NEOCEPTION® DIGITAL TWIN







WHAT IS DIGITAL TWIN

The Digital Twin is a virtual representation of a physical object, system, or process. It's created using digital technology, such as sensors, data, and simulations, to mimic the real-world counterpart in a computerized environment. This virtual replica is designed to be a precise, real-time reflection of the physical asset or system, capturing its behavior, characteristics, and data.

DIGITAL TWIN AS A SOLUTION

- No additional tools for customers needed to access information
- Enabling automatic use of data by machine accessible interfaces
- Enable customers to retrieve a copy of the data in standardized form (AASX-file)
- Secure, shielded and authored access to information without direct access to internal systems
- Authentication of users (allows to share some information only to paying customers)
- Running business applications on top of the available data
- Connecting to multiple internal systems by using easy to manage rule sets and automated suggestions system.



BENEFITS



Dynamic Provisioning

Allows for the dynamic creation and provisioning of digital twins for various physical assets and systems.



Security

Incorporates robust security measures to protect sensitive data and prevent unauthorized access.



Semantically Described

Uses semantic data modeling to provide context and meaning to data points.



Scalability

Highly scalable, accommodating the addition of more assets and data sources without significant constraints.



Easy Update

Facilitates effortless updates and modifications to digital twins and their associated data models.



Versatile Output Formats

Offers diverse output formats for presenting and sharing digital twin data.

CUSTOMER VIEW

01 Connection Layer

In the initial connection layer, we focus on linking various systems within a company. This involves integrating software applications, sales tools, and data sources, like Siebel, HubSpot, Easy Project, and others. This layer acts as the foundation for seamless data communication.

02 Standardization Layer

The DT standardization layer ensures smooth interactions and data consistency among diverse physical assets and systems. Its core goal is to overcome challenges in integrating assets with varying data formats and protocols.

03 Modeling Layer

The modeling layer in DT customizes and standardizes data points using E-Class and IDTA standards. E-Class offers unique identifiers for cross-system communication, while IDTA standardizes templates like digital nameplates for product consistency, integrated by Neoception.

04 Application Layer

In the application layer, Neoception offers various applications using standardized data and models. These include a UI viewer for digital twin exploration, a format-specific file exporter, and potential automation via an API. Customers can request tailored applications.

