

Growing into the world of 2024

COMPANY PROFILE

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Company Profile

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CEO Greeting

Dear Customers

It is time for us to reflect on our values and strive fervently on the edge.
Now is that time.

Our company, which started with what seemed like reckless passion and ambition, has now built a history of over 19 years.

Through the passage of time, we have **accumulated technology and gained valuable experience.**

We now possess indicators of satisfaction that are not measured by others but by ourselves.

Currently, we wield the weapon of organized passion.

We aspire to be a company that offers not just products and services but **the value that our products and services create.**

We aim to be a company where the value we create with our customers becomes the very reason for our existence.

We will work not just to meet our customers' needs but to look toward the ultimate value that our customers' goals represent. When that precious value becomes the foundation for our customers' growth, our company will also be recognized for its worth.

Thank you.

History

Since its establishment in 2005

2024

Relocated the head office to 95, Dottjil-ro, Nam-gu, Ulsan.
Registered the telecommunications construction business license.
Designated as a Root Enterprise.

2022

Selected for the Smart Manufacturing Innovation Technology Development Project (R&D) by the Ministry of SMEs and Startups.

2020

Re-selected as a promising global ICT company.
Designated as a promising export SME.

2019

Awarded the Marketing Grand Prize in the MES category at the Smart Factory Awards 2019.
Selected as a promising global ICT company.

2018

Established an office in Indonesia.
Relocated the head office to Room 407, Corporate Research Building, 55beon-gil, Techno Sanup-ro, Nam-gu, Ulsan.

2017

Selected as an IT supplier by the Korea Technology and Information Promotion Agency for SMEs (TIPA).
Signed a partnership agreement with Siemens as the sole MOM partner in South Korea.

2016

Designated as a supplier for the Smart Factory Support Project by the Creative Economy Innovation Center.

2015

Selected as a K-ICT cloud service supplier by the Ministry of Science, ICT and Future Planning.
Established NSoft China subsid.

2012

Acquired GS certification (Enterprise Resource Planning System for Shipbuilding Equipment Companies).
Transitioned to a corporation named NSoft Co., Ltd.

2011

Awarded the Model SME Commendation in 2011.
Received Venture INNOBIZ certification.
Established a Corporate Affiliated Research Institute.

2009

Joined the Ulsan Technopark Industry-University-Research Collaboration Cluster.
Obtained ISO 9001 certification (Software solution development and website construction).
Registered as a supplier for the Ulsan Technopark Knowledge Service Support Project.
Co-hosted the Ulsan U-City Workshop with the Korea Land Corporation and Ulsan University Architectural Research Institute.

2008

Joined the IT Research Association of Ulsan Technopark's Strategic Industries.
Signed an industry-academic cooperation agreement with ASP(Automated Software Program) LAB.
Signed an industry-academic cooperation agreement with the Automobile Systems Department at Korea Polytechnics VII, Ulsan Campus.

2005

Registered as a software business entity.
Established NSOFT.

Overview

General information

Since its establishment in 2005, NSOFT has been doing its best for customer satisfaction.

Overview

Company Name	NSOFT Co., Ltd.
Business Field	Information Service & Software Consulting and Development
CEO	Choi DaeHyun
Location	Head Office: 4F-5F, NSoft Building, 95, Dottjil-ro, Nam-gu, Ulsan R&D Center: 5F, NSoft Building, 95, Dottjil-ro, Nam-gu, Ulsan Overseas Subsidiary: 203, Hanja Industrial Park, Yancheng City, Jiangsu Province, China
Contact	Phone : 052-260-5535 / Fax : 052-903-5535
Website	www.nsoft.co.kr
Founded	April 1, 2005
Business Registration Number	610-86-13761
Number of Employees	28

ManPower

Developer Status

- Top-level: 9 developers
- Senior-level: 4 developers
- Mid-level: 7 developers
- Junior-level: 6 developers

Senior-level:
4 developers

Top-level:
9 developers



Junior-level:
6 developers

Mid-level:
7 developers

Organization chart

Organizational status information



Business Field

Main business information

Solution

NSoft's Specialization:
SI Solutions

SIEMENS

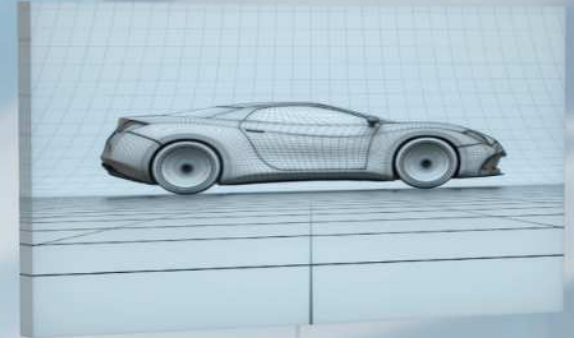
Specialized Partner
for MOM Solution

R&D

Smart Safety
R&D

Achievements

NSOFT's Achievements



2024

- Website renewal and maintenance for SK Innovation.
- Ongoing participation in the Ministry of Science and ICT's NIPA D.N.A Partnership Program for joint entry with SMEs.
- Ongoing development of MES and logistics automation programs for Seoyon E-Hwa's North America subsidiary.
- Ongoing construction of the logistics system for Seoyon E-Hwa Texas.
- New line SCADA setup and MES upgrade at Lotte Chilsung's Anseong factory.
- Ongoing enhancement of the Electronic Lab Notebook (ELN) system for Kolmar Korea.
- Website development for YeonEco.
- WMS system upgrade development for Hyundai Electric.
- BOM issue resolution for Samsung Biologics.
- Ongoing Smart Factory AS support project for Hannam Hi-Tech.

2023

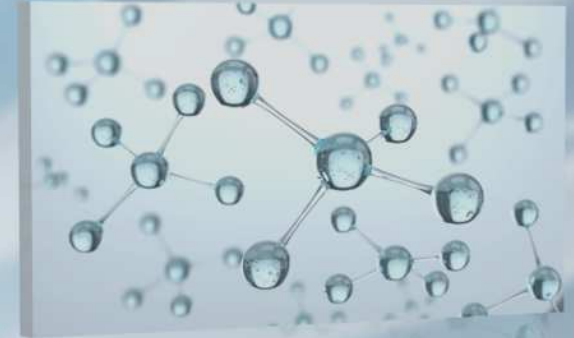
- Ongoing operation of the safety and environmental system for SK Corp.
- Construction and migration of the dispatch product system for Yongsan.
- Advanced development of the hazardous substance diffusion prediction program for the Ministry of Trade, Industry, and Energy.
- Project implementation for organizational restructuring of the RnD and DB units at Samyang Data System.
- WMS construction for Lotte Global Logistics Indonesia.
- Construction of a smart material warehouse management system for HD Hyundai Electric.
- Ongoing horizontal deployment project for MES and SIS at Seoyon E-Hwa's overseas subsidiaries.
- ELN system construction for Kolmar Korea.
- Modification and construction of the research management system for Kolmar BNH.
- Additional DMS process construction for Taewoong Medical.
- Ongoing development of the AI manufacturing service platform for ETRI. Ongoing development of the AI manufacturing service platform for the Korea Electronics and Telecommunications Research Institute (ETRI).

2022

- MES construction for LS Cable & System's Transmission & Automotive Wire Division.
- MES construction for Taewoong Medical's medical device sector.
- MES upgrade construction for Daein.
- Label project construction for Hyosung.
- MES construction for KORENS EM (including stabilization project).
- WMS operation support for Samyang Corporation (including MES integration).
- WMS upgrade construction for DFS.

Achievements

NSOFT's Achievements



2021

- MES construction for KORENS EM.
- PMS SAP I/F construction for Samyang Corporation.
- Equipment management system construction for Daein.
- RD&L SAP I/F construction for Samyang Corporation.
- Material management system construction for USYS.
- WMS upgrade construction for Dong-A Pencil.
- Next-generation facility management system construction for SK.
- Research data management SAP I/F construction for Kolmar BNH.
- SAP / RD&L I/F construction for Kolmar BNH.
- MES construction for Dongguk.
- SCM construction for KD-Tech.
- Warehouse monitoring system construction for Korea Zinc.
- Artificial Intelligence Academy (AIA) Platform construction for Ulsan, Busan, and Gyeongnam Information Industry Promotion Agency.

2020

- PMS construction for Samyang Corporation.
- Research data management system construction for Kolmar BNH.
- WMS construction for Dongguk GLP.
- WMS construction for DFS.
- Platform upgrade for Ulsan Open Citizen University.
- Freight transportation management system construction for Busong Development Co., Ltd.
- SPC construction for Hyundai Electric.
- MES construction for Hannam HI-Tech.
- MES construction for Taewoong Medical's medical device sector.
- Tugboat management and HR system construction for Chokwang Shipping.

2019

- Production planning system construction for CJ CheilJedang Jincheon BC.
- Next-generation facility management system construction for SK Innovation (TAPS, IDMS, PSM).
- WMS construction for Dong-A Pencil.
- MES construction for 1drop Inc.'s medical devices.
- Electronic Lab Notebook (ELN) system construction for Samyang Biopharm.
- Logistics improvement consulting for Dong-A Pencil.
- MES upgrade construction for Seoyon E-Hwa's Georgia subsidiary.
- Experimental data management system construction for The PlantEat.
- MES construction (including self-diagnosis system for equipment) for Seoyon E-Hwa Ulsan plant.
- WMS construction for Hyndae Fitting.
- MES construction for Cor-Tech in China.
- ERP construction for Ilshin Precision.

Achievements

NSOFT's Achievements



2018

- Experimental data management system construction for Samyang Corporation.
- Delivery of N-GINS framework for Hanju Salt.
- MES construction for Daein.
- MES construction for Kukdong and Kukdong Automation.
- MES construction for Daehan Metal in China.
- After-sales management system construction for Camko Motor in Cambodia.
- SCM construction for Sejin Heavy Industries.
- Integrated logistics system construction for Dong-A Enterprise.
- Custom operations management system construction for GSC.
- Custom operations management system construction for Autorex.
- TAPS improvement construction for SK Innovation.
- Renewal of HiOK support system for SK Innovation.

2017

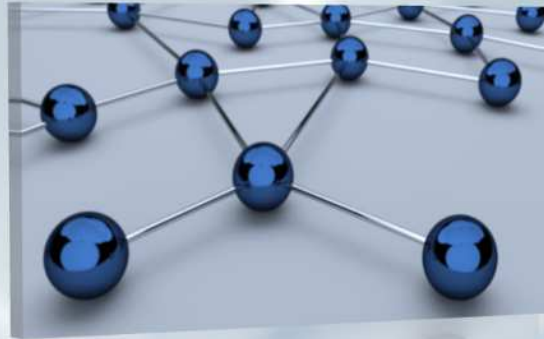
- SRM construction for Seoyon E-Hwa.
- Integrated business system construction for Samchuly Welltech.
- Consumer claim management system construction for Dorco.
- QMS construction for Sejong Industrial in Slovakia.
- ALC improvement construction for Sejong Industrial in Mexico.
- Smart Permit System construction for SK Innovation.
- Polarion system customization for Samsung Electronics.
- Production system construction for Sejong Industrial's Czech subsidiary.
- Waste management system upgrade for Seokcheon Environmental Development.
- HR system upgrade and maintenance for Seoyon E-Hwa in Jiangsu, China.
- Delivery of SPC for Zhangzhou Yancheng in China.
- Selected as a supplier for the 2017 Smart Factory Support Project and project execution (Sejin Heavy Industries SCM, Dong-A Enterprise MES, Samchuly Welltech ERP).
- POP construction for Sejong Industrial's Slovakia subsidiary.

2016

- Specification management improvement construction for SK Innovation.
- Work diary system redesign and construction for SK Innovation.
- Production planning monitoring system construction for Seoyon E-Hwa in Jiangsu, China.
- ERM upgrade and new system construction for Seoyon E-Hwa in Jiangsu, China.
- Maintenance and operation of e-HR system for Seoyon E-Hwa in Jiangsu, China.
- Production system construction for Sejong Industrial's Mexico subsidiary.
- Horizontal deployment of the logistics system at Donghee Industrial's Tianjin plant.
- POP construction for Seoyon E-Hwa's Changshu plant in Jiangsu, China.
- Mobile web engine monitoring system development for Hyundai Heavy Industries.
- K-ICT cloud system development (N-ERM, N-SSIMS).
- Just-in-sequence system delivery for Yura Corporation's Mexico subsidiary.
- MES/POP construction for Jiangsu Hanjin Jinze Co., Ltd.
- Mobile web field monitoring system development for MPS.
- Joint Training Center website construction for Ulsan College's Workforce Development Project.
- ERP maintenance for Ulsan City Development Corporation.
- Participation as a supplier for the Ulsan Metropolitan City Information Support Project.

Achievements

NSOFT's Achievements



2015

- VAN system upgrade for Jiangsu Hanil Mold Co., Ltd.
- Shipowner management system construction for COSCO.
- e-HR system upgrade and maintenance for Sejong Industrial.
- PDA Lot tracking system construction for Donghee Industrial.
- Integrated business management system construction for Pharmicell.
- ERM and SCM system construction for Seoyon E-Hwa Hanil Poland.
- ERM maintenance for Ulsan City Corporation.
- Smart sales integrated management system construction for Geukwang Ding.
- Smart sales integrated management system construction for Hyundai SDI.
- EO and 4M schedule management system construction for Jiangsu Hanil Mold Co., Ltd.
- Tugboat management system construction for Haegang Shipping.
- Webzine system construction for Ulsan College.
- MRPII system construction for Ilshin Hi-Tech.
- Inbound/outbound system construction for Daemyung Industry.
- PDA packaging system construction for Donghee Industrial (KD-Tech, Woori Industry, Nambu, Gyeongrim).
- Inventory management system construction for Yeongdong Gaseol Jae.

2014

- ERM/VAN system construction for Suzhou Huachang Mechanical and Electrical Co., Ltd.
- Mold/Test management system construction for Jiangsu Hanil Mold Co., Ltd.
- Automotive supplier management system construction for (Yancheng Gangcheng) Automotive Cooperative.
- Automotive supplier management system construction for Yancheng Gaiwei Automotive Parts Co., Ltd.
- Automotive supplier management system construction for Jiangsu Yujia Mold Co., Ltd., Jiangsu Weijin Mold Co., Ltd., and Jiangsu Hanjin Jinze Co., Ltd.
- DFMEA ERM development for Daedong.
- Integrated logistics management system construction for Daedong (formerly Sinchang Electric).
- Legacy vehicle management system development for Daedong.
- Tugboat management system construction for Heungjin Shipping.
- Material management system construction for Bomyeong.
- MRP system construction for Sinhwa Machinery.
- Implementation of a customized IT support project for government R&D personnel.

2013

- ERM construction for Daedong (formerly Sinchang Electric).
- Smart collaboration platform-based business management system construction for Jangwon Industry.
- Quotation management system construction for Segi Information & Communication.
- Implementation of PI Project consulting (IT sector) for Daedong.
- One-Stop IT support system development for Ulsan College.
- Recruitment management system development for UNIST.
- IT service management site development (ITSM) for UNIST.
- Participation in the material and production/process performance management system construction for underwater vessel outfitting components at Hyundai Heavy Industries.
- Development of a smart collaboration platform to establish IT service infrastructure for small and medium-sized enterprises in the shipbuilding industry as part of a government R&D project.

Achievements

NSOFT's Achievements



2012

- Development of the Engine Smart CS System for Hyundai Heavy Industries.
- Development of the N-DISPLAY mobile system.
- Development of the material in/out management app for Hyundai Heavy Industries.
- Participation in the R&D project for industry-academia cooperation under the auspices of the Ulsan Metropolitan City Small and Medium Business Administration.
- Website and system improvement for Hyundai Mipo Dockyard Technical Training Institute.
- Logistics system maintenance for Jiangsu Hanil Mold Co., Ltd. in China.
- IT service management site development for UNIST.
- Participation in the comprehensive information management system for Hyundai Arts Center.
- Participation in the logistics system for Doowon Climate Control's Brazil subsidiary.
- Co-prosperity portal development for Hyundai Mipo Dockyard.
- Development of the IT equipment management system for Hyundai Heavy Industries.
- Development of the Advance Shipping Notice (ASN) system for Hanil E-Hwa's Asan plant.

2012

- Development of the mobile version of the material management system for the Shipbuilding Information Department at Hyundai Heavy Industries.
- SMS dispatch maintenance for Hyundai Mipo Dockyard.
- Development of the logistics system and VAN system for Hanil Brazil.
- Development of the ERP system for Daein Chemical.
- Participation in the mobile ship A/S system for Hyundai Samho Heavy Industries.
- Development of MRPII system for Gunyoung Co., Ltd.
- Development of Encall (Delivery Management System).
- Development of temporary construction materials management system for Yeongdong Gaseoljae.
- Advanced development of the steel stockyard system for Hyundai Heavy Industries.

2011

- Development of the steel claim management mobile web for Hyundai Heavy Industries.
- Development of the outfitting production app for Hyundai Heavy Industries.
- Development of the piping production performance processing mobile app for Hyundai Heavy Industries.
- Construction of the mobile A/S system for Hyundai Heavy Industries.
- Website and system improvement for Hyundai Heavy Industries Technical Training Institute.
- Industry-academia R&D project under the supervision of the Small and Medium Business Administration.
- Government R&D project under the supervision of the SME Support Center.
- Logistics system maintenance for Jiangsu Hanil Mold Co., Ltd. in China.
- Redevelopment of the early childhood portal for Ulsan Metropolitan Office of Education.
- Development of the nuclear power plant construction information system for Hyundai Engineering & Construction.
- Development of the logistics system for Jiangsu Hanil Mold Co., Ltd. in China.
- Additional development of the cyber system for nurturing small and medium-sized enterprises' technical personnel at Ulsan College.
- Development of the independent management application for SK C&C (including the mobile electronic entry approval system).

Achievements

NSOFT's Achievements



2010

- Development of the logistics system for Jiangsu Hanil Mold Co., Ltd. in China.
- CKD/VAN system redesign for Hanil E-Hwa.
- Development and delivery of the groupware system for Hyundai Climate Control.
- Development of the logistics management system for LS-Nikko Copper.
- Construction of the .NET-based development framework for Sejin Heavy Industries.
- Maintenance of the early childhood portal website for Ulsan Metropolitan Office of Education.
- Integrated maintenance of the information system for Ulsan Buk-gu Office.
- Delivery of the production management system related to automotive parts for Sinhwa ID Tech.
- Website redesign and web accessibility improvement for Ulsan Metropolitan City Foreign Language Education Center.
- Execution of the knowledge service support project under the Knowledge Service Industry Support Program.
- Construction of the electronic document management system for KOLAS.
- Delivery of the waste management program for Shinmyung Industrial.

2009

- Website construction for Ulsan College.
- Cyber system construction for nurturing SME technical personnel at Ulsan College.
- Delivery of the task management system for LS-Nikko Copper.
- Groupware construction (for Alpha Engineering, Jaesung Industry, etc.).
- Participation in the development of the unmanned weighing system for LS-Nikko Copper.
- Participation in the development of the laboratory information management system package for SK Energy.
- Web accessibility improvement service for Ulsan Buk-gu Office website.
- Participation in the construction of the OLAP system for Ulsan College.
- Participation in the development of the ship resource management system for Hyundai Heavy Industries Co., Ltd.
- Participation in the G-ERP integration project for Samsung SMD.
- Complete redevelopment of the MRP system for Ilshin Precision Co., Ltd.

2008

- Website and operation system redesign for Hyundai Heavy Industries Technical Training Institute.
- Development of the task DB management system for SK Energy.
- Redevelopment of the VAN/CKD system for Hanil E-Hwa Co., Ltd.
- Website redesign for Hanil E-Hwa Co., Ltd.
- Website production for KTD Telephone Directory.
- Improvement of the eMSDS system for SK Energy.
- Participation in the development of the laboratory information management system for SK Energy.
- Development of the entry support system for SK Energy.
- Development of a multilingual VAN system for Hanil in Beijing.
- Framework configuration for the academic administration information system at Pukyong National University.
- Maintenance of the VAN and CKD systems for Hanil E-Hwa Co., Ltd.
- Maintenance of the tugboat management system for Haegang Shipping Co., Ltd.
- Corporate website production for Ilshin Precision Co., Ltd.

Achievements

NSOFT's Achievements



2007 - 2005

- Participation in the construction of the outsourced block management system for the Shipbuilding Division of Hyundai Heavy Industries Co., Ltd.
- Participation in the construction of the material system for the Electrical and Electronics Division of Hyundai Heavy Industries Co., Ltd.
- Improvement of the material operation system for Ilshin Precision Co., Ltd.
- Participation in the construction of the integrated receiving management system for Hyundai Heavy Industries Co., Ltd.
- Participation in the construction of the Andon system for the Construction Equipment Division of Hyundai Heavy Industries Co., Ltd.
- Participation in the construction of the surplus material information system for Hyundai Heavy Industries Co., Ltd. (all three divisions).
- Additional ERP system development (HR, shipping, quality) for Daesung Ready-Mix Concrete Co., Ltd.
- Construction of a real-time unit price information disclosure site for Yongsan.
- Construction of a waste management system for Yongshin Environmental Development Co., Ltd.
- Construction of a tugboat management system for Chokwang Shipping and Haegang Shipping.

Chapter 2

Business Field

- Solution
- SIEMENS
- R&D

Business Field

Solution



N-GINS

N-IO

N-STORM

N-DIS

N-MES

N-EA

N-WMS

N-IM

N-WMS-AI

N-TVMS

SIEMENS

Specialized Partner
for MOM Solution

R&D

Smart Safety
Research & Development

NSTORM _ Nsoft Smart Technology Of entiRe Management

NGINS Framework _ Next-Generation Integrated Nsoft Solution Framework

NSTORM - **AB** (Automation Bridge)

NSTORM - **AI** (artificial intelligence)

NSTORM - **DIS** (Data Intelligence Studio)

NSTORM - **DWP** (Digital Work Permit)

NSTORM - **EA** (Electronic Approval)

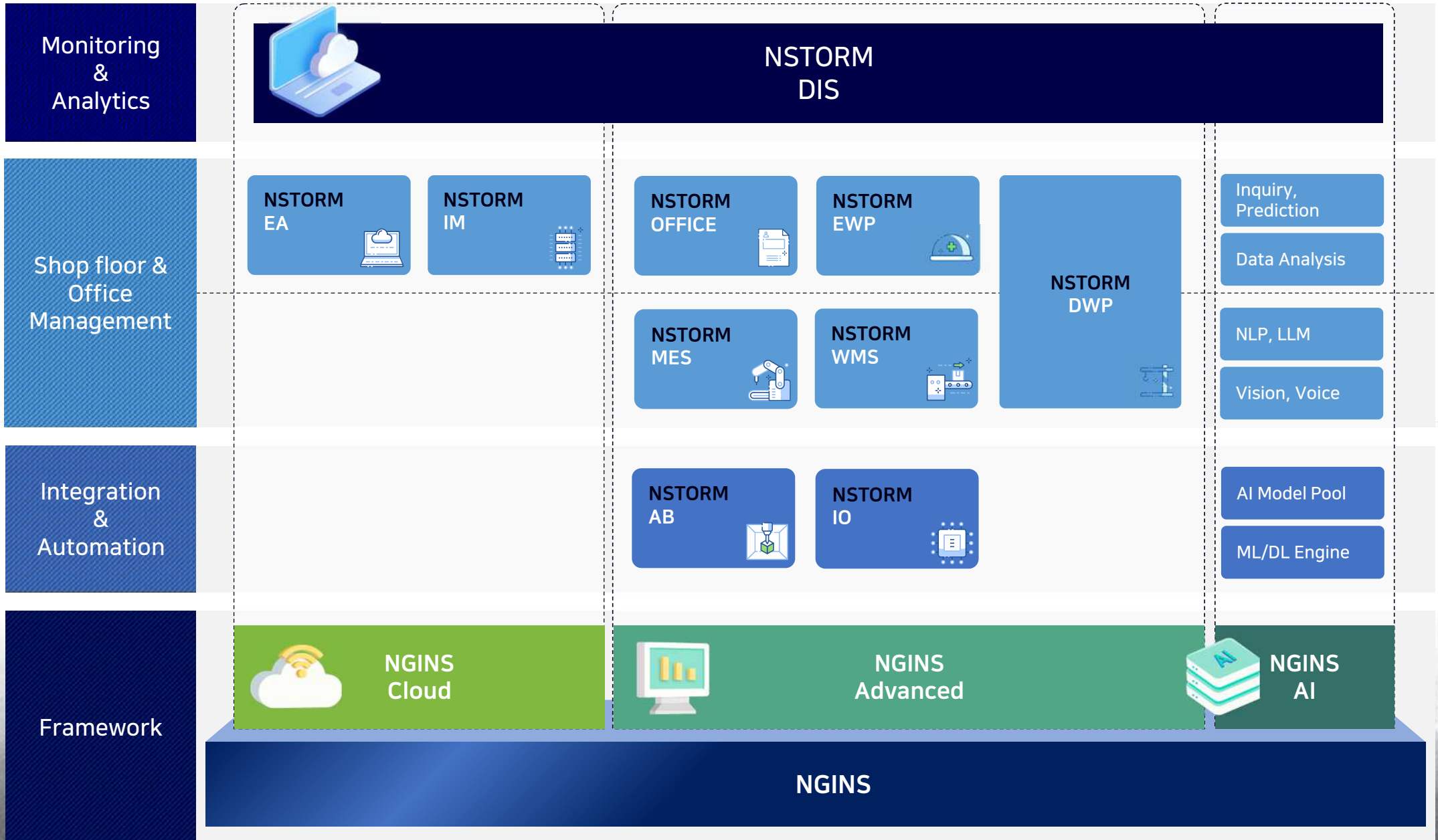
NSTORM - **EWP** (Electronic Work Permit)

NSTORM - **IM** (Inventory Management)

NSTORM - **IO** (Inter Operability)

NSTORM - **MES** (Manufacturing Execution System)




NSTORM - **WMS** (Warehouse Management System)





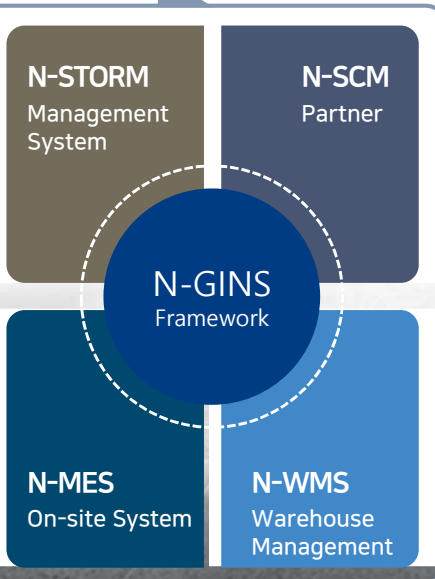
N-GINS | Framework

Proven technical capability in handling high-performance, large-scale transactions stably within the system framework of various industries.

Increased Development Productivity	Maximized Interoperability	Improved Standardization of Information Services
<ul style="list-style-type: none"> Productivity is enhanced by minimizing development efforts through the pre-provision of commonly required functions. Utilizing frameworks reduces the training period for developers and enhances expertise. 	<ul style="list-style-type: none"> Components developed in prior projects can be easily reused in subsequent projects. Standard framework-based systems facilitate the sharing and integration of components. 	<ul style="list-style-type: none"> Standardized development patterns and methods based on templates ensure consistent presentation across system design, development, and implementation. Components developed in prior projects can be easily reused in subsequent projects. 

Process

- Master Data Management
- Material Management
- Production Management
- Quality Management
- Mold Management
- PMS Management
- Sales Management
- Test Management
- Partner Management
- System Management



- Purchasing Management
- Production Collaboration
- Quality Management
- Supplier Management
- General Purchasing Management

- Master Data
- Production Planning
- Production Performance
- On-site Terminal
- Quality Status
- LOT Tracking
- Warehouse Management

- Master Data Management
- Material and Outsourced Product Management
- Production and Delivery Management
- Status Inquiry
- On-site Terminal

Expected Effects



Quality Improvement

- Provides essential basic functions for system construction.
- Database access, multi-query result retrieval, single-query result retrieval, execution of multiple data manipulation statements, execution of single data manipulation statements.
- Provides an HTML report template library.



Rapid Deployment

- Provides a button creation library.
- Provides libraries related to Excel file upload and download.
- Provides libraries related to menu creation.
- Provides libraries related to shortcut management.




Ensured Convenience

- Supports web service processing using WCF.
- Provides libraries related to code base management.
- Provides functions related to user, program, and common code management.
- Provides libraries related to multi-language processing.

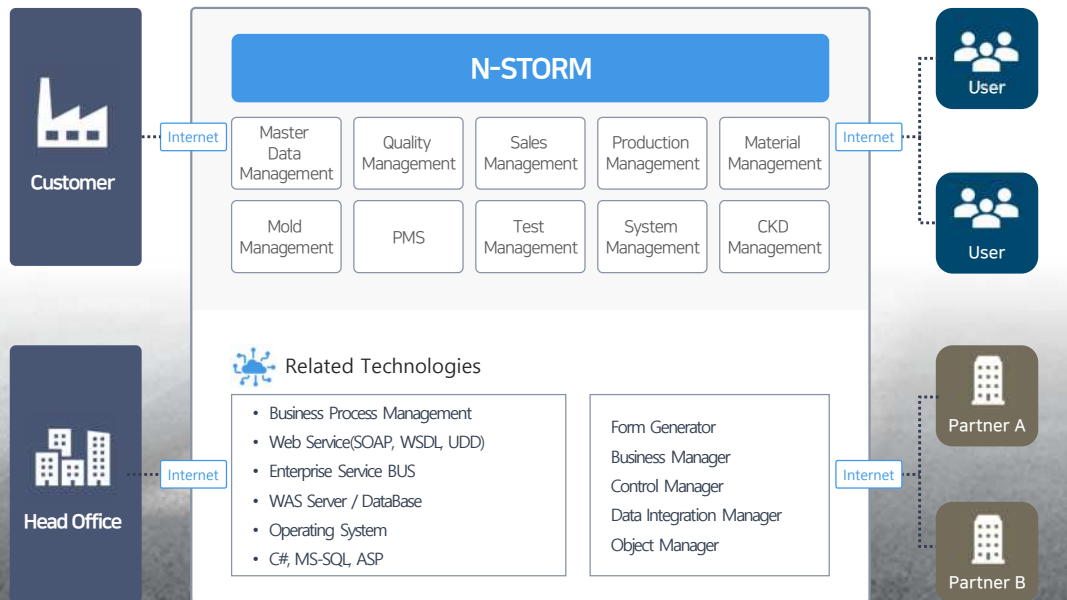


N-STORM | Smart Resource Management

A system that collects and analyzes data related to materials, production, sales, and quality, enabling better business decisions.

Powerful Built-in Features	Design Focused on Scalability	Easy Maintenance
<p>Incorporates modules that are difficult to implement in existing commercial systems or that require project-based adoption, all without additional costs.</p> 	<p>Designed to ensure excellent scalability by considering interfaces with connected systems (SAP, CKD/VAN, MES/POP, etc.) or additional systems.</p> 	<p>Supports the operation of servers and databases required to run the system, and provides maintenance personnel in a remote support format, reducing costs for system implementation, operating environment construction, and asset management.</p> 

Process



Expected Effects



Enhanced Operational Efficiency

Enables real-time execution of tasks by quickly acquiring integrated and consistent information through the immediate identification of material and product statuses, inventory levels, and production line conditions, thus enhancing the efficiency, convenience, and overall management of operations.



Real-Time Status Monitoring

Allows for real-time monitoring of production process conditions, material procurement, inventory levels, work-in-progress status, and quality status, enabling efficient resource management and informed decision-making.



Demand Forecasting Capability

Enhances the ability to analyze and utilize data for quality issue identification by registering and linking raw material test results, in-process inspection results, and product inspection outcomes for each supplier in the MES system.



Cost Reduction and Increased Customer Trust

Enhances service quality, leading to increased customer trust through the shift from traditional operation methods to a system-based approach, which maximizes workforce efficiency and operational capabilities.

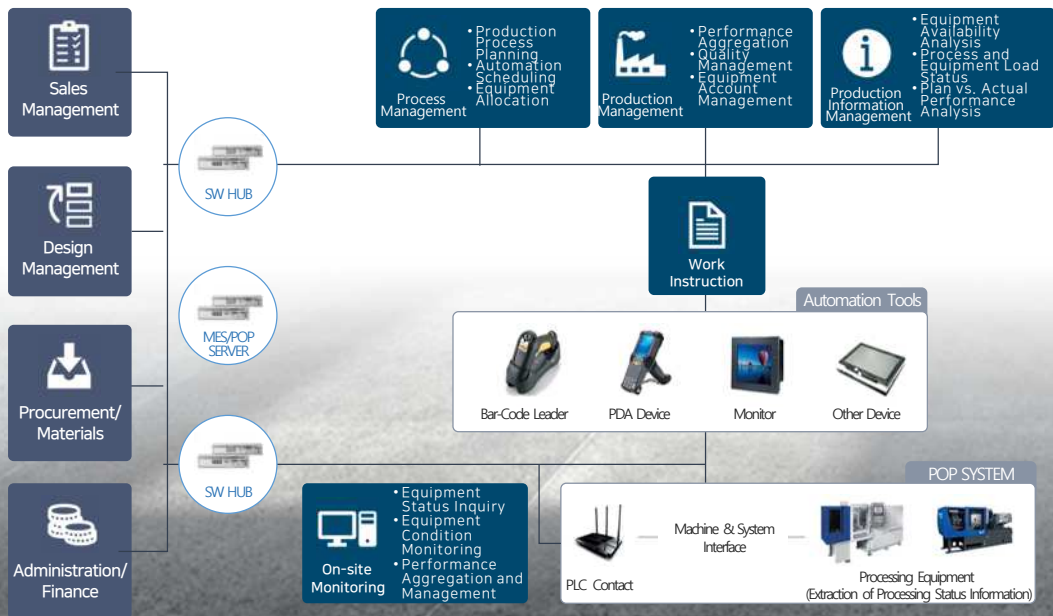


N-MES | Manufacturing Execution System

A system that shares real-time production site information from the shop floor to the management level.

Integrated Operations Management	Real-Time Monitoring	Barcode-Based Management
<p>Enhances operational efficiency by providing more useful and systematic production data from the shop floor through the network, which formalizes the process.</p> 	<p>Provides a system that enables the acquisition of intuitive information for the efficient management of resources, while collecting and analyzing relevant data to serve as a basis for quality activities.</p> 	<p>By using barcode readers at the production site to collect data, the system prevents input errors and omissions that may occur with manual key-in processes, thereby enhancing data accuracy and ensuring ease and speed of information acquisition.</p> 

Process



Expected Effects



● Ensured Manufacturing Competitiveness

- Improves quality by reducing errors and defects on the production floor.
- Enables cost reduction and collection of product cost information through rapid information acquisition.
- Establishes a distribution method for production plans and an import system.



● Ensured Management Standards through Process Standardization

- Establishes work processes through the adoption of N-MES.
- Establishes a master data management system (linked with ERP).
- Ensures accurate work instructions and production system establishment.



● Prompt and Efficient Response to Manufacturing Sites

- Provides the latest information generated on-site.
- Enables detailed inventory tracking and reduction in inventory holding by monitoring the actual inventory status for each process.
- Ensures efficient equipment management through the aggregation and analysis of equipment operation, downtime, and fault information.






● LOT Tracking Management

- Input information for semi-finished products
- Quality, inspection, and operator information
- Provides comprehensive LOT quality information.
- Assigns LOTs at the work instruction stage to manage, track, and trace back work and data.

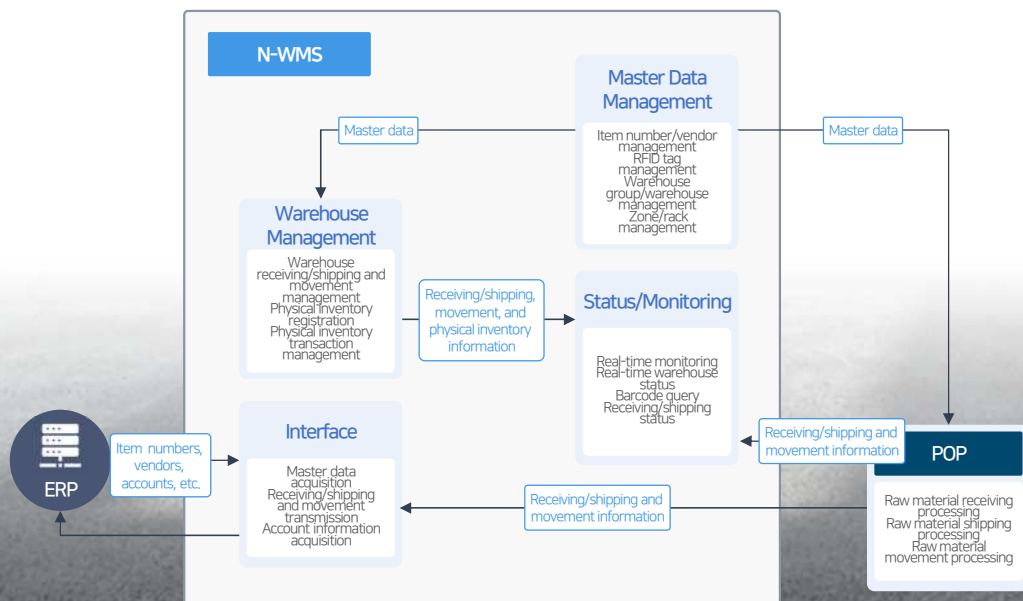


N-WMS | Warehouse Management System

A system that accurately manages all warehouse operations (receiving, location management, shipping, movement, inventory checks, etc.) in real-time.

AI-Based Operational Optimization	AI Voice Assistant	Paperless Operations
<p>Enhances operational efficiency by using AI technology to analyze and predict data related to receiving, shipping, and inventory, allowing for optimal planning, operations, and adjustments.</p> 	<p>A voice-activated AI assistant that supports operators by providing location search, information retrieval, and task queries. Operators can access the system via voice commands to ask questions, retrieve information, and perform tasks.</p> 	<p>Enables management of all warehouse processes through PDA, RFID, and other devices, eliminating the need for paperwork and allowing operations to be managed digitally without manual entry, effectively erasing all paper-based tasks.</p> 

Process | Expected Effects



● Inventory Accuracy

By attaching barcodes to physical items, accurate inventory management is possible by comparing the physical inventory to the system. Real-time physical item information can be verified by querying barcodes.



● Real-time Information Provision

Provides real-time inventory information for specific locations (warehouses, zones, racks, etc.), allowing for inventory checks and item tracking by location for purchase, sales, and shipping operations.



● First-In, First-Out (FIFO) Capability

When receiving inventory, barcodes attached to physical items enable real-time tracking of pre-specified inventory, reducing the risk of loss through timely preservation.



● Improved Labor Productivity

By digitizing traditional operations, it reduces errors in receiving and shipping processes, improving inventory checks, picking, and other tasks, thereby enhancing overall productivity.

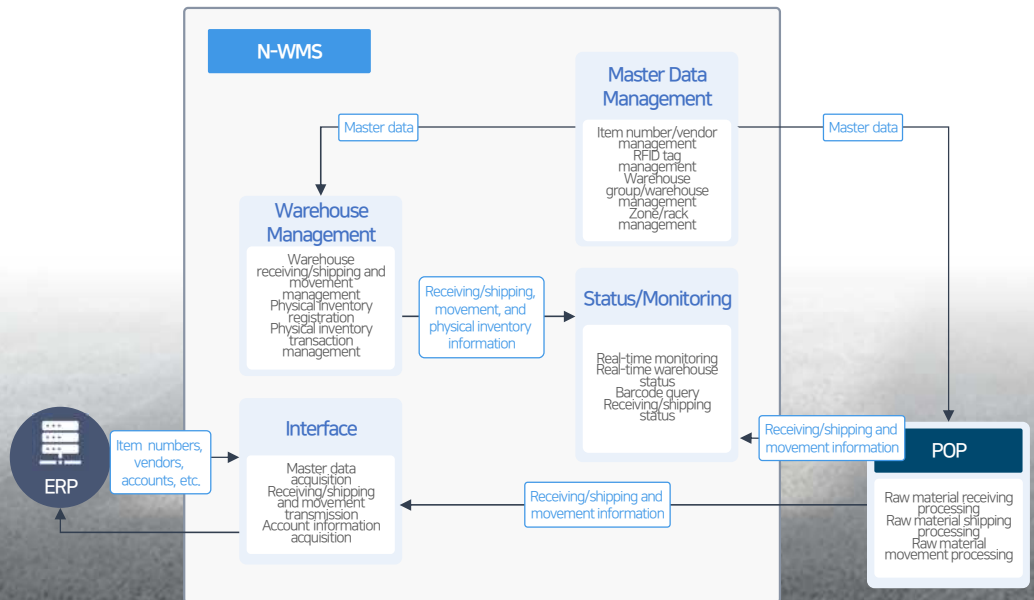


N-WMS | Warehouse Management System

A system that accurately manages all warehouse operations (receiving, location management, shipping, movement, inventory checks, etc.) in real-time.

Ability to Establish an Optimal Workforce Plan	Efficient Warehouse Space Management	Paperless Operations
Enables the maintenance of optimal employment levels in accordance with workforce demand and allows for cost-effective personnel planning by utilizing temporary operators as needed, leading to reduced labor costs. 	Provides methods for precise placement and efficient operation of warehouse spaces, including inventory turnover, intelligent picking, stock replenishment, and cross-docking, to optimize warehouse operations based on actual conditions. 	Enables management of all warehouse processes through PDA, RFID, and other devices, eliminating the need for paperwork and allowing operations to be managed digitally without manual entry, effectively erasing all paper-based tasks. 

Process | Expected Effects



● Inventory Accuracy
 By attaching barcodes to physical items, accurate inventory management is possible by comparing the physical inventory to the system. Real-time physical item information can be verified by querying barcodes.



● Real-time Information Provision
 Provides real-time inventory information for specific locations (warehouses, zones, racks, etc.), allowing for inventory checks and item tracking by location for purchase, sales, and shipping operations.



● First-In, First-Out (FIFO) Capability
 When receiving inventory, barcodes attached to physical items enable real-time tracking of pre-specified inventory, reducing the risk of loss through timely preservation.






● Improved Labor Productivity
 By digitizing traditional operations, it reduces errors in receiving and shipping processes, improving inventory checks, picking, and other tasks, thereby enhancing overall productivity.

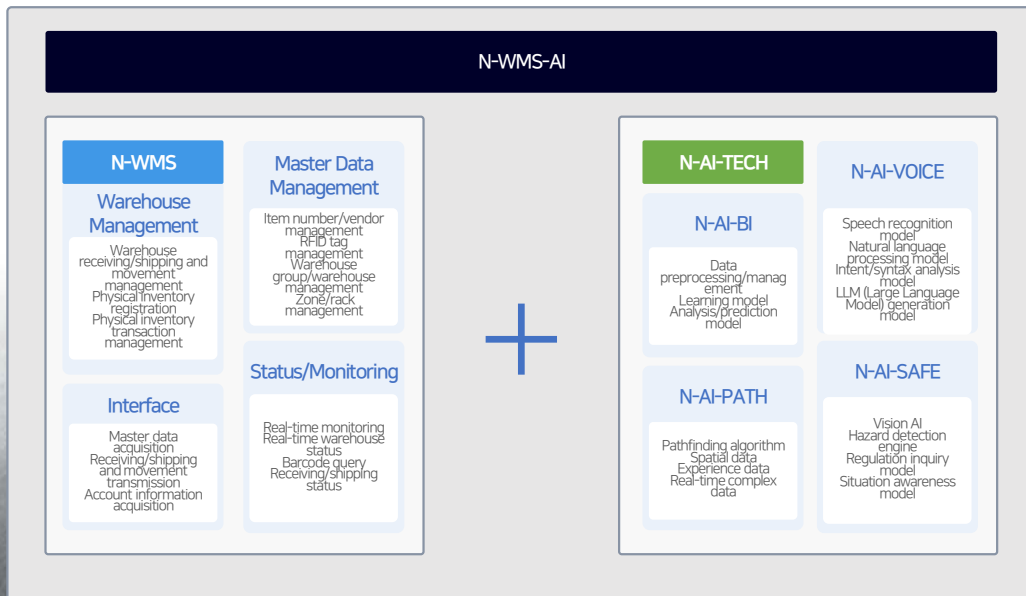


N-WMS-AI | AI-driven Warehouse Management System

Optimizing field operations and enhancing frontline operator capabilities with AI-integrated WMS.

AI-Based Operational Optimization	AI Voice Assistant	AI-Based Route Optimization
<p>Enhances operational efficiency by using AI technology to analyze and predict data related to receiving, shipping, and inventory, allowing for optimal planning, operations, and adjustments.</p> 	<p>A voice-activated AI assistant that supports operators by providing location search, information retrieval, and task queries. Operators can access the system via voice commands to ask questions, retrieve information, and perform tasks.</p> 	<p>Based on AI algorithms, this function utilizes heuristic data, such as allocation planning, shipping schedules, spatial information, and operator experience, to provide operators with the most efficient movement routes.</p> 

Process



Expected Effects



● Field Operation Optimization

The AI technology analyzes and predicts data generated through planning, stacking, operations, and tasks, allowing for the analysis, tracking, and management of effective KPI indicators.



● Reduction of Time and Cost

The AI technology forecasts the necessary tasks and labor, efficiently allocates the estimated costs, and optimizes resources, resulting in a reduction in overall costs and time.



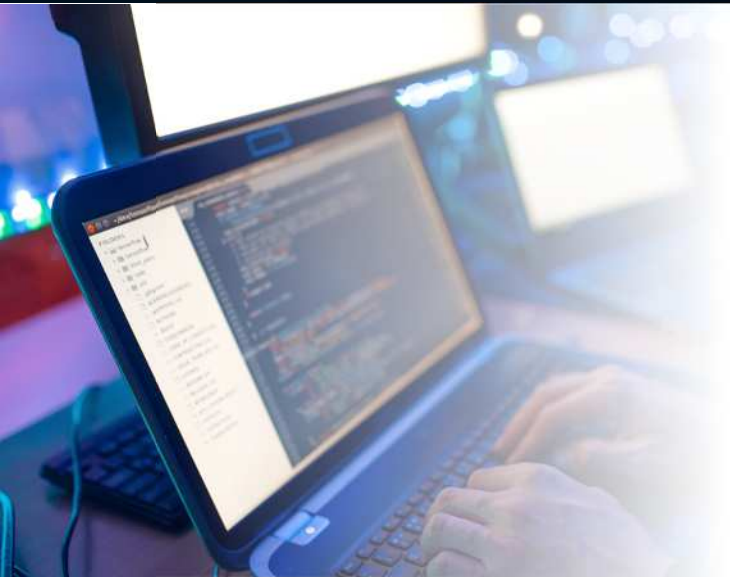
● Real-Time Information Tracking and Data Connectivity

Using 2D and 3D technology, site information is tracked and managed in real-time, with data shared through connections to various IoT devices and equipment, establishing a foundation for integration with AI technology.



● Operator Assistant

Operators can ask for the desired information and receive relevant data in real-time, minimizing downtime and facilitating quick knowledge transfer.



N-IO | Integration Solution

A solution for promoting effective integration between various systems.

Easy Maintenance	Quick Implementation	System Interoperability
<p>Provides maintenance, making it easy to manage new updates or patches.</p> 	<p>The integration solution is pre-developed, allowing for quick implementation. When providing standard connections between specific systems, development time can be shortened.</p> 	<p>Processes and transmits data efficiently by enabling smooth communication between systems using various protocols and communication methods.</p> 

Process



Expected Effects



● Interoperability with Various Systems

Enables easy use by integrating various systems.



● Management of Multiple Interfaces within a Single System

Allows the use of multiple interfaces within a single system through data transformation and mapping.



● Interface Standardization

Promotes the use of standardized interfaces to make them easier for users to utilize.




● Monitoring of Processing Results

Implements real-time monitoring of the processing results from interfaces and data.

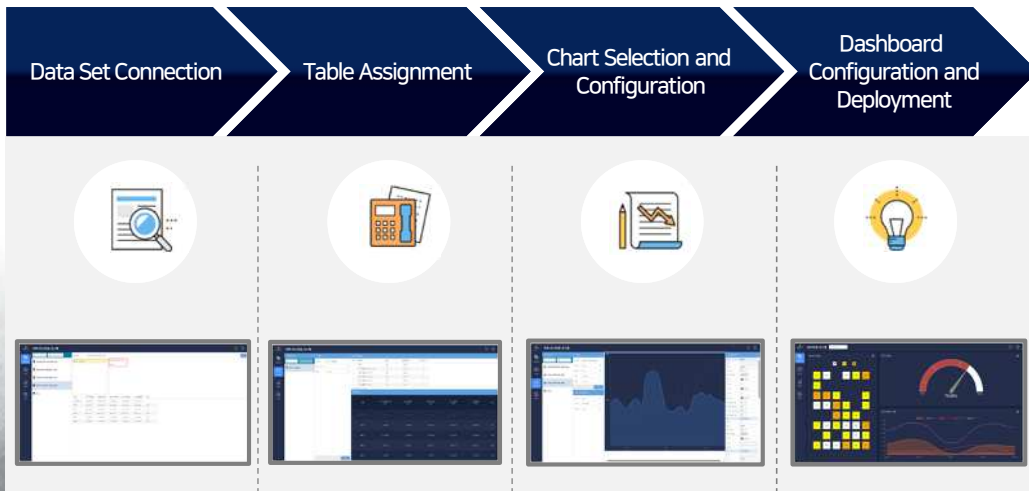


N-DIS | Visualization Solution


A solution that visually represents and monitors data and information.

Efficiency	Performance Analysis	Provision of Various Dashboards
<p>Standardizes best practices for continuous improvement and optimal practices through data collection, visualization, and analysis, as well as advanced reporting and analysis.</p> 	<p>Provides real-time visibility into efficiency KPIs, enabling operators and decision-makers to take immediate corrective actions to enhance plant performance and productivity.</p> 	<p>Provides dashboards for analysis, performance, and insights.</p> 


Process




Expected Effects

- 


Dashboard and Analysis

Data can be accessed from anywhere using web browsers or mobile apps, making it easy to use, manage, and expand.
- 

Data Sources

Prepares seamless data integration from various sources.
- 

Data Monitoring and Analysis

Provides unlimited visual data exploration to accelerate the analysis process without requiring technical knowledge.
- 

Monitoring

Real-time updates with options to configure colors and styles.

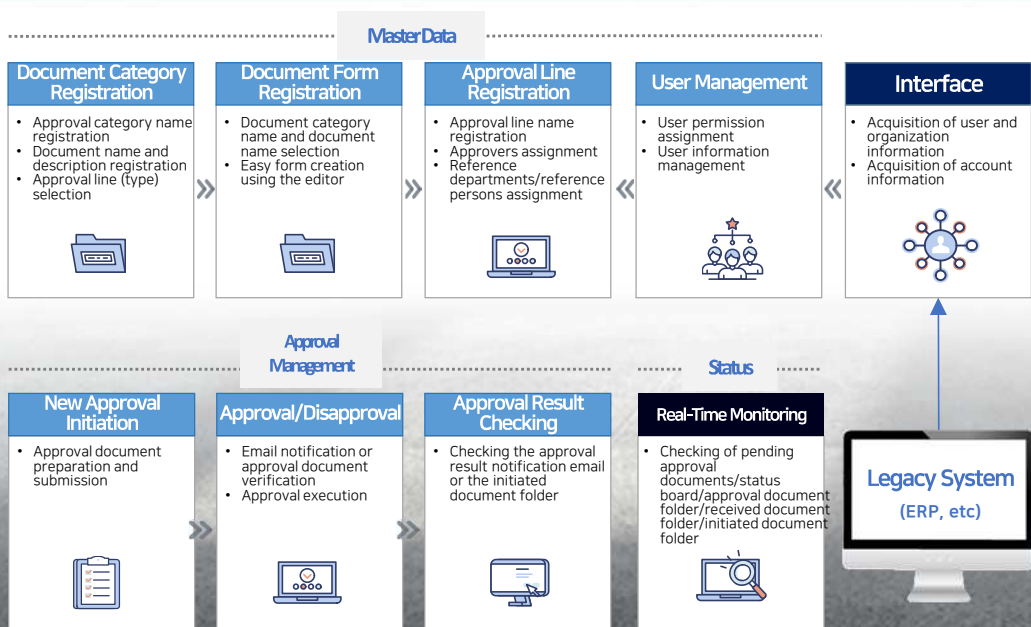


N-EA | Electronic Approval

An electronic approval system that processes documents and approval processes within an organization or company electronically.

Efficiency Improvement	Document Management and Tracking/ Transparency	Eco-Friendly
<p>Replacing paper documents and manual approvals with electronic processing speeds up the workflow and shortens the time to approval.</p> 	<p>Documents are stored and tracked digitally, making document management easier. Each approval stage records who approved and when, allowing for tracking of approval history. This ensures transparency and clearly identifies accountability.</p> 	<p>Reduces paper usage and digitalizes processes, making it environmentally friendly.</p> 

Process



Expected Effects



● Cost Reduction and Resource Efficiency

Reduces costs for postage, printing, etc., and allows for more efficient use of resources.



● Mobile Accessibility and Flexibility

Provides a flexible working environment by allowing access to approval tasks via mobile devices anytime, anywhere.



● Time Reduction and Process Acceleration

The electronic approval system automates the approval process, reducing approval time and accelerating business processes.






● Accuracy and Document Tracking Enhancement

Ensures the accuracy of documents, and automatically tracks each approval stage to prevent mistakes or errors.

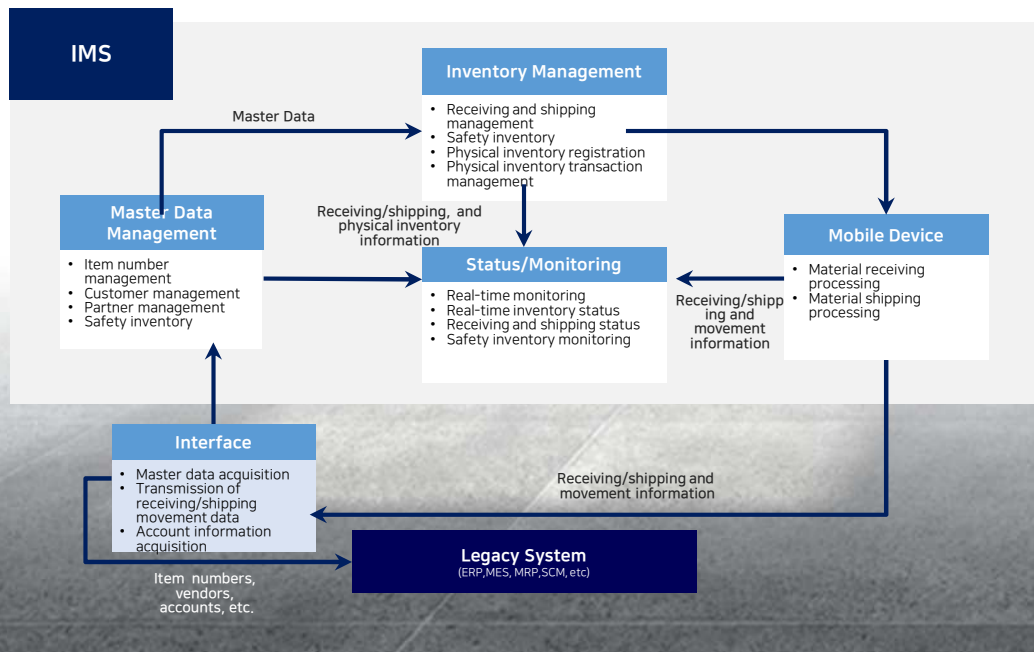


N-IM | Inventory Management

A solution that enhances logistics management and operational capacity by managing materials and inventory.

Efficient Inventory Management	Improvement of Labor Productivity	Real-Time Provision of Material Information
<p>NIMS provides precise inventory preservation methods and guidance for efficient management, enabling intelligent inventory counting, optimized picking, inventory preservation, cross-docking, and more, all tailored to real-world warehouse operations.</p> 	<p>By digitalizing existing operations, errors are eliminated, and current material and inventory locations can be accurately identified, ensuring synchronization between information and physical inventory. Additionally, tasks such as inventory tracking and picking are innovatively reduced, which contributes to an overall increase in labor productivity.</p> 	<p>Real-time information on materials for production can be provided, allowing real-time inventory tracking, which enhances operational efficiency.</p> 

Process | Expected Effects



- 

● Improvement in Accuracy
Improvement in inventory accuracy, operational accuracy, and service quality.
- 

● Cooperative Network Establishment
Sharing of information linking suppliers, companies, and partners. Integration and collaboration of processes through shared, real-time information between customers and partners, providing opportunities to create new added value.
- 

● Performance Management Systems Establishment
Shipping error rate / Adherence to tact time / Unfulfilled orders rate, etc.
- 

● Warehouse Operations Digitization
Utilizing data obtained from barcodes, it is possible to acquire master data, transmit receiving and shipping movements, obtain account information, and monitor material transactions, inventory status, material/inventory locations, and related movements.

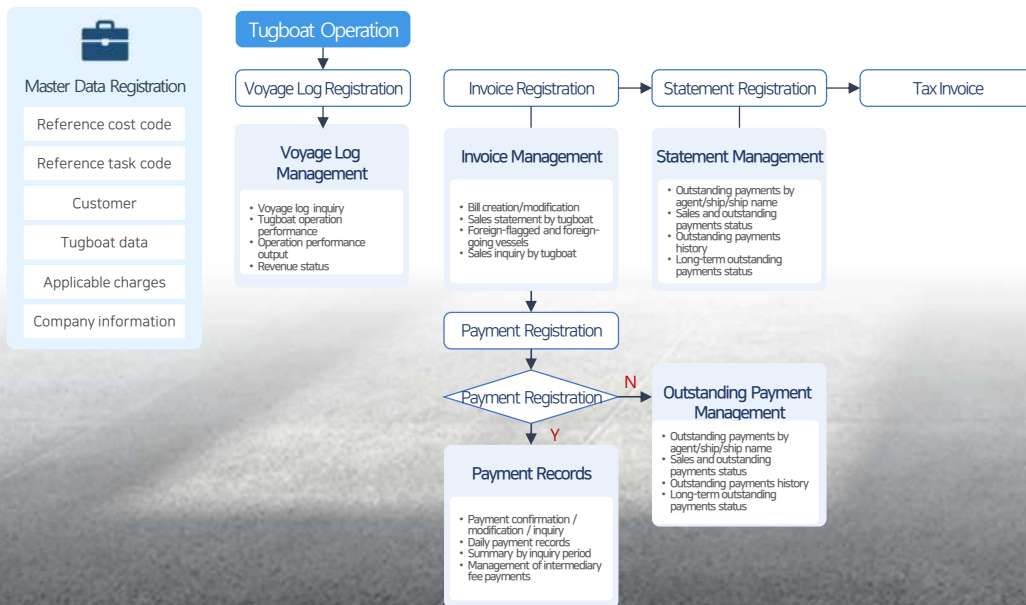


N-TVMS | Tugboat Management

A system that manages tugboat operations through an integrated management system for tugboat schedules, bills, and payment records for shipping companies operating tugboat services.

Enterprise System Introduction	Task Optimization Systematization	Integrated Management System
<ul style="list-style-type: none"> Framework reflecting the unique characteristics of the maritime industry. Support for smooth operations by leveraging the underlying infrastructure, enhancing user performance. 	<ul style="list-style-type: none"> Monitoring task progress to provide real-time guidance to users, ensuring efficient task execution. Simplified configuration compared to traditional complex systems, allowing easy and efficient access. 	<ul style="list-style-type: none"> Real-time information sharing among ships, land operations, and partners to maximize operational efficiency. Simple data entry for easy management of tugboat schedules, enabling efficient addition of new operations. Database conversion of information related to tugboat schedules, workloads, and related tasks for system-based operation.

Process



Expected Effects



Information System Enhancement

Improves operational efficiency by managing tugboats, pilots, and bills comprehensively.



Sales Increase

Reduces unnecessary expenses by improving accuracy and reducing work hours, leading to potential sales growth. Helps prevent document drafting errors, resulting in enhanced customer service and increased sales.



Transparency Assurance

Ensures transparency by allowing the tracking of tugboat operation types, work hours, completion times, and operator information across time units (hourly, daily, monthly, yearly).



Faster Task Processing

Enhances task processing speed by preventing accidents, schedule delays, and other issues that may arise from work errors or omissions, through accurate tugboat and pilotage management.

Business Field

SIEMENS



Solution

NSoft's Specialization:
SI Solutions

Opcenter Ex PR

Opcenter Ex DS

Opcenter Ex MDD (CAMSTAR)

Opcenter RDnL

Opcenter APS

R&D

Smart Safety
R&D

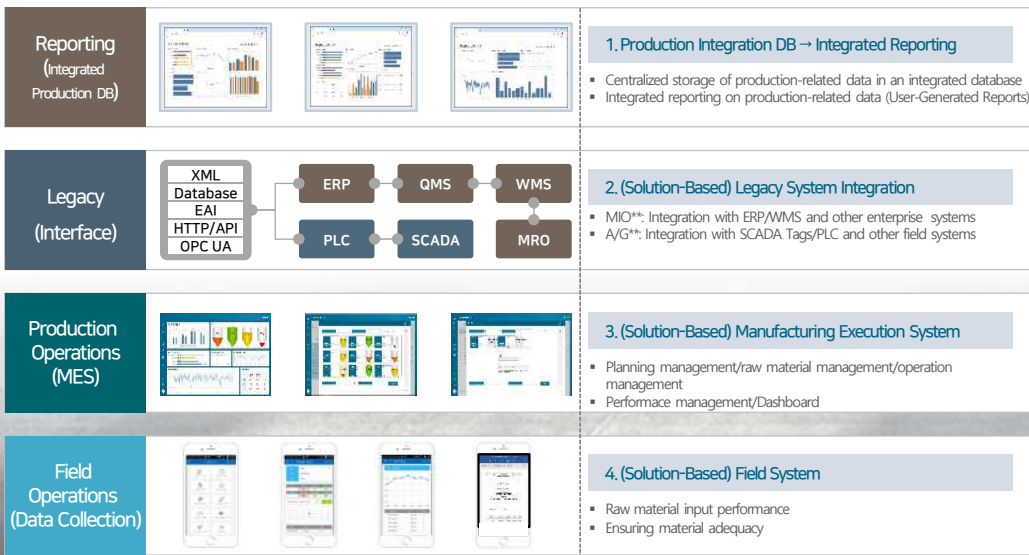


Opcenter Ex PR | Process Industry

A solution specialized for industries that conduct continuous production in batch units, such as chemicals and beverages.

Order Execution and Management	Production Reporting	Production Traceability & History Management
<p>Operators execute manufacturing tasks based on work orders provided by line or process instructions. In the case of batch operations, work orders are linked and managed, collecting production performance data for each process.</p> 	<p>Automatically or manually collects process data and manages it comprehensively by linking with work orders. This allows the generation and output of production, quality, and equipment reports.</p> 	<p>Links work orders to manage production performance, batch units, equipment data, material usage, operator history, etc., building traceability both forward and backward, and responding to production/quality issues.</p> 

Process | Expected Effects



- 1. Production Integration DB → Integrated Reporting**
 - Centralized storage of production-related data in an integrated database
 - Integrated reporting on production-related data (User-Generated Reports)
- 2. (Solution-Based) Legacy System Integration**
 - MIO**: Integration with ERP/WMS and other enterprise systems
 - A/G**: Integration with SCADA Tags/PLC and other field systems
- 3. (Solution-Based) Manufacturing Execution System**
 - Planning management/raw material management/operation management
 - Performance management/Dashboard
- 4. (Solution-Based) Field System**
 - Raw material input performance
 - Ensuring material adequacy

MIO* : Manufacturing Interoperability (SIEMENS System interface solution)
 A/G** : Automation gateway (SIEMENS SCADA/RTDB Data Interface solution)

-  **Maximized Operational Visibility with Data-Driven Production Efficiency**
 - Reduces workload by centrally managing data from the production site, including raw material input, production performance, and product quality.
 - Enhances ease of search and utilization by managing job performance and history using real-time data.
-  **Strengthened Information Sharing and Collaboration through Digitalization**
 - Registers and manages updates of operational standards, regulations, and procedures in the system, and utilizes this information for production directives.
-  **Improved Quality through Enhanced Traceability and Quality Control Systems**
 - Increases the utility of quality issue analysis by registering and linking raw material test results, process inspection results, and product inspection outcomes for each supplier in the MES system.
-  **Agile Market Response with Real-Time Decision-Making**
 - Efficiently supports decision-making by analyzing the correlation between production and quality data, identifying causes and results.
 - Provides real-time field information and enhances decision-making speed through customized dashboards.

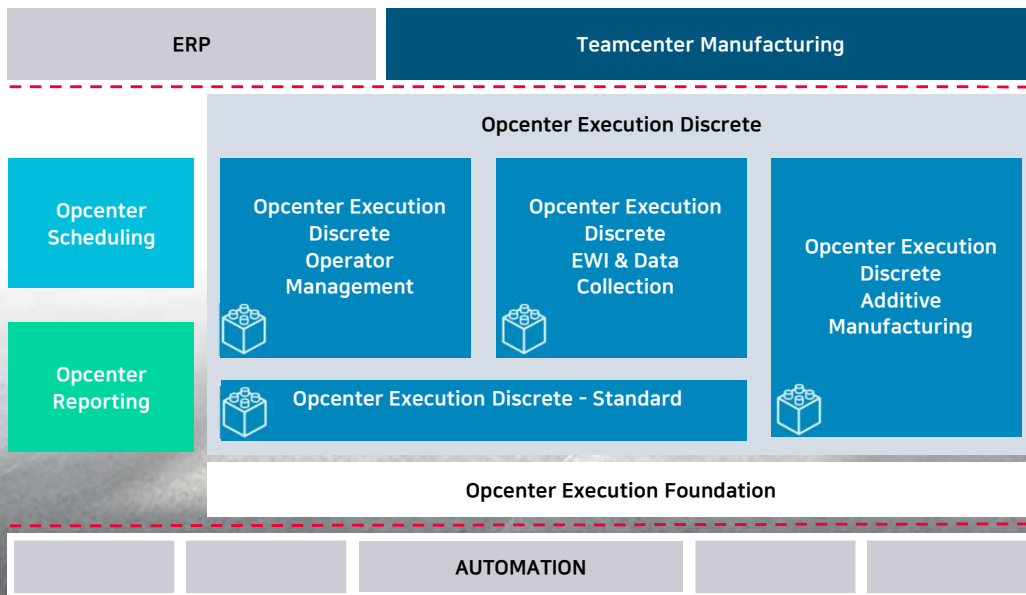


Opcenter Ex DS | Discrete Manufacturing

A solution specialized for industries that conduct large-scale production in lot units, such as electronics and automotive industries.

Asset Management Function	Management Function	Monitoring Function	Additive Manufacturing Function
<p>Centralizes related asset information, defines and manages efficiently, and ensures visibility of material flow and tool usage in the workplace.</p>	<ul style="list-style-type: none"> • Work order management • Production scheduling dashboard • Defect management • Change management • User, operator, and labor management 	<ul style="list-style-type: none"> • Work order management during production • Traceability inquiry of hierarchical structures • Raw material traceability management • Work order alerts • Line buffer monitoring in the level structure 	<p>Processes specialized in additive manufacturing Production traceability management for products and processes</p>

Process | Expected Effects



High-Level Production Capability

Elimination of barriers between production technology, production planning, and execution



Implementation of Digital Twin

Enhancing business process efficiency through comprehensive system access



Improved Efficiency

Supporting collaboration between engineering and execution departments to address issues and deficiencies throughout the lifecycle







Operational Environment

Establishing a paperless operational environment by ensuring transparency and visibility in manufacturing and on the shop floor



Opcenter Ex MDD (CAMSTAR) | Medical Devices

An optimal solution for improving manufacturing systems in enterprises, integrating seamlessly with Teamcenter & Automation Systems.

Process Model Management	WIP Tracking	Smart Scanning	SPC
<p>Easy implementation of process models tailored to the company's needs using drag & drop functionality, with management of revisions and histories.</p> 	<p>Enables traceability of all information generated in manufacturing processes, facilitating root cause identification of issues and utilizing the data as foundational information for various reports.</p> 	<p>Camstar provides data entry functionality through barcode scanners, enhancing operator productivity, preventing data entry errors, and ensuring data accuracy.</p> 	<p>Provides powerful and seamless Statistical Process Control (SPC) functionality, enabling real-time information on the causes of production decrease and defect reduction.</p> 

Process

Camstar Interoperability					
Enterprise and Shopfloor connectivity					
Camstar Intelligence					
Operational Reporting (Data Abstraction Layer, OOB Reports & Adhoc Reporting, KPI's, Analytics, Alerts, Dashboards)					
Camstar Change					
Author	Review and Approve			Activation	
Camstar Quality Modules					
Production Nonconformance Mgmt.			Event Mgmt.		
Camstar Manufacturing Modules					
Advanced Scheduling	AQL Sampling Plans	Maintenance Management	Label Printing		
Order Dispatch	SPC	Electronic Signature	Operator Training & Certification		
Camstar Manufacturing Core					
Performance Monitoring	Security Mgmt.	Paperless Manufacturing	Lean Flow	Alerts and messages	Containment Management
WIP Tracking	Electronic Procedures and Computations	Labor & Team Tracking	Genealogy	Resource Tracking	Reworks, Returns & RMA
Workflow Router	Process Specification	Master Data Definition	Inspection Plans	Unique Device Identifier (UDI)	Electronic Audit Trail

Expected Effects



Scalability

The Camstar system allows for the addition of more users, facilities, and greater capacity, including transaction lines, as manufacturing requirements increase.



Extensibility

The Camstar system can add functionality in the form of additional modules and extend capabilities through "code-less extensibility." This allows IT Camstar users to build user-defined applications tailored to specific requirements.



Integration-readiness

The Camstar system can operate as a standalone digital point solution or integrate with connected IT functions similar to manufacturing, such as MOM, QMS, ERP, and PLM systems.

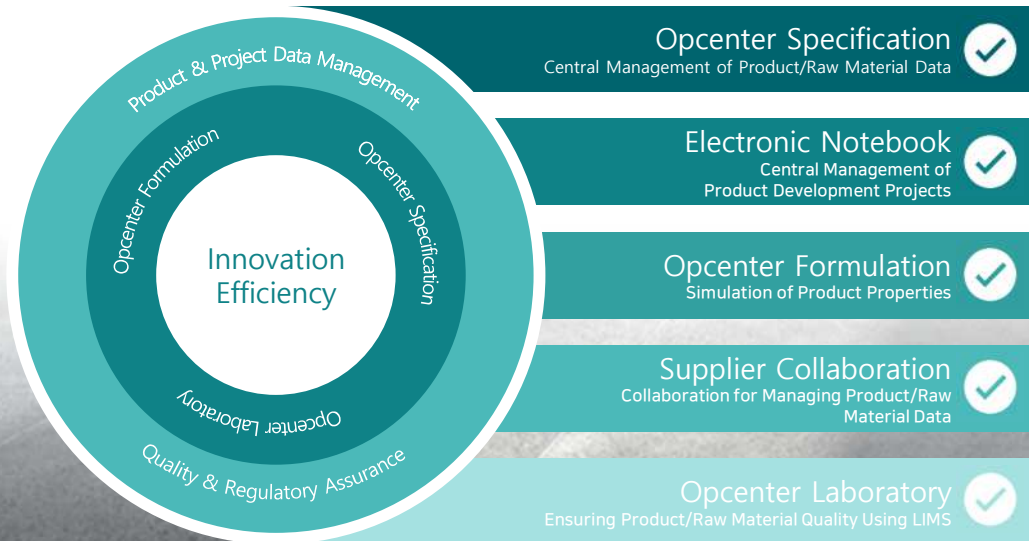


Opcenter RDnL | Laboratory Management

A specialized solution for managing data related to various experiments, equipment, and raw materials/materials conducted in laboratories.

Basic Functions	Raw Material/Product Management	Formulation Management	Laboratory Information Management
Manages electronic research notes and executes workflows.	Manages information such as raw material properties, product specifications, or BOMs, ensuring comprehensive product data management.	Manages product formulations, including searching for registered experiment results and mixing ratios.	Manages samples, test results, judgments, and standard test items, including detailed searches for trend charts, reports, and test results.

Process



Expected Effects



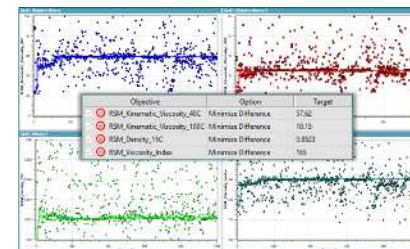
Reduction of Development Schedule

- Reuse of past development formulas
- Identifying key factors through exploration of past experiment results and discoveries
- Prevention of redundant experiments



Exploration of Optimal Formulations



- Integration with Data Mining Solution (HEEDS)
- Exploration of formulations that best satisfy target properties
- Exploration of formulations that minimize production costs



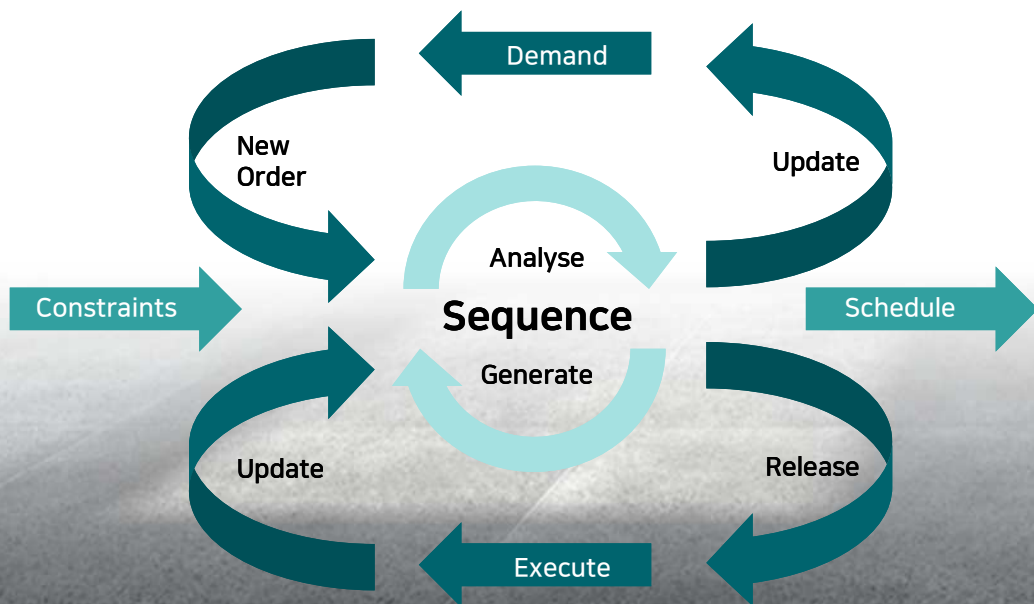



Opcenter APS | Production Planning


Utilizes algorithms to analyze and calculate production schedules based on constraints, rules, etc., allowing the creation and evaluation of multiple scenarios.

Opcenter Advanced Planning	Opcenter Advanced Scheduling
<p>Enhances competitiveness and maximizes profitability while improving customer service, providing essential planning tools for companies. Based on current inventory levels, actual sales, and forecasted demand, coordinates material purchases, supply timings, and production plans to minimize costs associated with inventory.</p> 	<p>A scheduling tool that establishes detailed production schedules based on product, process, and equipment, and is primarily used by manufacturing companies with limited machines, equipment, and labor, but also applicable to services and logistics.</p> 

Process | Expected Effects



- 
Strategic Decision-Making Tool (Opcenter PL)
 - Sets production direction by considering demand forecasts and the feasibility of long-term orders.
 - Dynamically sets target inventory levels in alignment with long-term demand.
 - Balances load across multiple resources by considering capacity constraints and the inventory/lifespan of materials.
 - Supports key decisions regarding production capacity:
 - Adjustment of workforce shortages and surpluses
 - Evaluation of resource capacity shortages and surpluses
 - Determination of whether to expand plant capacity

- 
Tactical Decision-Making Tool (Opcenter SC)
 - Considers detailed work orders to provide work sequences and task lists.
 - Accounts for changes due to work interference, equipment failures, and scrap.
 - Responds to real-time production efficiency.
 - Supports decision-making:
 - Overtime work
 - Prioritization of production/work orders
 - Splitting of production/work batches
 - Delivery schedule adjustments
 - Delivery commitment simulations (CTP/ATP)

Business Field

Solution

**NSoft's Specialization:
SI Solutions**

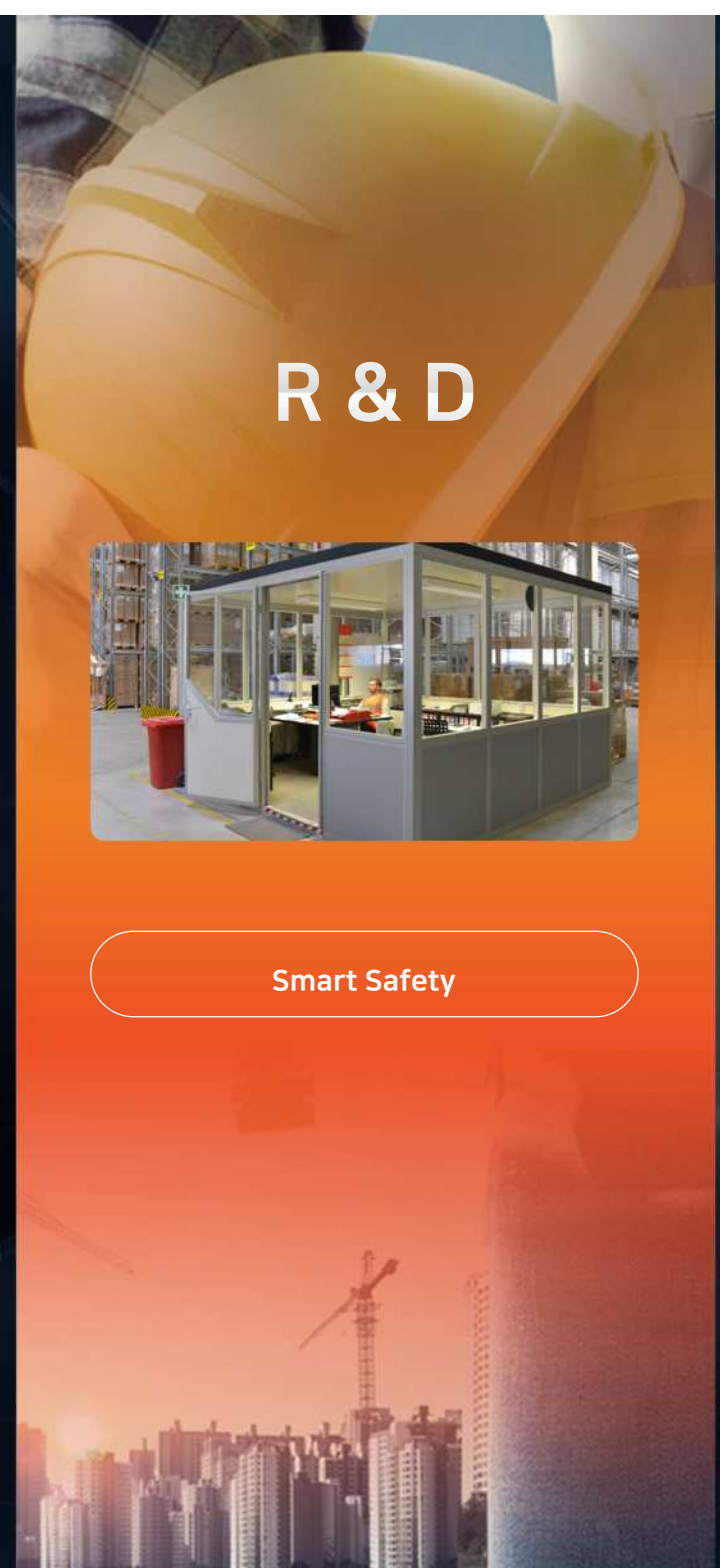
SIEMENS

**Specialized Partner
for MOM Solution**

R & D






Smart Safety



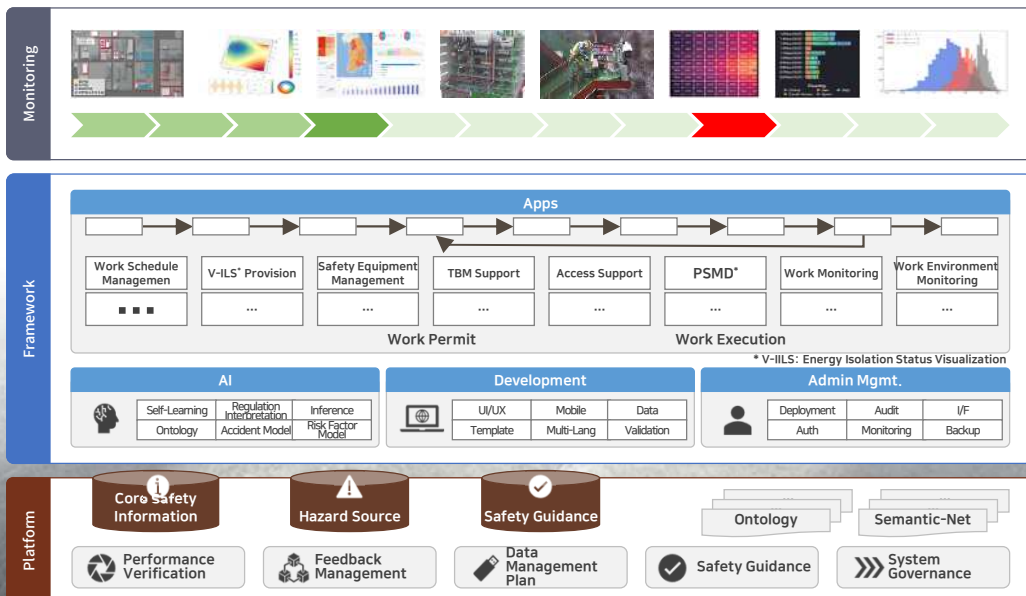


Smart Safety | Accident Prevention

Provides safety risk & precautionary measures to supervisors, safety managers, and workers, linked with TBM for accident prevention.

System Structure Implementation and Standardized DB Construction	Cross-Checkable Analysis Models	Management of Non-Routine Work and Impact Analysis
<ul style="list-style-type: none"> Implements a structure that supports knowledge information such as safety, regulations, and harmful risk factors within the system. Digitizes work permits. Stores and manages work conditions, work environments, and hazard types in a DB. Standardizes and stores various harmful risk factors in the DB. Enhances access levels through AI and big data technology. 	<ul style="list-style-type: none"> Currently identifies only risk factors for individual tasks. Constructs cross-check analysis models and system structures between tasks and between processes and tasks. Cross-checks interactions across the entire site. 	<ul style="list-style-type: none"> The execution of safety tasks considers the mutual impact between work areas and among workers. Manages the overall structure in an integrated manner. Infers organic hazardous risk factors by linking existing information during the execution of safety tasks. 

Process



Expected Effects



Economic and Industrial Impact

- Utilization of formalized foundational knowledge for industrial safety
 - Establishment of a database for hazardous risk factors categorized by types of safety work
- Identification of hidden potential risks from dispersed data
- Reduction in occurrences of industrial accidents



Technological Impact

- AI analysis technology utilizing multiple data sources
 - AI engine for analyzing evolving safety regulations and work environments
- Construction of effective AI training datasets
 - Publication of refined datasets for the development of expanded AI models



Social Impact

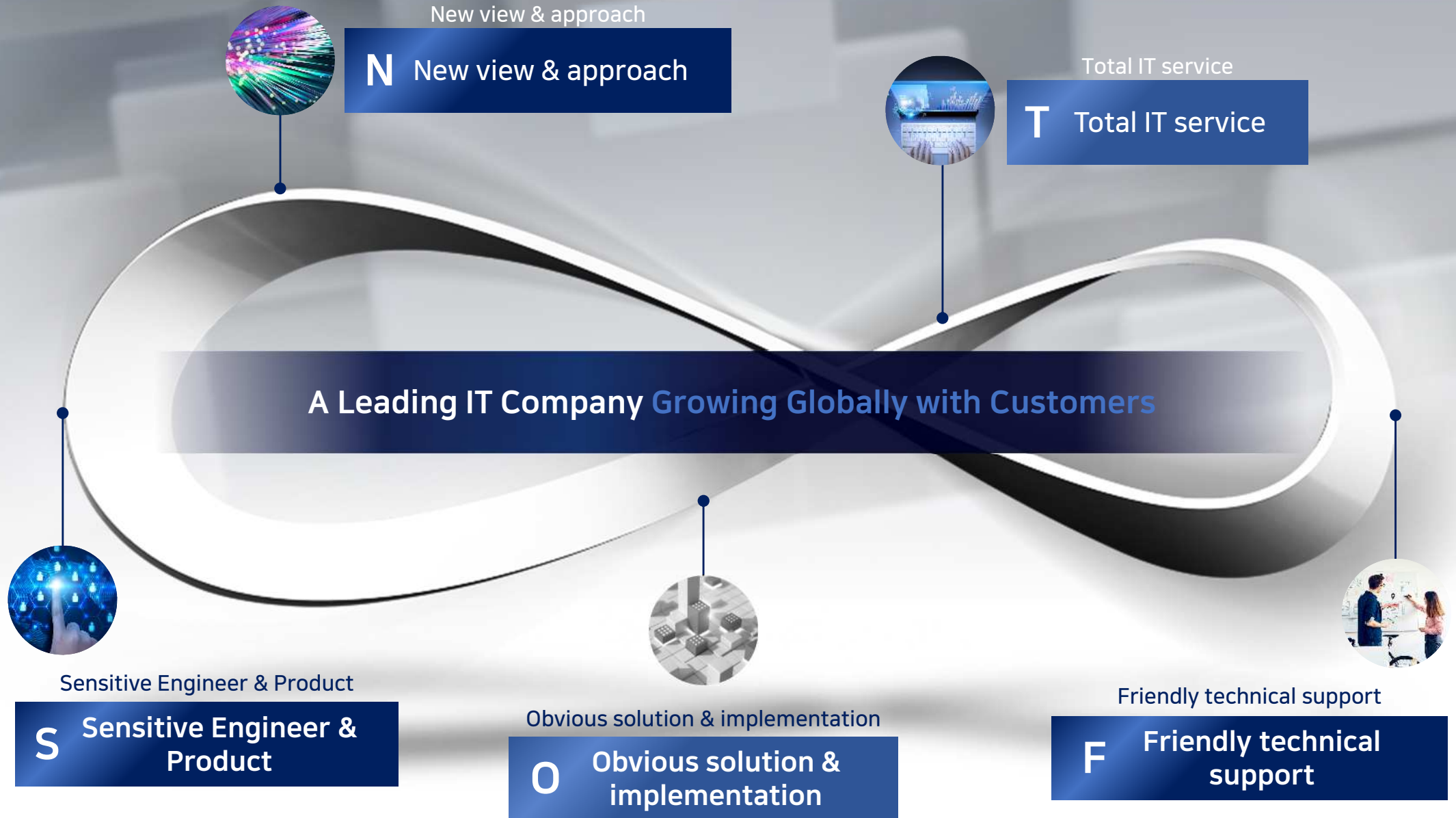
- Ensuring practical worker safety
- Implementation of a system for securing actual worker safety

Business Strategy

- Strategy
- Vision

Strategy

Skill is strategy



Vision

on to move forward

No.1 Partner of Siemens

Selected as a Korean MOM supplier partner by Siemens, which is leading Industry 4.0 worldwide, expanding opportunities to supply global solutions, thereby increasing sales and raising corporate brand awareness.

Maximization of Solution Competitiveness

Possessing core solutions like MES, WMS, and ERP for smart factories, which allow effective responses to changes in production paradigms and corresponding demand.

Global Market Expansion

Having a Chinese subsidiary offers a competitive advantage in expanding export opportunities and market presence in the IT sectors of East Asia and Southeast Asia compared to other companies.

Talent Acquisition

With a strong pool of IT professionals and advanced software application technologies, we meet the high demand from both government and industry sectors.



THANK YOU

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