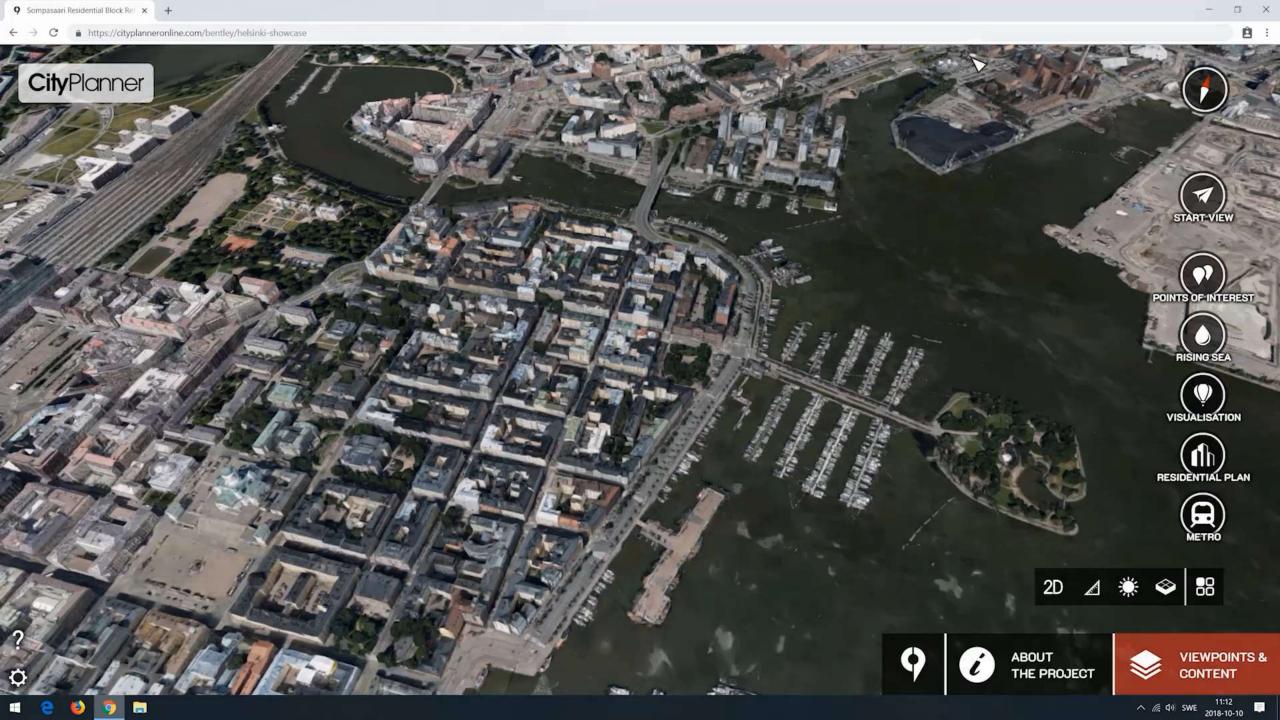


Industrializing Project Delivery...

Automation Constructioneering Collaborative Digital Workflows ConceptioneeringComprehensive Status Reviews Continuous Surveying of Digital Context Offsite ManufacturingComponents Center Repeatability Digital Twin

Infrastructure can't become Intelligent/Smart unless it is Digital!!



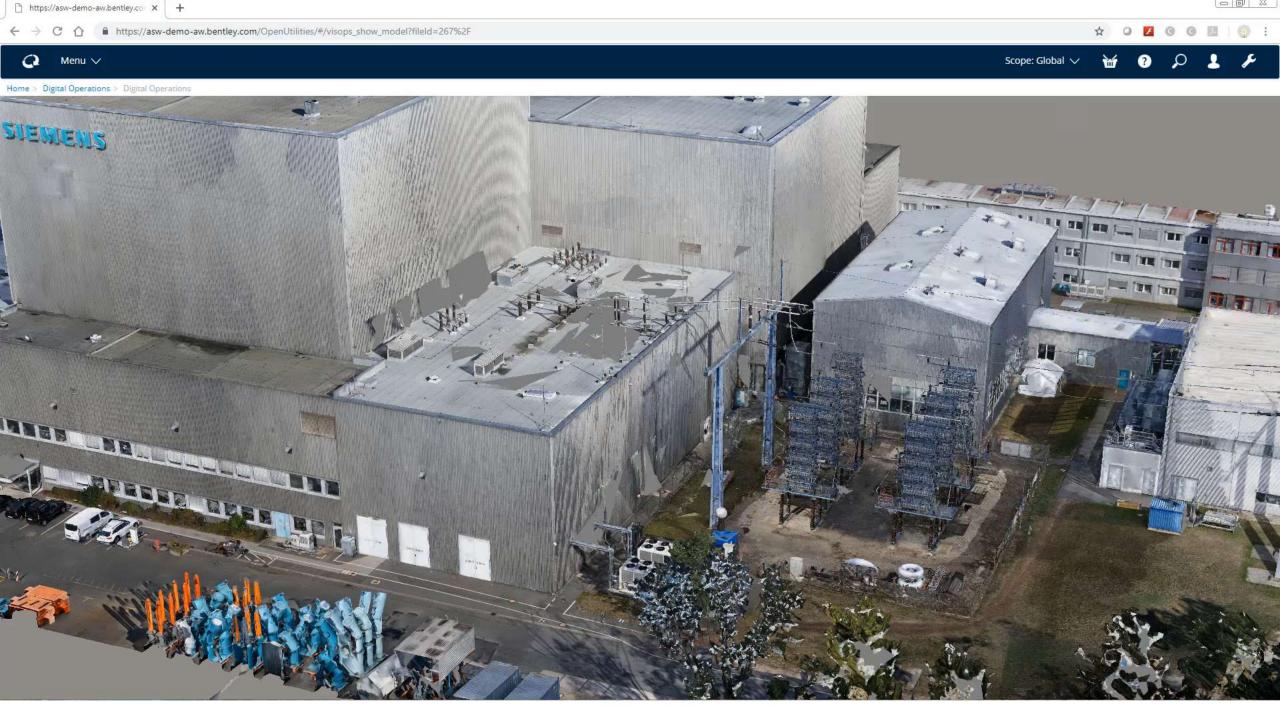




May 2018	lese so	Jan 2019				Jan 2020	1000		1.0	Jan 2021	1410			Jan 2022			
Jul	Oct		Apr	Jul	Oct		Apr	Jul	Oct		Apr	Jul	Oct		Apr	Jul	Oct
wk 37	wk 50	wk 63	wk 76	wk 89	wk 102	wk 115	wk 128	wk 141	wk 155	wk 168	wk 181	wk 194	wk 207	wk 220	wk 233	wk 246	wk 259







Immersive Visibility

Continuous and Comprehensive Status Review







Analytics Visibility

Reality Modeling





Connected Data Environment



Digital Alignment

Change Synchronization

Engineering and Construction Automation...

- Must be based on digital representation of existing reality
- All steps of the Infrastructure lifecycle involved
- Infrastructure Asset owner involved before and after the construction
- Digital Twin(ning) is a process, not a one time-event
- Process is as strong as it's weakest link
- Pay-off is biggest when all steps in the process collaborate and benefit:
 Exiting situation => Planning => Design => Construction => Hand Over
 => Asset Management
- Go Digital on your Intelligent Infrastructure!