

Connecting the urban environment for improving city resilience & liveability...

Combining data analytics (ML/AI), IoT, urban planning, and engineering into a comprehensive analysis of the transportation of people, goods and materials.

SITUATION & CHALLENGE

At AFRY, the digitalization in urban environment is perceived as a priority in the main network industries : Rail, road, water and electricity. This encompasses the processes by which digital technologies and information can be used by business sectors and public administrations to modify their organizational models, improve their performance and create new value.

SERVICE & APPROACH

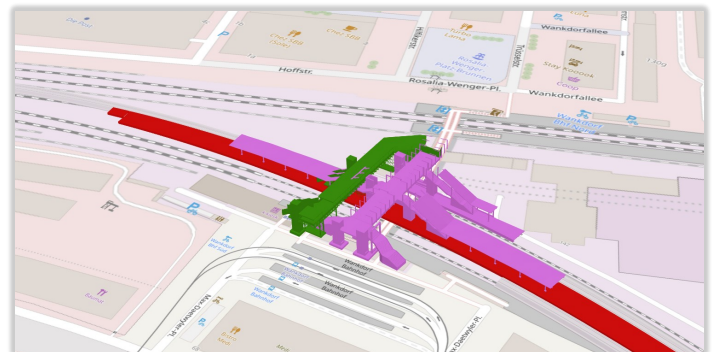
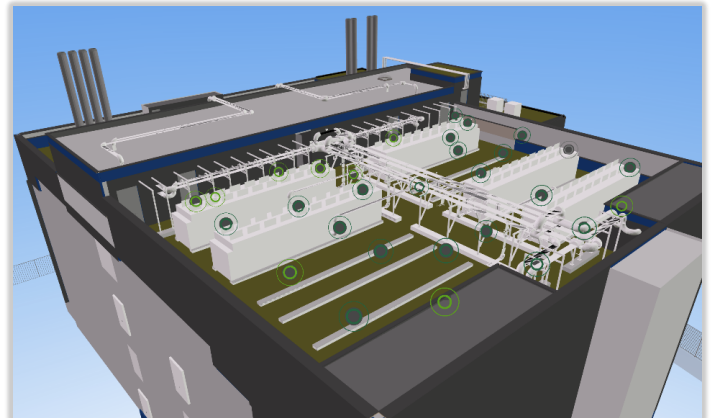
- Providing the possibility to load/read GIS files comprising city networks of rails, roads, waste & water.
- BIM models of constructions can be loaded on top of the GIS model, with embedded features.
- Data can be dashboarded, collected and engineered, then used for predictive modelling (ML).
- The ML models can thus be used to (1) detecting correlations and causalities; (2) emerging hidden patterns; (3) testing intervention hypotheses and predict scenarios; and (4) deploying engineering and artificial intelligence tools for planning.

IMPACT & ADDED VALUE

- Rail Operators (SBB) and Roads Offices (ASTRA) can ensure safe mobility. Grid Operators (Swissgrid, BKW, etc.) provide a sustainable energy supply. Cities can predict degradation of the public infrastructure, e.g. leakage of the drinkable water network, blockages in waste water channels, etc.

E-DAP: the *end-to-end* data platform

A cloud-hosted infrastructure for the treatment of plant data: from IoT sensing, through data engineering, dashboarding, ML/AI, digital twin, to insight.



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Advanced Modelling &
Simulation: [Link](#)

Browse use-case video : <https://youtu.be/OzVVJFuWunQ>

