

Smart Digital Architecture

Developing the best-in-class digital architecture in greenfield projects

ET world

ET
Software Level

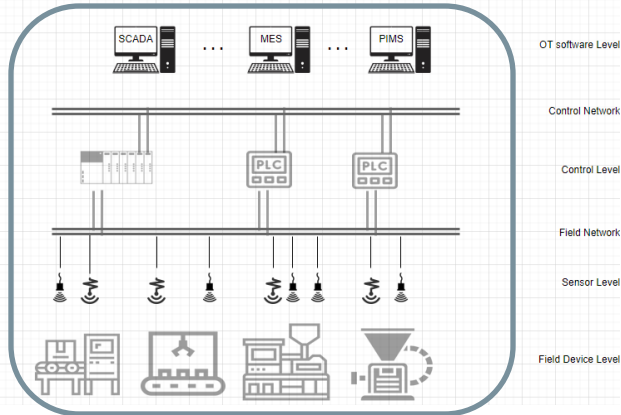


IT world

IT
Software Level

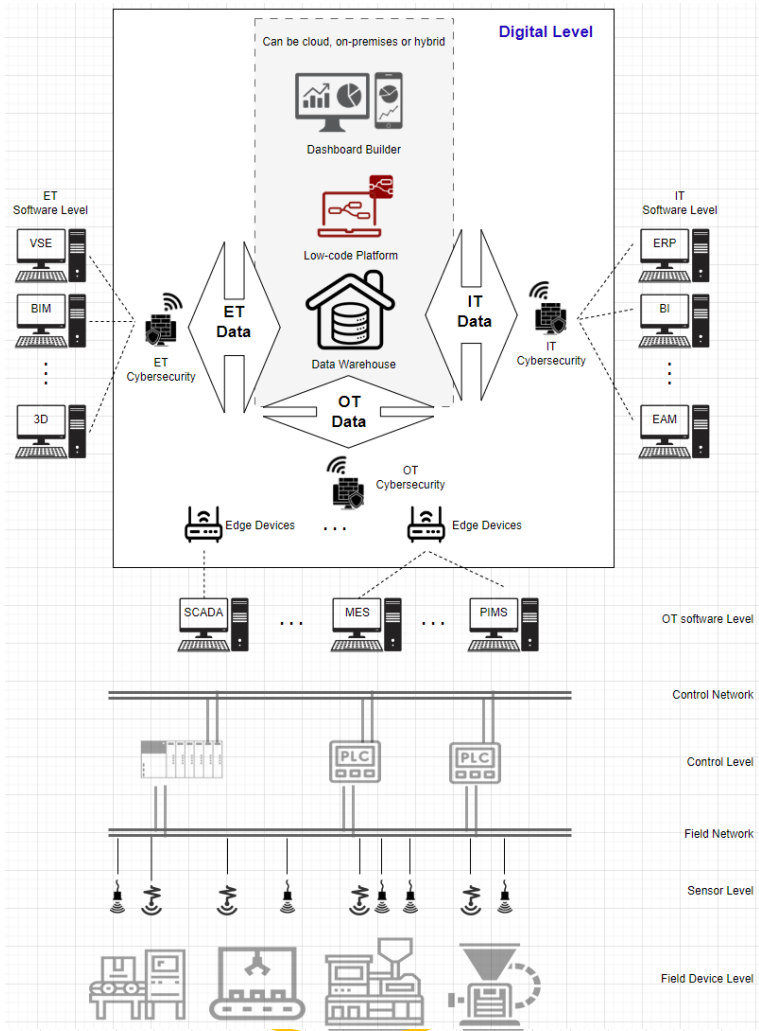


OT world



Technological silos

In conventional engineering, ET (engineering), OT (operational) and IT data and systems are separated, and these 3 worlds are not designed to communicate with each other. This makes digital development slow and expensive. This also results in poor decisions and inefficient processes.



Bridging the digital gap

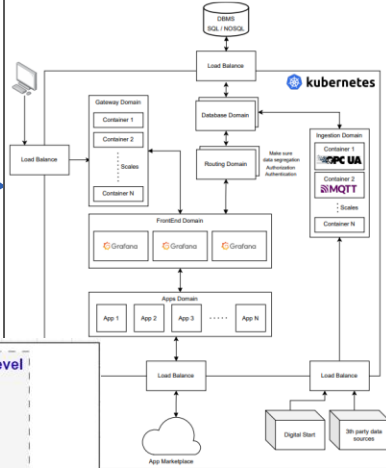
Advances in technology have made it possible to connect these three worlds, ET, OT and IT, and all the systems together.

This establishes a “single source of truth” improving data and information quality and enables more intelligent solutions and incisive decisions.

Software architecture

Key requisite is to get the interconnected hardware infrastructure done correctly. The software definitions, the database plan and many other strategies must also meet the efficiency requirements of the entire system.

Software architecture plan



Digital Level

Can be cloud, on-premises or hybrid



Dashboard Builder



Low-code Platform



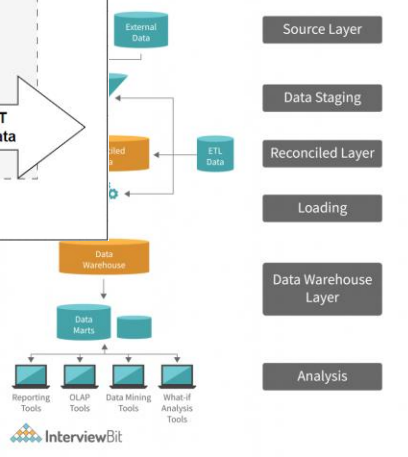
Data Warehouse

ET Data

IT Data


OT Data

Data warehouse plan



CRITERIA FOR THE BEST-IN-CLASS DIGITAL ARCHITECTURE

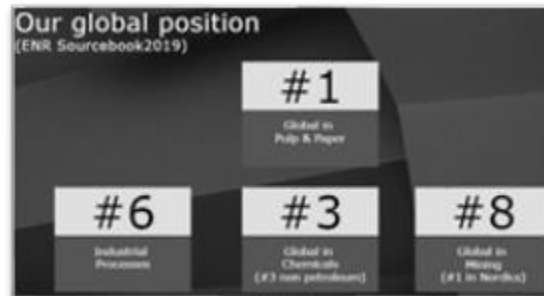
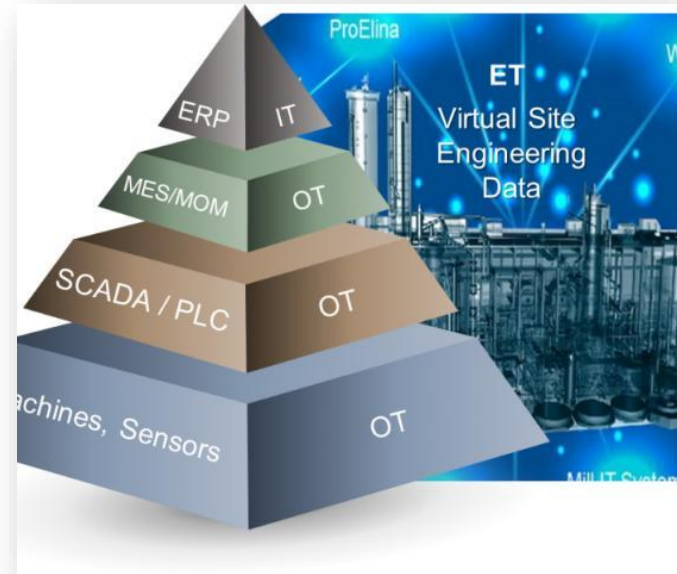
1. Single Source of Truth: data availability and good quality
2. Complete control and transparency into own data
3. Reasonable licensing costs
4. Credible suppliers that invest in the solutions in the long term
5. Ability to host external solutions and have control over vendors
6. Industrial Edge to allow OT and IT integration
7. Low-code programming platform for rapid development
8. Appropriate cyber security



Digital architecture design must align with best practices to ensure OT-ET-IT integration, cybersecurity and data ownership and to avoid vendor lock-in

Smart Digital Architecture

To achieve results through digitalisation, AFRY, a leading industrial services company, has created a clear process to implementing intelligent digital architecture in greenfield projects.



The First step for your smart greenfield

Start your greenfield project with

FEL1: Preparation

- Digital journey Workshop (1 day on-site)
- Document containing the guidelines for an efficient digital factory

FEL2: Design

- Viability studies for digitalization
- Digital blueprint
- Platform definition
- Solutions UX design

FEL3: Solutions

- Business cases preparation
- Solutions integration architecture
- Platform implementation
- Functional Description Sheets

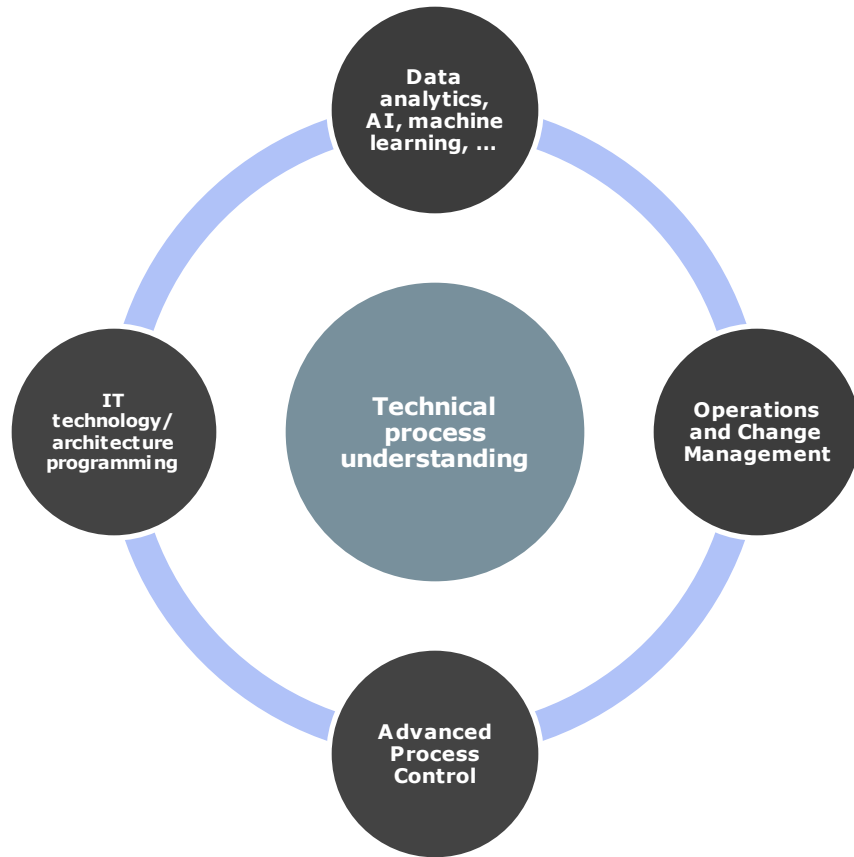
Start delivering

Smart Digital Architecture

Deliverables


Deliverable of the digital architecture design

1. Verification of global standards according to the blueprint
2. Digital best practices workshop and training
3. Network Diagram & protocols definition for the digital infrastructure
4. Edge devices, on-premise server and cloud specifications
5. Low code and visualization platform directives
6. Data warehouse architecture building and validation
7. Software technologies design
8. Business cases preparation
9. Solutions functional description sheets and RFQs



AFRY is a leading engineering company, with thousands of multidisciplinary experts.

Technical process understanding makes it possible to achieve results with digital development.



With decades of expertise and as a leading engineering consulting company with thousands of multidisciplinary specialists, AFRY brings its knowledge into the digital age.

Start your greenfield smartly, securely and with a robust digital architecture.

That's how AFRY is
Making Future

CONTACT INFORMATION

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