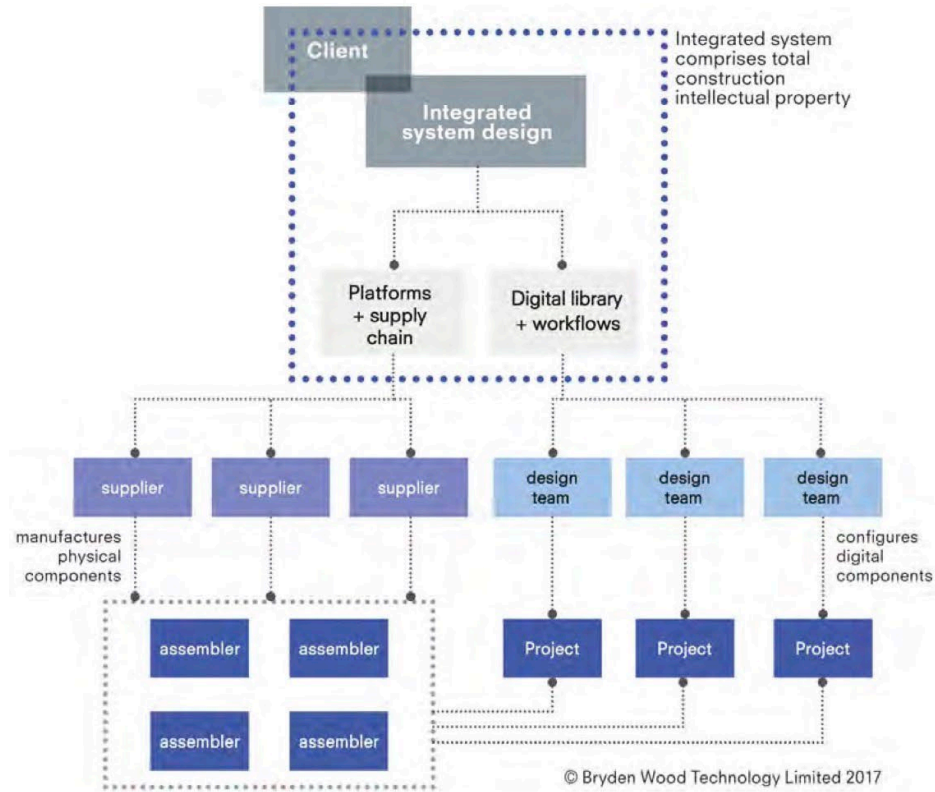
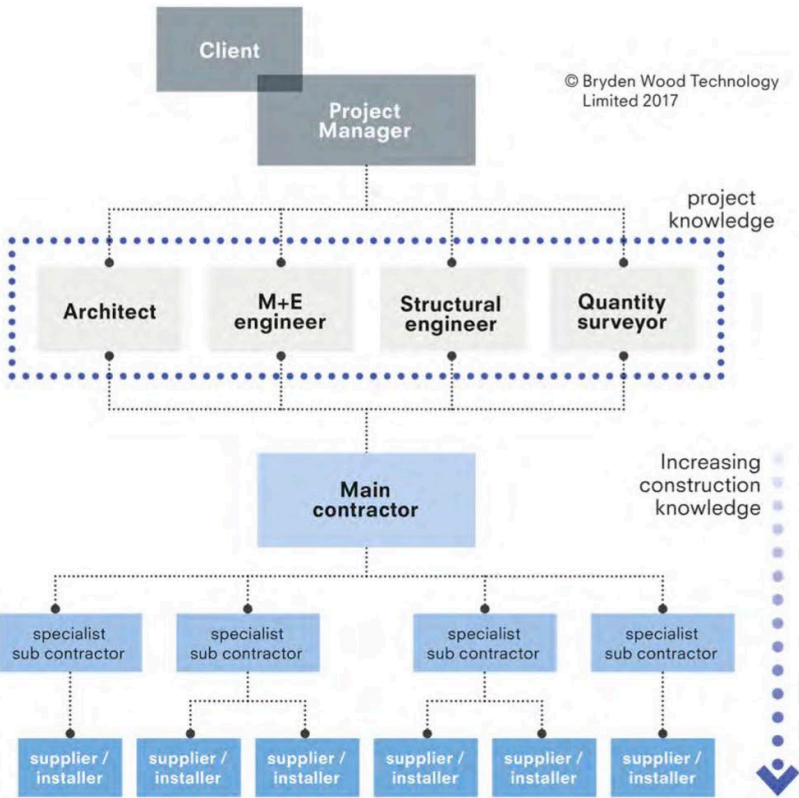
Today =



Automated Design =



Izvor: Jamie Johnston *Disruption is almost inevitable: The question is how we as an industry choose to respond*, BIM Show Live 2019



Izvor: Jamie Johnston *Disruption is almost inevitable: The question is how we as an industry choose to respond*, BIM Show Live 2019



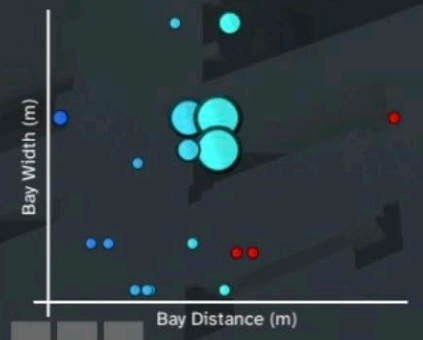
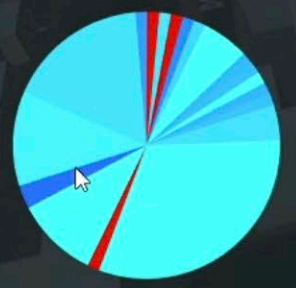
Bryden Wood



Analytics

System Platforms

Platforms (Category 3)



Design a Building

South Block

Apartments Podium Basement

Corridor
 Load Double load Width (m) 1.6

Core
 Core alignment Right Core Face Corridor

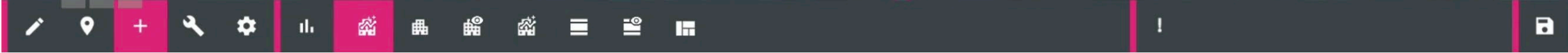
Core Depth (m) 4.8 Core Width (m) 7

Floors

0-6	3.2	7.2	7.2	-
7-8	3.2	7.2	7.2	-

Apartment Mix (%)
 2b4p 100

- Draw Add setback
- Move Rotate
- Generate
- Refresh





JAMI CRESSER-BROWN

Director, Creative Technologies, Bryden Wood



Hvala! 😊

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