

Digital Industry

Collaborative Design-Build-Operate Ecosystem

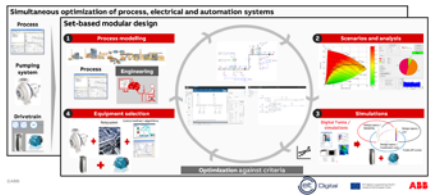
PRODUCT LAUNCH

PARTNERS: ABB Oy (Finland), Aalto University (Finland), Semantum (Finland)

Collaborative Design-Build-Operate Ecosystem

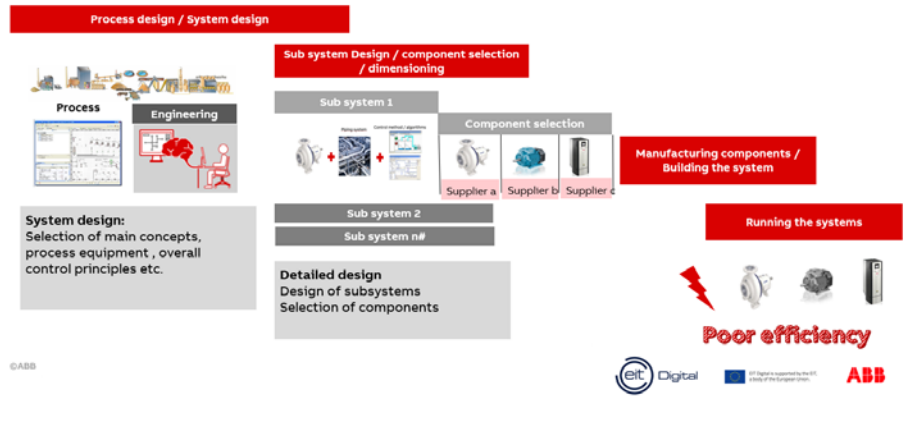
New way: Collaborative Design-Build-Operate ecosystem

Digital twins enable simulation for optimal system and component design



Why traditional way of working is not good enough?

Total system design rigid and inefficient due to system silos and stacking of the safety margins



Digital transformation

Collaborative Design-Build-Operate Ecosystem provides a fully digital option for traditional design process of industrial plants. Partners can join a cloud-based environment to work together when designing plants.

When designing and building large industrial plants, the result gets easily inefficient due to for example oversized motors and frequency converters. If the industrial plant could be simulated as a whole system before implementation, the components could be selected properly. This leads to savings in costs. Collaborative Design-Build-Operate Ecosystem provides a cloud-based platform for this kind of collaboration and simulation between several partners.

Various configurations could be easily simulated together with different simulators, and the optimum solution is found to make the plant efficient.

Competitive Advantages

- New innovative way to design and build industrial plants by using digital twins
- Simulation enables savings in costs
- Cloud-based environment enables collaborative working regardless of place or time

Target Markets

- OEMs and plant operators
- All industries globally

Status/ Traction

- First pilot tests ongoing
- Discussion about the first commercial pilot ongoing
- Technical development ongoing with a partner called Semantum

Road Map

2020

- Finalize the MVP and initiate first commercial pilots

From 2021 onwards

- Scale up and further development based on customer pilots' feedback

Leveraged Technologies

Component level Digital Twin technologies, hybrid dynamic process and electrical system simulators and their integration based on open standards (e.g. FMI, OPC UA, AutomationML).

Contact



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Collaborative Design- Build-Operate Ecosystem

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