Software Tools Supporting Advanced Design Requirements for Digital Twins

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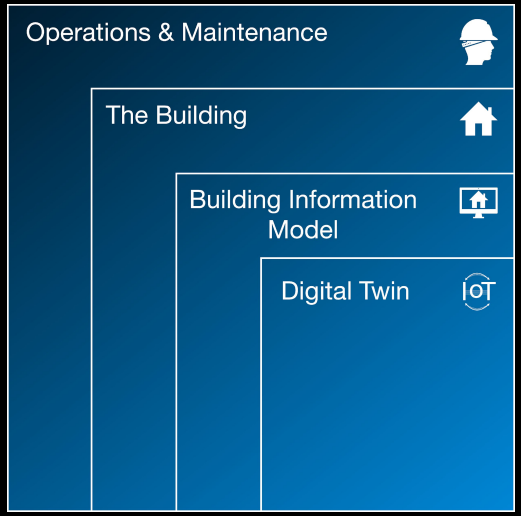
A Digital Twin in the Built Environment

- How does the DT fit into a BIM process
- Who is designing it
- How do we support this effort



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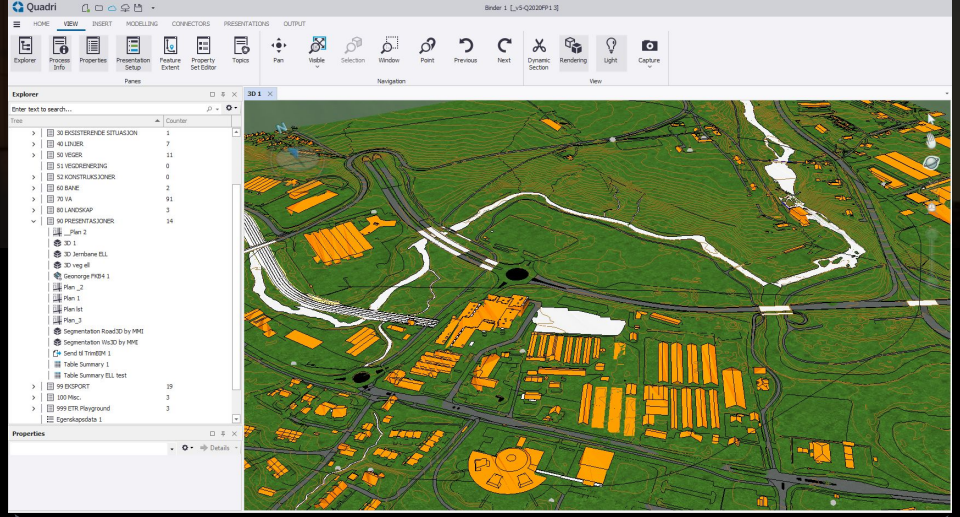
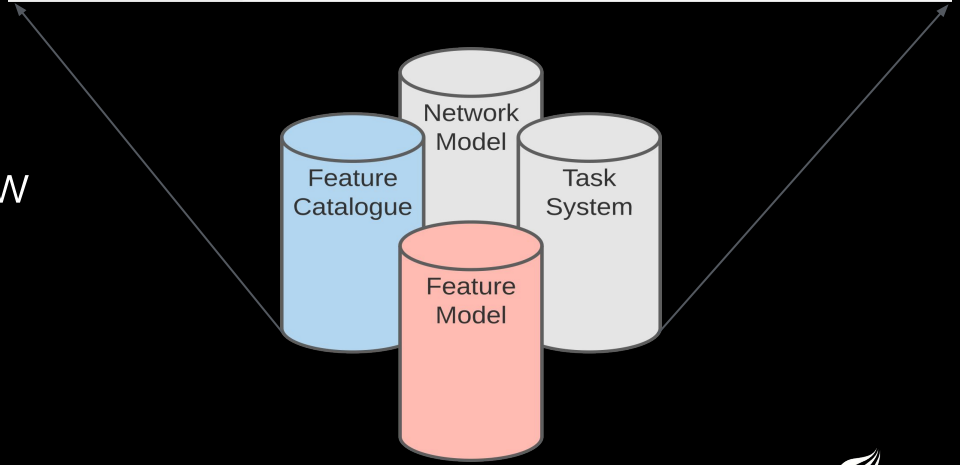
A Digital Twin for Infrastructure



Four Key Pillars:

- *Feature Catalogue* is the Object Dictionary for the model
- *Feature Model* represents instantiated objects
- *Task System* represents workflow
- *Network Model* represents infrastructure topology



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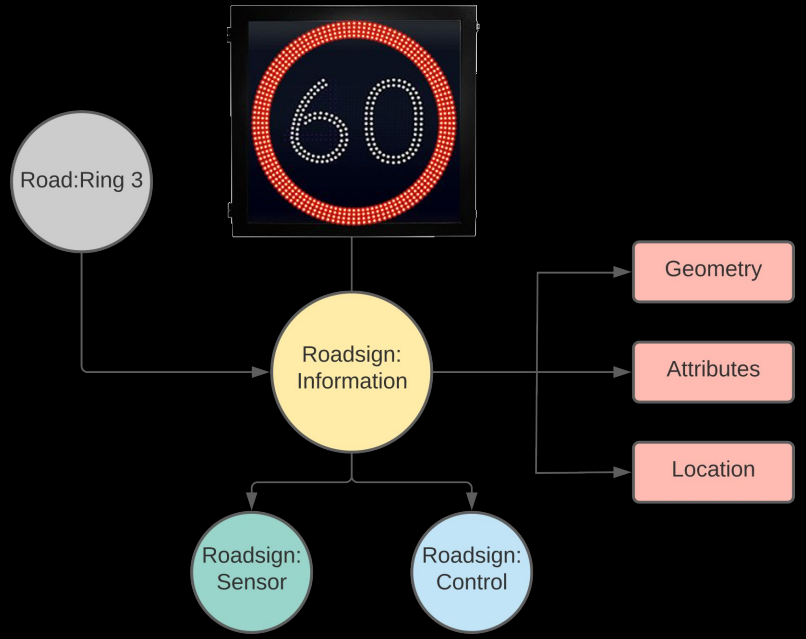
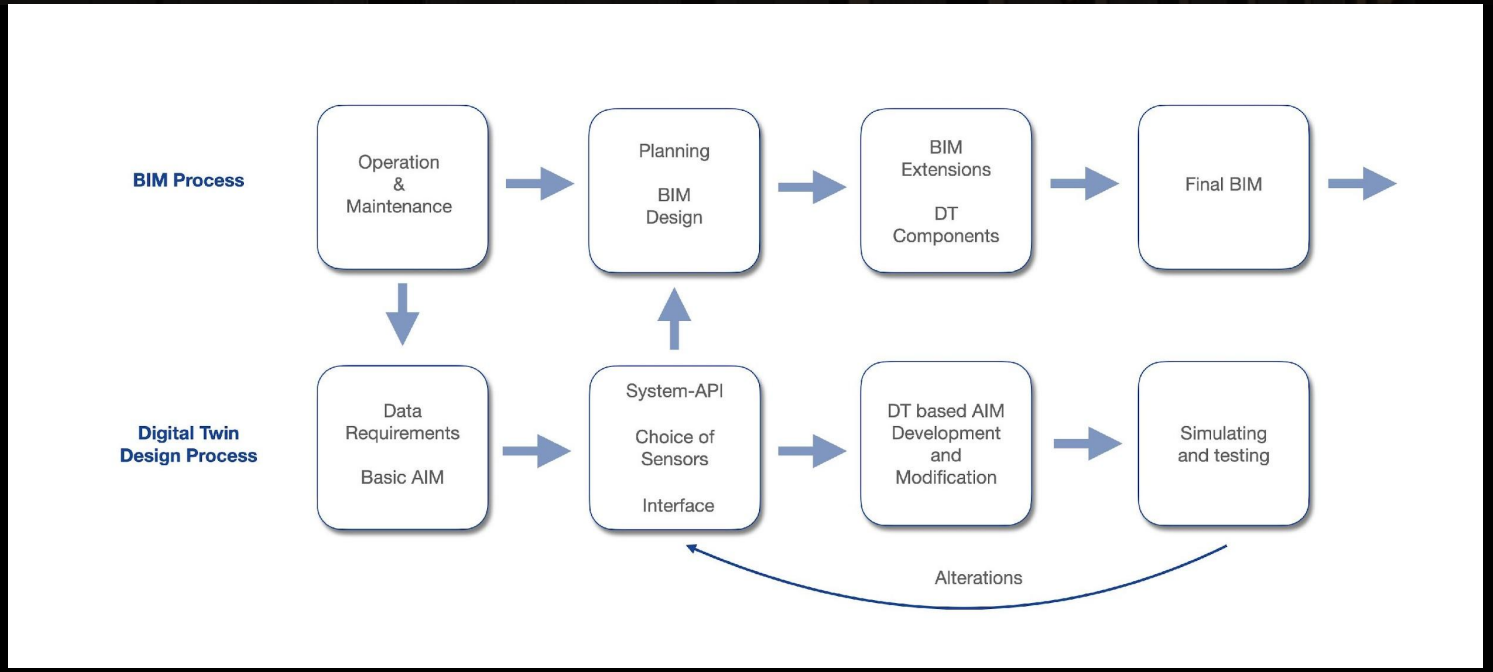
Design Example: Digital Signage

- Design requirements for Digital Twin:
- Manufacturing data (geometry, materials, machining)
- Information to be displayed
- Geographical location
- Position along road network
- IoT Sensor and Control Data



Design Method Within a BIM Environment



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