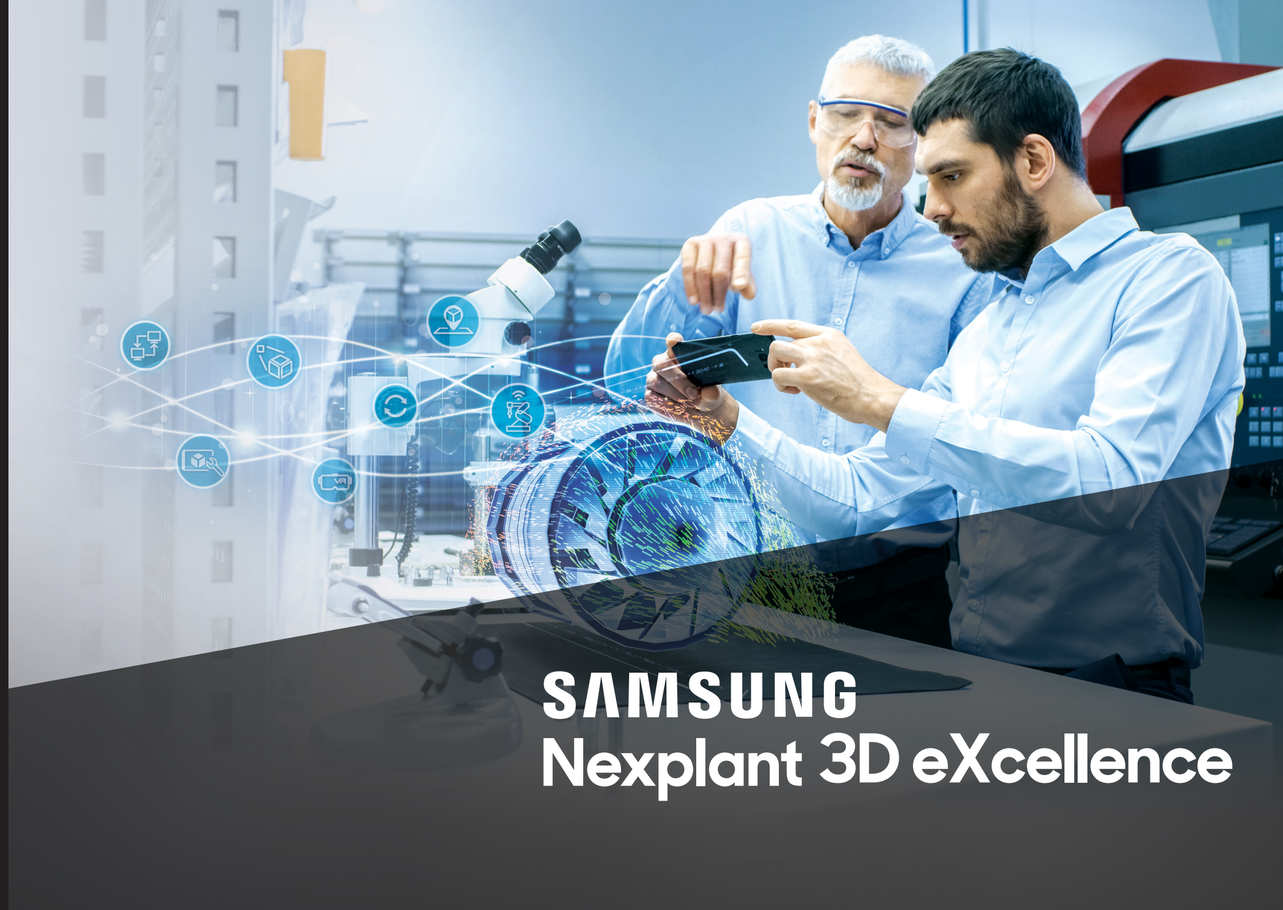
SAMSUNG SDS

Realize your vision



SAMSUNG
Nexplant 3D eXcellence

Combining real and virtual to realize Digital Transformation

New era of hyper-connectivity·
hyper-intelligence·hyper-reality
beyond the 4th industrial revolution,
a business needs to adopt changes
at a fast pace for its sustainable growth.

Faced with rapid technological
advancement and severe competition,
collaboration among companies has
become essential to success,
and efficient utilization of IoT, AI, Bigdata
and 3D/AR/VR has become an important
factor for business competitiveness.

Lead the future
of Intelligent Digital Transformation
with 3D eXcellence Platform
based on 3H echnologies.
(Hyper-connectivity·Hyper-Intelligence·Hyper-reality)

SAMSUNG
Nexplant 3D eXcellence

Nexplant 3D eXcellence converts, integrates and visualizes various 3D data created in the stage of design and supports manufacturing innovation based on Digital Twin through convergence of information which is generated in the stage of manufacture, construct and operation and IoT data.

Nexplant 3D eXcellence provides innovation of your business and collaboration environment with free use of heterogeneous data.

Enjoy various services connected with 3D data.

3D eXcellence supports you to utilize the generated data in the design stage for various tasks such as manufacture, construction and operation. With ultra-lightweight streaming service for large 3D data, you can collaborate with multiple users in real time via the Web browser.

In particular, you can share the data with other users without deploying the original design data, providing a highly-secured collaboration environment.

Exchange

Supports 30 different types of heterogeneous CAD formats such as manufacturing & building areas and transforms the data with high performance so that it can be easily connected and utilized on various devices.

Integration

Makes possible to link the attributes values of design data with the data of ERP, SCM. Realizes the Digital twin with merge 3D and IoT data in your bussiness.

Visualization

Provides rapid visualization with high performance ultra-lightweight streaming even for large data and an environment where VR·AR can be easily utilized.

Key Functions

Exchange & Visualization

Exchange

Transforms the heterogeneous CAD formats into the lightweight single format so that it can be retrieved from the Viewer and the latest 3D model can be utilized by managing drawing revision and auto-reloading design changes.

Rendering

Web or mobile search for 3D model and 2 types of rendering(SSR, CSR) are available. Streaming service allows you to combine and search for multiple 3D models quickly & safely.

* SSR : Server Side Rendering
* CSR : Client Side Rendering

Collaboration

Viewer (Web/Mobile)

Possible to search various 3D models quickly and provides detail of structure and parts' attributes information for analysis. Basic functions (camera view, mark-up, measure and others) and various analysis functions are also available.

Design Review

Real-time Web-based multilateral conference review (voice·video·text) is available (no need to install separately), so that the participants can share the history of model search and operation. Managing the issues and the history function also supported.

WorkManual

Authoring

Web-based 3D work manual authoring tool, it provides a simple UI and manages workflow step-by-step can easily create a manual.

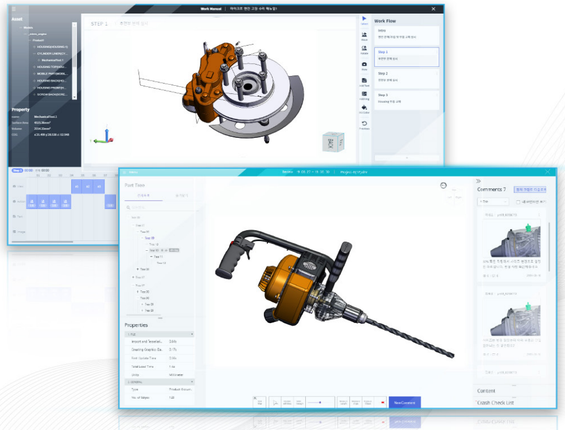
Play

3D work manual can be used in various devices . Work efficiency can also be improved by features. (partitial-play, zoom-in/out, etc.)

Deployment

Deployment and sharing of the work manual is available. And the functions of managing the schedule and the history are also supported.

Authoring



Design Review

Realize Digital Transformation by driving the change of your business with 3D eXcellence platform technology.

Utilize 3D design data in the entire area

By utilizing various heterogeneous CAD data, 3D data written in R&D and design can be used for various services, reducing manufacturing time and reconstruction costs.

Secured collaboration environment

Support for multiple devices based on the Web and streaming without transferring the original data, so that it can provide a secure working environment with no data leakage.

Platform based functionality extensibility

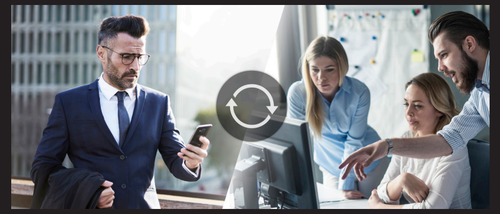
The entire service based on the data set configured in the platform is integrated, making it easy to expand the features. Data and API Catalog service provides an environment customers can develop a module by themselves.

Use Cases

Various Services of 3D eXcellence

Digital Twin O&M

Digital Twin based monitoring (3D Model + IoT Data) enables fast and secure operation and maintenance for equipment, production lines, and even plant and facility areas.



Cloud based Design Review in real time

Design Review enables to make a decision quickly through web or mobile meetings with no risk of data leakage, whenever a remote collaboration or a multi-lateral review is needed.

Work Manual for production and assembly

Production line produces a variety of products and the products can be changed depending on the needs of the market. Workers or A/S engineers in the mfg. line can create and deploy 3D CAD based work manual that can be used on-site. By managing the assembly/disassembly process, and fast update is possible even when a product geometry has changed.

Technical support for a field engineer

A field engineer can access the information of the desired device from a mobile device in real time during on-site work and utilize AR technology to receive a remote support from the expert by sharing the current situation.