



TEIA is the leading OT Platform based solutions provider. Our solutions provide options for software, strategy, consulting and IoT devices that are the foundations to building smart factories and manufacturing lines.



T

Total Technology

Our expertise and capabilities in conceptual design to identify and implement the needs of our customers to design the latest smart factories.

E

Engineering

Equipped with the latest necessary OT and IT Technology essentials to transition and build smart manufacturing states.

I

Innovation

The capabilities to develop smart and innovative SW platform tools required for intelligent and efficient HW (IoT Device) development

A

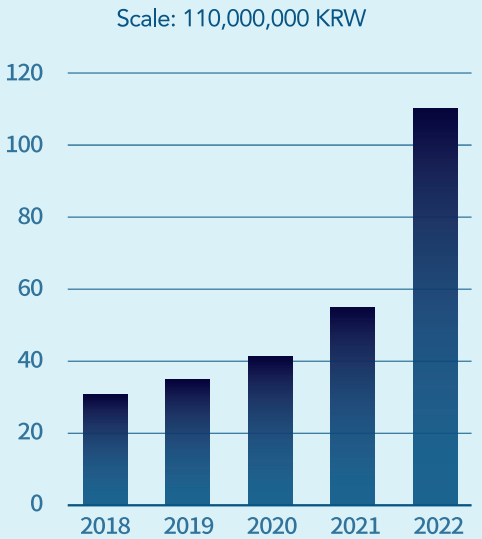
Assistants Service

We have solutions for all stages of the manufacturing industry, including planning, design, production, technology.

Overview

Company Name TEIA, Co.Ltd.
Established March 2015
President Lee Chun Jae
Staff Count 42 Employees (As of February 2023)
Business Field Smart Factory Engineering Consulting
 Development & Supply of Smart Factory OT Platforms
 Smart Factory HW Device Production and Supply
Address B 303,304 33, Gwacheon-daero 7-gil, Gwacheon-si, Gyeonggi-do, Republic of Korea
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Website <http://www.teia.co.kr>

Company Revenue Growth



TEIA Core Mission

Convergence

To provide a solution for one-stop digital conversion services for clients by converging OT platforms SW, and IoT Device HW for smart factories.



Features & Competitiveness

Tailored to the customers.
We have the conceptual design capability to identify and implement smart factory needs.

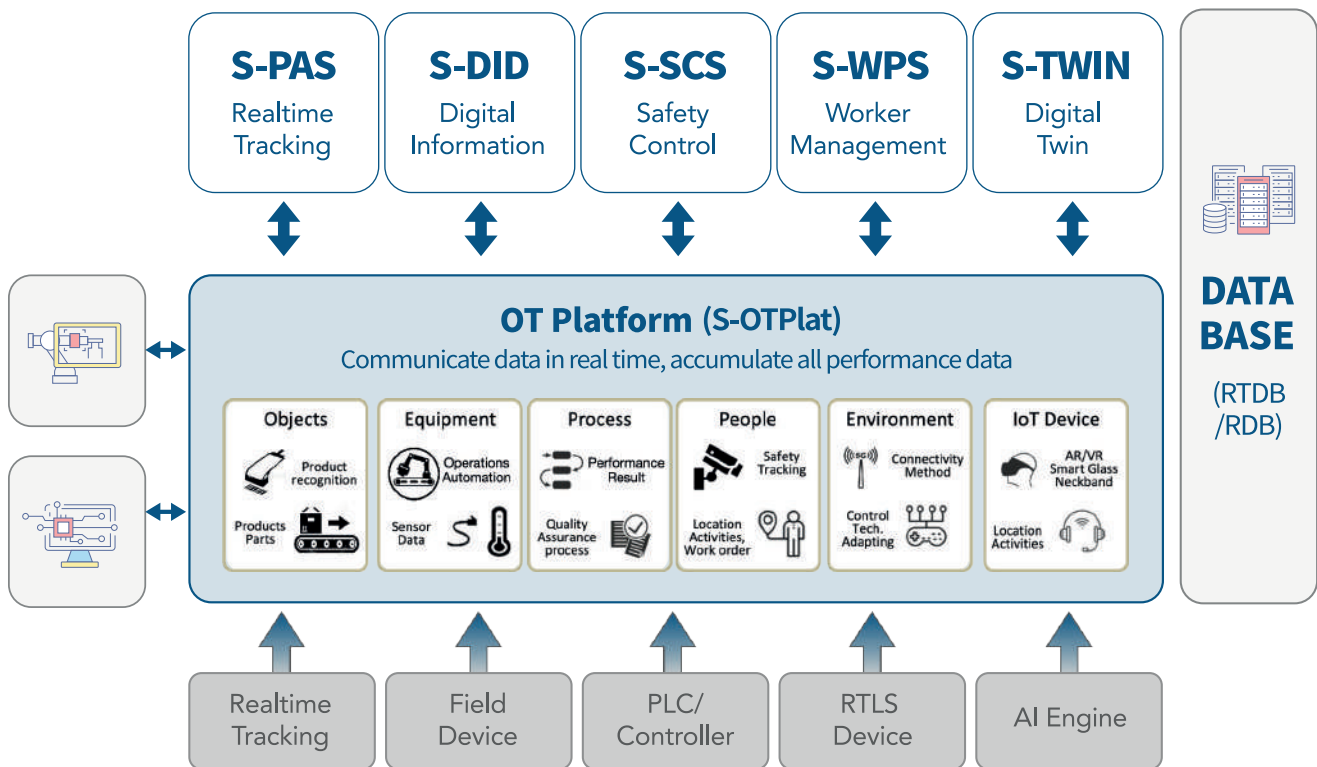
Solutions for the manufacturing sites.
Equipped with OT technology and IT technology essential for smartization.

Focused on intelligence and efficiency.
Equipped to development SW platform and HW capabilities.



SW Platform for Smart Factories

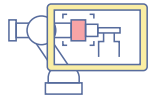
OT platform (S-OTPlat), including core technologies such as various smart IoT devices and existing facility linkage technology, real-time technology that guarantees accurate actual situation elements of the process, and digital twin consisting of S-Platform Series that can provide various services based on S-OTPlat.



S-Series (Smart Platform SW Series)

<p>S-PAS (Real-Time Tracking)</p>	<p>Real-time location tradition of moving objects in the factory Establish 3D virtual factories and systematic smart factories. Improvement of production quality and efficiency of facility/manpower operation</p>
<p>S-SCS (Safety Control)</p>	<p>Real-time disaster safety monitoring and control by applying artificial intelligence. (Deep learning) technology linked to various devices for industrial safety accident prevention.</p>
<p>S-DID (Digital Information)</p>	<p>Realization of a No-Paper factory by displaying asset information in real time on the e-Paper panel.</p>
<p>S-WPM (Worker management)</p>	<p>Converge various IoT devices and smart IT technology for innovate work and quality converging.</p>
<p>S-TWIN (Digital Twin)</p>	<p>Build digital replicas of physical assets, processes and systems. Predict/optimize/control using big data, artificial intelligence, and simulation technologies</p>

SW Key Features for Smart Factories



Smart Production Site Operation Support

Provide S-Series Service
 Smart work order
 Quality/Result management
 Data Collection
 Key System (ERP/MES)
 Connections



Factory Device Smart Linkage

Integrated multi-plug field controller.
 IOT data Linkage Gateway
 Device Linkage
 PLC/PC/Facility Linkage



Digital Twin

3D-based Digital Twin
 100% synchronization of field information in conjunction with a positioning device
 product tracking Trouble Product/Timeline Tracking



Big Data Smart Management

Big data collection
 Real time factory information
 Big data analysis tools
 Job and tool pattern analysis

Smart Factory Platform Effects

Substitution of on-site data collection equipment,
 New product application cost reduction,
 Work man-hour reduction/
 Work force reduction



Use of flexible workspace,
 reduce errors in detecting product flaws and reporting results,
 Increase work efficiency

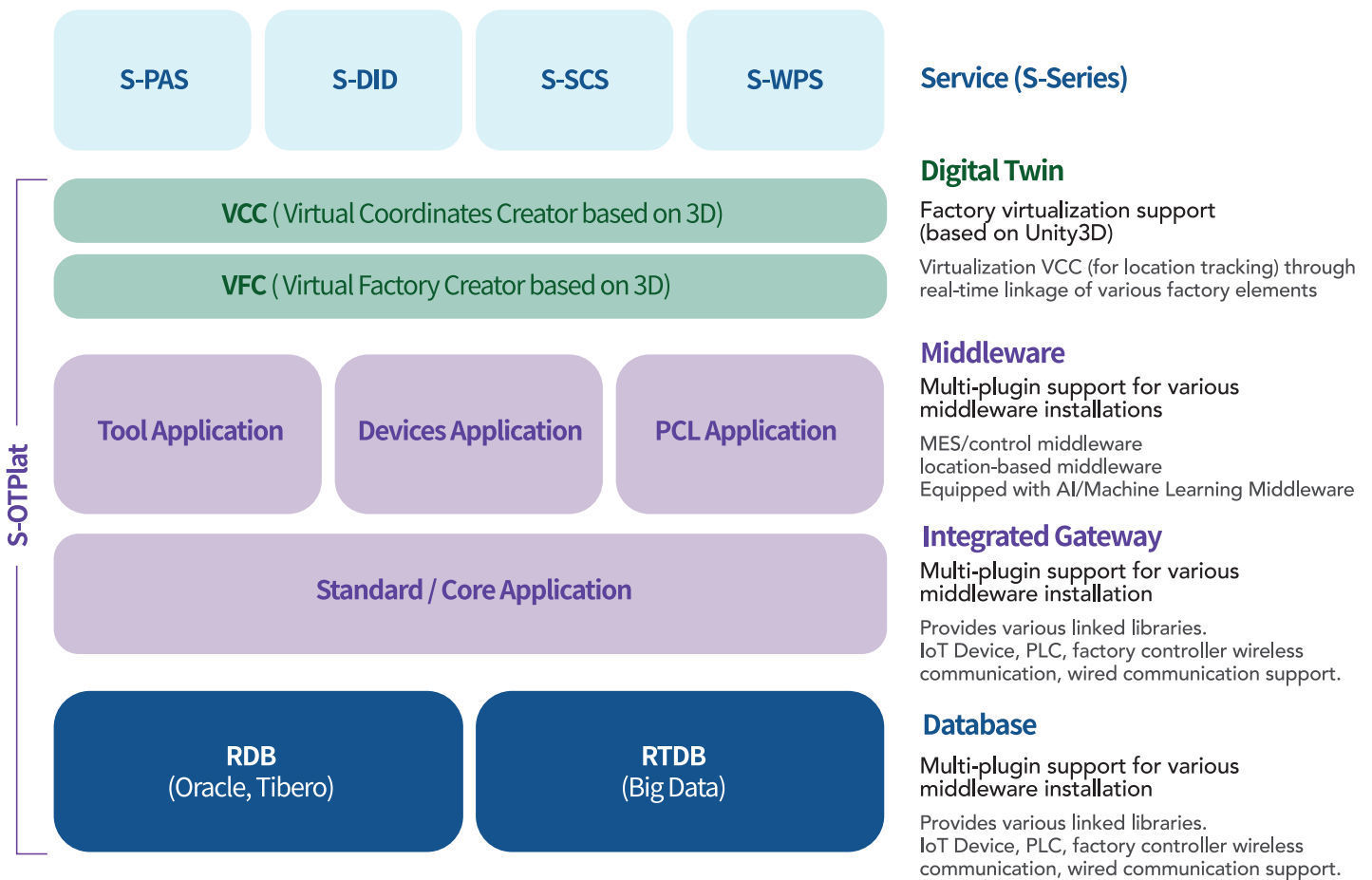


Live monitoring of work results,
 Error reporting data tracking and analysis for work improvements (Equipment problems, operator errors, etc.)

S-OTPlat

(Smart Operational Technology Platform)

Data communication function for each existing facility and IoT device, tracking the real-time location(coordinates) of factory elements, establishing a 3D virtual factory linked to factory facilities and IoT devices to improve production quality and improve facility processes by applying various algorithms or rules. We build the implementation of a state-of-the-art smart factory system that supports efficient operations.



Overview of S-OTPlat

Data analysis using big data and AI possible via connection with RDB/RTDB.
 Scalable operations due to S-Platform series implementation within the OT platform
 Supports factory automation and virtualization through VCC/VFC

Building Effect

Provides an integrated platform that supports bi-directional communication with devices and various communication protocols. Optimization of data gathering through linkage with big data and improvement of communication performance Easy to link with various devices based on IoT and secured scalability.
 Flexible distribution of optimal functions to various sites such as small devices, production facilities, factories, and buildings Systematic configuration of OT technology possibilities

Smart Factory Device

RTLS Device



Smart Device

Coordinate technology-based real-time location information management, positioning device for various purposes.

Precise close-range indoor location tracking (~30cm)

Wireless/wired gateway for various purposes
(BLE/LoRa/Zigbee/Network/Serial communication, etc.)

Services linked with peripheral facilities (facility control lights, barcodes, PCs, PLCs, etc.)

Connect various objects to build a smart manufacturing environment, we develop, apply, and provide IoT-based common element technologies that integrate into an intelligent ecosystem.

IoT Device

 <p>S- Facility</p>	 <p>S- Facility</p>	 <p>S- Device</p>	 <p>S- Device</p>
<p>Smart Cart</p>	<p>Smart Rack</p>	<p>ESL TAG, ESL AP</p>	<p>Smart Watch</p>
 <p>S- Device</p>	 <p>S- Device</p>	 <p>S- Device</p>	<p>※ Commercial product expansion/linkage technology</p>
<p>Completion Button</p>	<p>AR Glasses</p>	<p>Smart Neckband</p>	

Expected effects when applied

Delivery of production information using real-time location tracking

Automatic recognition-based misassemble/faulty operation verification and quality assurance.

Two-way communication of products/facility to improve production quality