Company Introduction

Smile! Plant

30years'eXperience

One-stop Industrial Automation Solutions

aim Systems

" Will be+ today and future! "

aim Systems

With Outstanding Expertise,
Achieving Goals Together

With our excellent expertise and passion for smart manufacturing innovation,
we will work together to realize customer value and achieve goals in this digital age.

We provide integrated IT solutions combined with proven automation solutions and professional engineering services for smart factories and smart airports in the manufacturing industry, supporting customers' operational efficiency improvements and digital transformation.

We build a foundation for integrated operations management and immediate service deployment, as well as rapid adoption of cutting-edge technologies including AI into business processes. We prepare for customer business model innovation and sustainable value creation.

aim Systems

Global Industrial Intelligence Solution Provider

Head Office

AIM SYSTEMS, INC.

INCORPORATED	1996
CEO	Jung Yeun Sun
BUSINESS	Development and supply of industrial automation solutions Core technology support and key personnel operation RND technology strategies provision
EMPLOYEES	189
ADDRESS	Bundang, Gyeonggido (www.aim.co.kr)

Shanghai Branch

AIM SYSTEMS (SHANGHAI) CO., LTD.

INCORPORATED	2005 Year
CEO	Jung Yeun Sun
BUSINESS	Local system construction, technical support/maintenance Sales/marketing activities and local customer management
EMPLOYEES	81
ADDRESS	Shanghai, China

aim Systems

aim Growth Story

30 years

1996 ~ 2004

Company Established: 1996

Successful local development of MES for the first time in Korea

Secured references from large companies

Domestic Manufacturing Automation/Local Development

- Plaque of Appreciation Award from Hynix Semiconductor(MES system implementation contribution)
- Ranked 25th in ‘2003 Korean Technology Fast 50’
- Ranked 67th in '2002 DTT Asia Pacific Technology Fast 500'
- Plaque of Appreciation Award from Samsung Electronics Semiconductor (MES system implementation contribution) entered China

2005 ~ 2009

Leading the domestic manufacturing automation market

Expansion of overseas markets

Domestic Leader/Overseas Expansion

- Selected as a partner of the HP eKorea
- Best Award in the Commercialization Sector of the Industrial Technology Award Selected by the Minister of Trade, Industry and Energy
- Plaque of Appreciation Award from Hynix Semiconductor(MES system implementation contribution)
- Plaque of Appreciation Award from Siltronic-Samsung Wafer(MES system-implementation contribution)
- 5 Million Dollar Export Tower Award

2010 ~ 2014

Leading exports to overseas markets

Expansion of smart factory domestic business

Diversification of industries such as chemicals, electronics, assembly, and solar energy

Overseas Leader/Domestic Business Diversification

- Construction Excellence Prize Award by China's CEC-PANDA(MES system implementation contribution)
- Excellent Supplier Award by China's CSOT(MES system implementation contribution)
- Trade Day Award by the Minister of Trade, Industry and Energy (Special Contributor - Export)
- Companion Company Award by the Gyeonggi Provincial Small and Medium Business Administration
- Cooperation Prize Award from Samsung Display for mutual growth partnership
- Grand Prize in Industrial Technology Commercialization by the Minister of Trade,

2015 ~ Present

Securing smart airport technology

Expansion of new industries such as smart logistics/secondary batteries

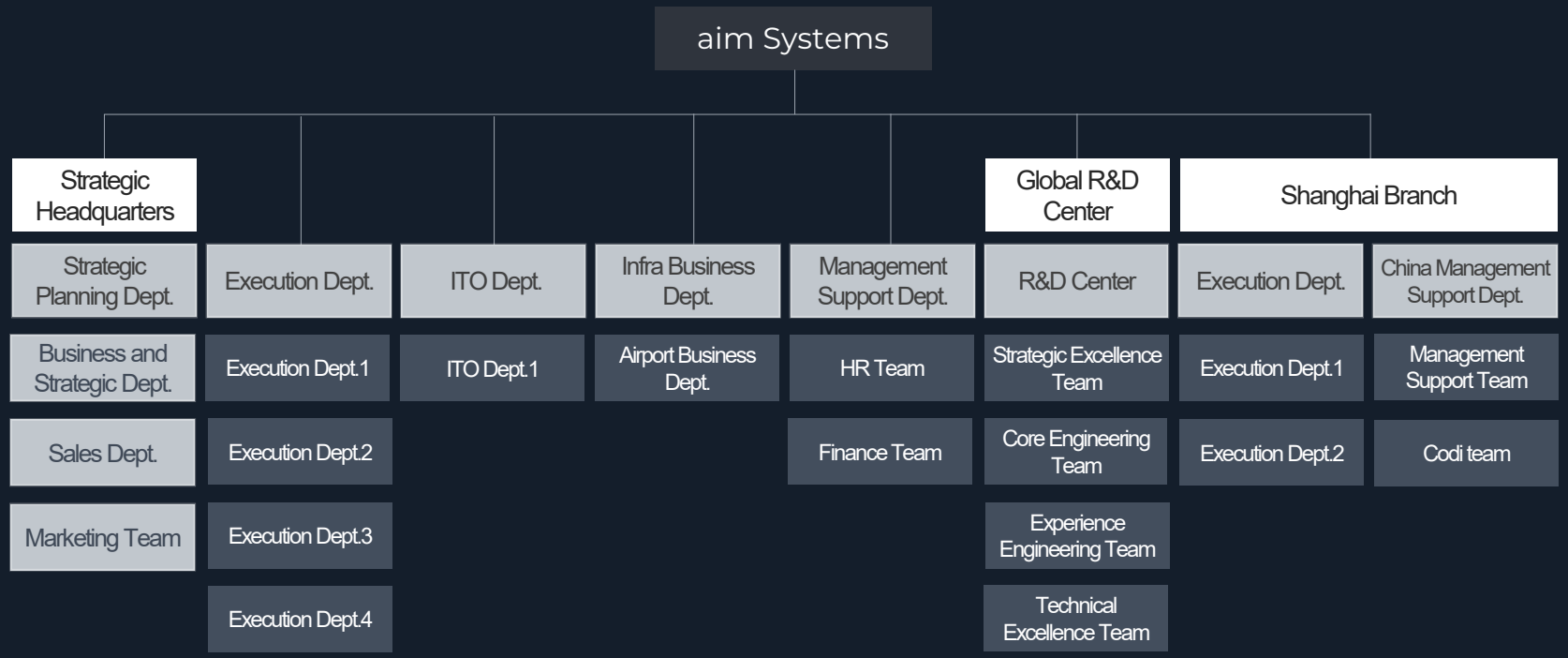
Sustainable Growth and New Businesses Expansion

- 30 Million Dollar Export Tower Award
- Youth-Friendly Small Giants Certification
- World-Class 300 Selection Certificate
- National Core Technology Company Selection Certificate by the Minister of Trade, Industry and Energy
- Digital Innovation Award at the 2024 19th Annual Digital Innovation Awards

Organization and Personnel

- We systematize product development, technical support, and business management through global R&D and management support organizations. Each business division realizes customer value with industry-specific expertise and proven technology accumulated over many years and carries out systematic and stable global business.

Collaborative Global Organization



Number of personnel by role

2024.10.01 Update

Business Area

- aim Systems, the 1st generation leader in factory automation, provides automation solutions and engineering services based on advanced technology and expertise. We are leading the market and moving toward creating future value in industrial automation through continuous innovation and integration.

- We are securing market leadership based on proven technology and excellent market share in Asian markets centered on Korea and China

SK hynix, SK on, LOTTE INFRACELL, BOE, TIANMA, LG Display, LX, 华星光电 CSOT, TRULY, HLMC 上海华力

- We have professional technical capabilities to provide smart automation solutions from cutting-edge high-tech industries leading smart factories to various manufacturing fields.

Semiconductor	Display	Secondary battery	PCB
AutoParts /Assembly	Electronics /Assembly	Chemical	Airport/ Aviation

- Through our strong in-house R&D organization, we continuously develop competitive, cost-effective and customized solutions.

High-tech, General Manufacturing, Smart Airport

Application Software	Domain/IT Consulting
System Integration	System Maintenance

Business Area

- Based on core technologies in the semiconductor and display fields, we have expanded our business areas to include smart factories, logistics, and airport infrastructure, and we are building a new ecosystem with a cloud-based manufacturing integration platform.

Smart Factory

A smart factory is an operational control system that improves productivity and quality by applying information and communication technology to the design and production process.

- Semiconductor
- Display
- PCB
- Secondary battery
- Automotive, electronic parts/assembly
- Chemical

SK hynix, LG Display, BOE, TIANMA, TRULY, 华星光电 CSOT, Visionox, HKC, OCI

Smart Logistics

A logistics control system that optimizes logi stics movement time by managing return ord ers for logistics facilities

- Factory Logistics Automation
- Logistics Warehouse Automation
- MES
- WMS
- MCS
- WCS
- OCS
- ACS
- SCS
- CCS

Smart Airport

Integrated infrastructure system of passenger terminal including common use passenger processing system and self-bag drop/BRS

- Self check-in
- Self Back Drop
- Security check
- Other infrastructure

Incheon Airport, KAC 한국공항공사

Manufacturing Integration Platform

A digital innovation system that integrates all IT from development to operation of integr ated development operation support tools.

- **eziframe** (Libraries)
- **eziflow** (WF)
- **ezibizcon** (CIM Framework)
- **ezidevops** (CI/CD)
- **ezihub** (Centralization)

Smart Factory

We provide smart factory solutions that integrate production execution, facility automation, and logistics automation.

We implement the entire process from product planning to sales with ICT-based intelligent digital automation, and build an ecosystem that integrates development, building, and operation.

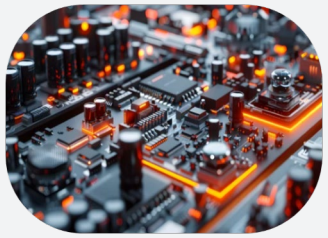
We realize a smart factory with high productivity and safety by optimizing automated operation processes with data-based prediction and analysis.

Semiconductor

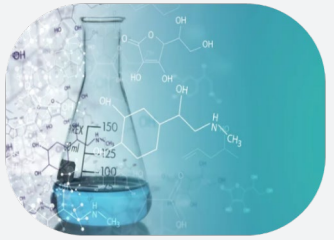
Display

PCB

Secondary battery



Automotive, electronic parts/assembly



Chemical

Semiconductor

- At a time when the automation solution depended heavily on imported goods, we succeeded in developing the semiconductor manufacturing operations automation solution for the first time in Korea. We have realized production efficiency and factory operation optimization by establishing various process-specific automation systems for major domestic and foreign semiconductor companies, and we have the unrivaled competitiveness to provide total solutions to semiconductor factories of various wafer sizes, memory/non-memory.

Implementation Details

Major Semiconductor Factories Implementation Details

200m FAB (Memory/Foundry)	300m FAB (Memory/Foundry)	EDS	OSAT
• MANUAL/SEMI/FULL Auto Response • Photo Inline Equipment Specialized Tracking • Furnace Equipment Control • Batch Lot Control • Cassette/Reticle Management	• Multi Lot One Carrier • Wafer Level Tracking & Traceability • NPW (Non-Production Wafer) • Large Data Processing • N2 Purge Control	• PROBE Card Management • Test Results Data Collection • Wafer Map • Inventory Management • Facility Maintenance Management	• Multi Chip Management • Material Management Process • Golden Recipe Management • Bin Sorting • Wafer Map

Supply Solutions

MES	EAP	MCS	Monitoring/Engineering
• Semiconductor Specialized Process • Flexible Operation Scenario Based on Workflow • Diverse Manufacturing Requirement Response • Optimization by Manufacturing Type • Flexible Application Support and Customization • SEMI Standards-based Integration and Extension	• Various Communication Protocols Provision SECS/GEM, OPC, PLC UA • Installation Scenarios by Equipment Type Single Equipment, Complex Equipment, In-line Equipment • Real-time Monitoring and Control • Real-time Large Data Processing	• Integrated Control of Various AMHS Equipment • Field-based Modeling and Real-time Monitoring • Intelligent Route Optimization and Real-time Route Optimization • Production Bottleneck Prevention and Material Movement Efficiency Improvement	• RMS (Recipe Management System) • SPC (Statistical Process Control) • FDC (Fault Detection & Classification) • FMB (Factory Monitoring Board) • Report

Semiconductor

Key Clients

MagnaChip	SK hynix		SHLMC		SK hynix ,Samsung
Korea			China		Korea
MagnaChip 매그나칩 반도체 & hynix 하이닉스 1공장					
	M10	M11	C2	Fab1	All
S. LSI	DRAM, NAND	NAND	DRAM	S. LSI	DRAM/NAND/Foundry
130nm	60/40nm In-house(2016)	48nm~28nm In-house(2015)	90~60nm In-house(2016)	55/40nm	Under 20 nm
2004~	2004~2015	2008~2014	2006~2015	2011~	Current
80K	130K	140K	140K	35~40K	160K ↑

SM/SI support
MC/MCS Project

Display

- We are leading the global market by supplying full automation solutions optimized for various display manufacturing sites, such as TFT LCD, AM OLED, Module, and Micro OLED, to major domestic and overseas factories.
- We provide engineering solutions for manufacturing data analysis, focusing on manufacturing execution systems that integrate scheduling and deploying, equipment automation systems that provide standardized PLC I/F and in-line facilities, and logistics automation systems that enable intelligent return optimization and real-time monitoring.

Implementation Details

Display Main Factories Implementation Details

TFT LCD

- MANUAL/SEMI/FULL Auto Response
- Array/CF/CELL Tracking
- MMG & Advanced Glass Sorting
- Indexer Control Operation Standardization
- Lot/Glass/Panel Tracking
- Cassette/Mask Management

AM OLED

- LTPS/OLED Equipment Specialized Tracking
- OLED Mask Carrier Auto Return
- OLED Depositor In-line Control
- Multi Lot/Multi Product Control
- None Product Glass Control

Competitiveness

Solution	Verification and securing of multiple references in large-scale display FAB
	Total solutions required for factory operation and full automation functions provision
	Possession of industry standard specifications and business field leader
Execution	Possession of optimal project methodology
	Securing a number of experienced consultants and developers
Business	Execution organization for local support in Korea and China
	Organic cooperation with related partners for HW and System SW
Value Chain	Equipment: Process and inspection equipment and logistics equipment (MHS)
	Material Parts: CF, Material : PR, and others

Module

- Module Line FULL Auto Response
- Panel Tray Map Management
- Module Process Specialized Sampling
- Shipping Label Management
- OQC & RM Rework

Micro OLED

- Wafer / OLED / OSAT Complex Process
- Wafer Level Tracking & Traceability
- Multi Lot/Multi Product Control
- OLED Mask Management

Display

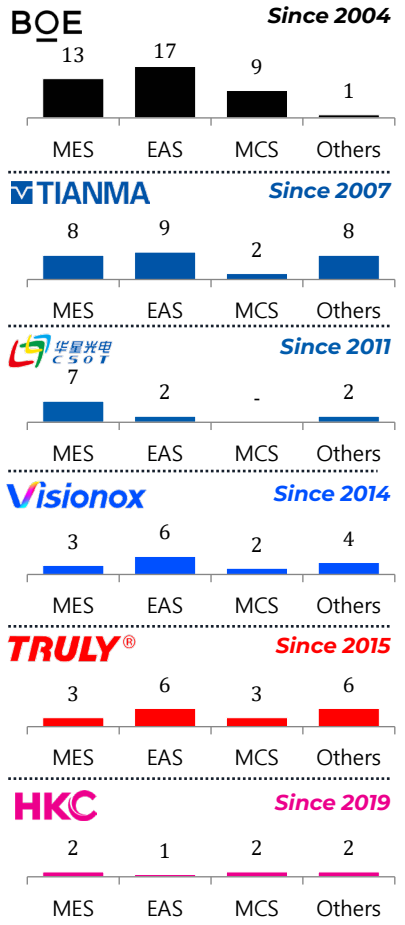
Key Clients

Building lasting trust relationships with key clients (focusing on the Chinese display market case)

MES EAP EAS MCS Report YMS

	BOE	TIANMA	华星光电 CSOT	Visionox	TRULY®	HKC
'04	G5					
'07		G4.5				
'09		G4.5				
'10	G6 G8	G4.5				
'11			G8.5			
'12		G5.5, LTPS LCD				
'13	G8					
'14	G8		G8.5	G6, AMOLED		
'15	G8	G6, AMOLED G6, LTPS LCD	G6, LTPS LCD		G4.5, TFT LCD +AMOLED	
'16	G6, LTPS LCD +AMOLED G6, AMOLED G11	G6, AMOLED				
'17			G11	G6, AMOLED	G4.5, TFT LCD	
'18	G6, AMOLED Micro-OLED G10.5		G6, AMOLED		G4.5, TFT LCD	
'19	G6, AMOLED		G11	G6, AMOLED		G8.6
'20						G8.6
'21		G6, AMOLED	G8.5			
'22			G8.5			

Accumulated building performance



Secondary Battery/Material

- Based on the automation solution technology proven in the semiconductor and display industries, we have expanded our business area to the secondary battery industry. From electrode, assembly, chemical, and module processes to material processes such as anode foil, we have successfully established production execution, facility and logistics automation, and engineering solutions to provide optimized secondary battery specialized solutions to customers.

Implementation Details

System main implementation details

Production Management

- Chemical materials, raw material compounding & mixing & slurry manufacturing, coating/rolling process
- Lamination/Welding/Packaging process of posi tive electrode & negative electrode & separator with semi-finished product/raw material BOM assembly concept

Recipe Management

- Real-time automatic calculation of compounding ingredients through COA such as IQC & PQC
- Real-time equipment input control by linking raw material input amount to raw material recipe
- Recipe management system operator input error prevention by product and facility

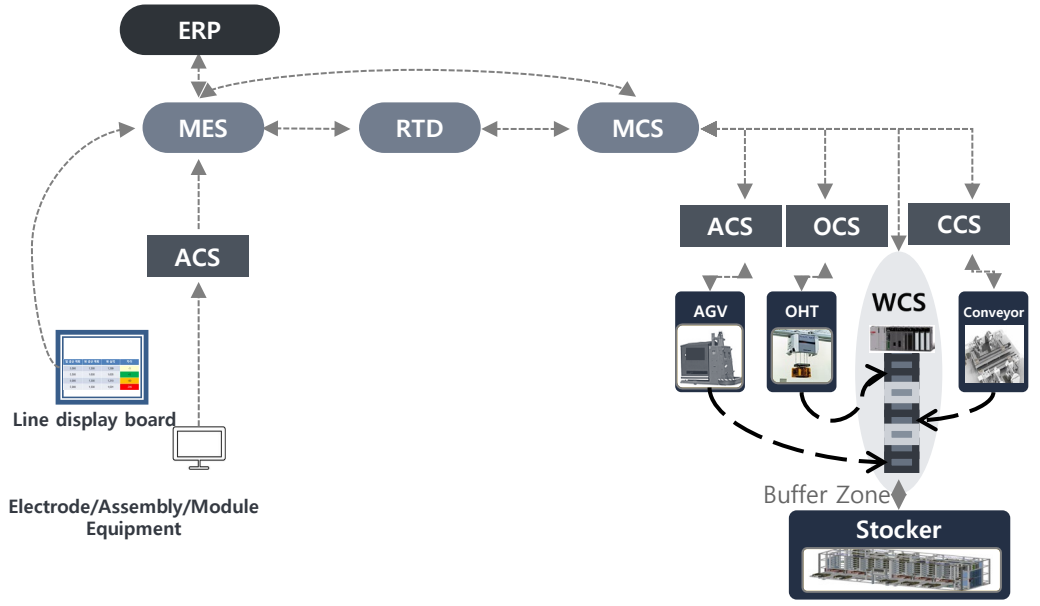
Material Management

- Improved traceability of raw materials & work in process management raw materials use
- LOT history tracking, quality improvement, and increased productivity by linking material input history

Equipment/Logistics Automation

- Production automation through PLC equipment I/F, automation of production performance, improvement of data reliability.
- Logistics automation through AMR/AGV I/F and optimal return route management

System configuration chart



Implementation Performance

SK on Seosan/China/USA (Georgia, Kentucky, Tennessee)/Europe (Hungary)

LOTTE INFRACELL

솔루스 첨단소재 Solus Advanced Materials

Supply Solutions

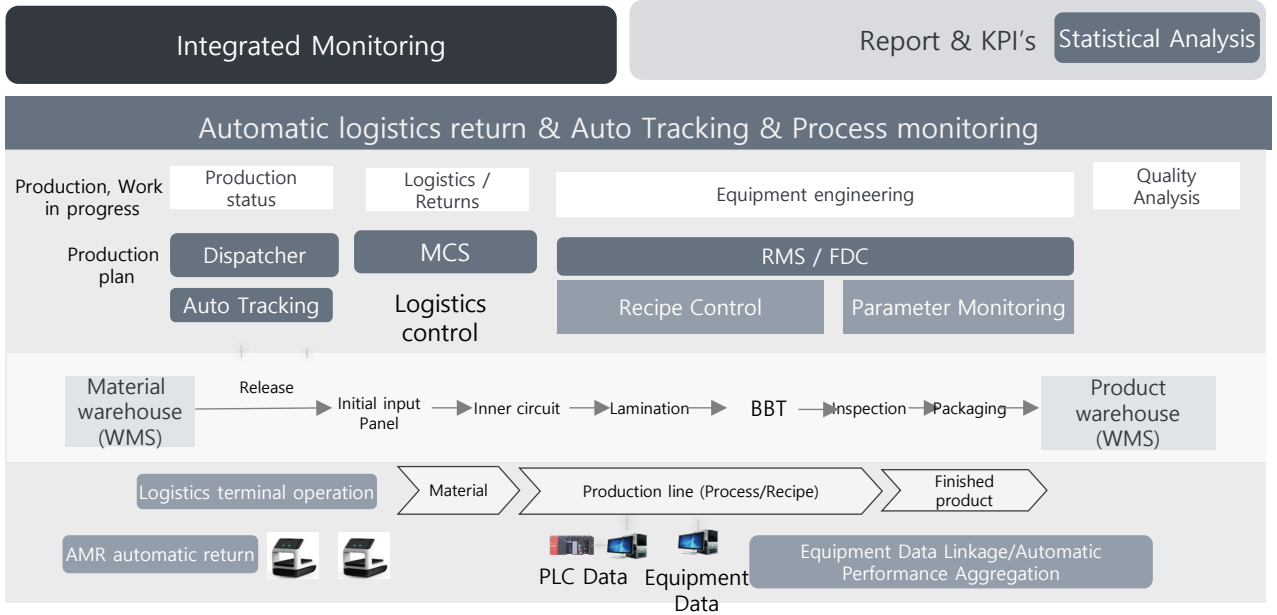
MES | EAS | RTD | MCS | ACS

PCB

- By applying the integrated automation solution proven in the semiconductor and display industries and optimizing it to the characteristics of the PCB industry, we are realizing production efficiency. Especially, we support productivity improvement through the establishment of production plans that consider the diverse production environment of PCBs and the characteristics of each process, real-time equipment monitoring, and material history tracking management.

Implementation Details

Implementation Details



Expected Effect	
Standardization	▪ Improve work processes through accurate analysis ▪ System design with improved procedures (SI) ▪ Standardization of system functions/specifications
Quality Stabilization	▪ Securing real-time raw data by process ▪ Rule-based parameter management: Management (FDC)/Control (SPC)
Smart Automation (Automatic Return)	▪ Automation of loader/unloader loading and unloading scenarios ▪ Automated logistics/return solutions design ▪ Real-time equipment/logistics status monitoring
Cost Management	▪ Derivation of raw/sub-material management data ▪ Panel defect tracking and reflection in system functions/specifications ▪ Monitoring - Status/Condition of Materials

Implementation Performance

DAEDUCK Korea Circuit

Supply Solutions

EAS | ACS | MCS | RMS | FDC

Automotive, Electronic Parts/Assembly

- The entire process of complete vehicle assembly and automobile parts production can be managed in real time. Through integrated monitoring of production process, material control, product tracking, and equipment maintenance, quality risks are detected and resolved early, thereby implementing a high-quality production system.

Implementation Details

Implementation Details

	Productivity Improvement	Quality Improvement	Cost Savings	Delivery Management
Key Details	• Process modeling required for various assemblies • Real-time production performance monitoring • Application of various latest devices optimized for field situations (Tablet, mobile PDA, kiosk) • AGV automatic return	• BOM standard information revision management • LOT history tracking linked to material input history • Provides inventory management function for material receipt and payment (ERP linkage)	• Provides process exception handling operation function • Provides RMA process, rework and repair process handling • Provides problem analysis function	• Work plan creation and performance processing in connection with ERP • Provides production monitoring for delivery management • Provides planning/performance management dashboard
Expected Effect	• Increased production efficiency with highly scalable standard information modeling • Improved production management level by using advanced systems • Improved convenience and productivity on site • Improved DT level due to increased system reliability	• Improved quality through prevention of input error • Reduced defect rate by improving production management level • Improved quality control level	• Cost savings due to reduced rework • Increased fair quality due to repair process • Reduced inventory cost	• Real-time performance history tracking compared to the plan • Production delivery date can be predicted and shortened

Implementation Performance

MHE · AETS · interM · OVIS · OE SOLUTIONS · ONE SEMICON · (주)제이쓰리 Base of Semiconductor · LX Semicon · STECO · 계양전기

Supply Solutions

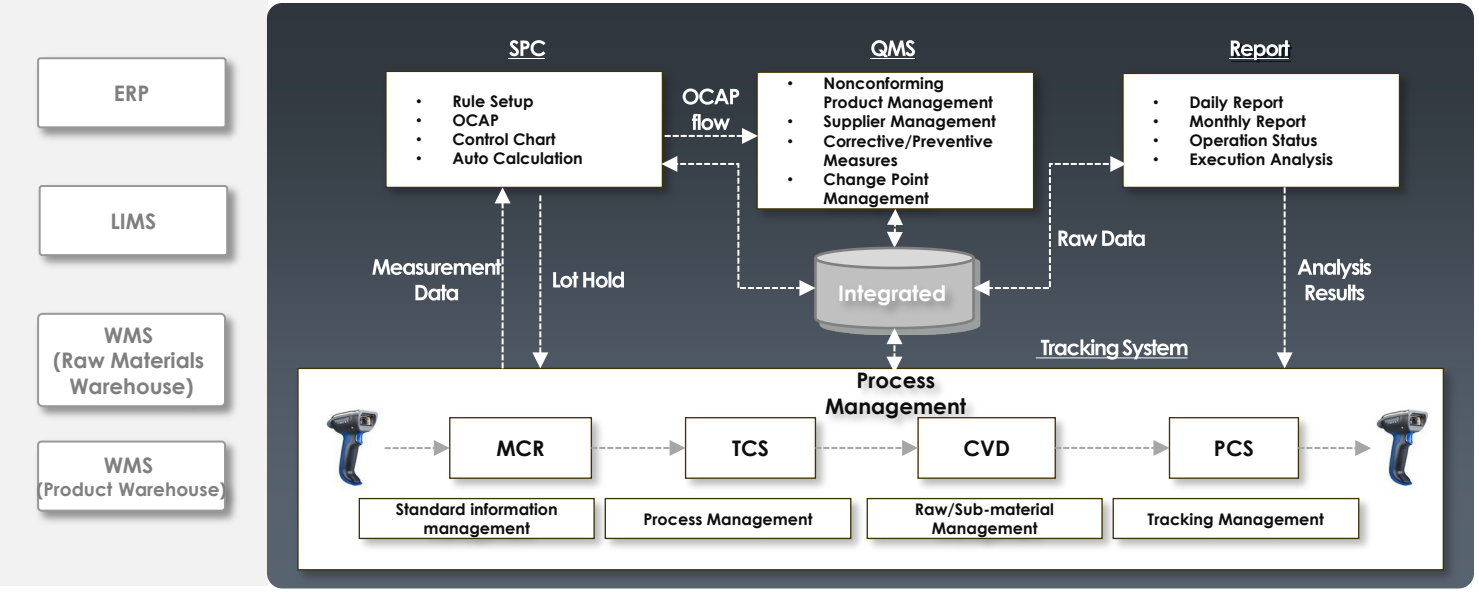
MES · EAS · Report · SPC

Chemical

- We collect and analyze data from all processes, from raw material imports to production and shipment. We provide solutions that maintain consistent quality regardless of the production location through real-time production status monitoring and quality risk detection.

Implementation Details

Implementation Details



Major Implementation Details

- Raw material input management
- Scale Performance I/F
- Raw material mixing equipment control
- LIMS linkage
- Real-time production information through equipment data linkage
- Continuous production flow work order management
- Automation of material receipt and payment, and consumption processing
- Automation of data-based quality control process
- Process data management using statistical techniques

Implementation Performance

chemE EMTIER SHEKOY CHEMICALS OCI KCTECH SK케미칼

Supply Solutions

MES | EAS | Report | SPC | QMS

Smart Logistics

We provide logistics automation solutions for high-tech and general manufacturing industries.

We provide integrated management from automation of logistics equipment within the factory, such as Stocker, OHT, and AGV, to transportation, inventory, warehouse management, material management, and packaging. We implement a smart logistics system that combines AI, IoT, and robot technologies.

Factory Logistics Automation

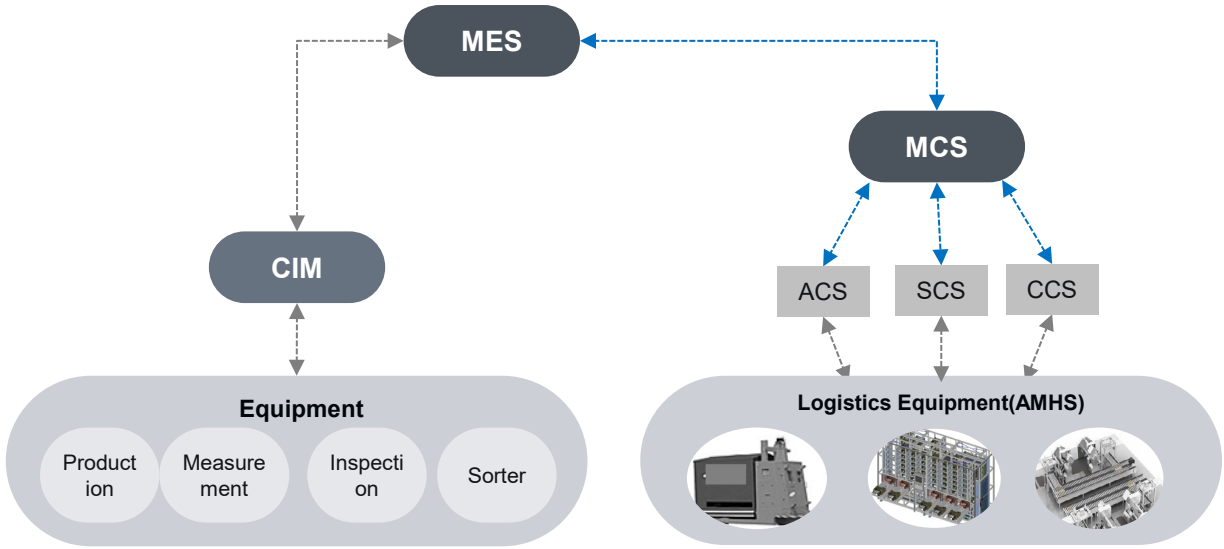
Warehouse Automation

Factory Logistics Automation

- We provide logistics automation services to major high-tech factories in Korea and China. We implement intelligent logistics automation systems that provide optimal routes for material and product movement through digital modeling and real-time monitoring based on factory layout.

Implementation Details

Implementation Details



Core Strengths	
Increased Productivity	▪ Shorten production cycle times by optimizing logistics flow ▪ Increased overall production through increased equipment operation
Reduced Operation Costs	▪ Reduced human dependence with automated logistics management ▪ Optimized power consumption with energy-efficient operation
Improved Quality	▪ Reduced production errors with accurate material supply ▪ Rapid response to quality issues through real-time monitoring
Increased Flexibility and Scalability	▪ Quick response to various production scenarios ▪ Rapid adaptation to production line changes and expansions
System Integration and Data Consistency	▪ Smooth integration with existing systems such as MES and ERP ▪ Accurate reporting and analysis with enterprise data consistency

Implementation Performance

SK hynix · LG Display · BOE · CSOT · HLMC · TIANMA · TRULY

Supply Solutions

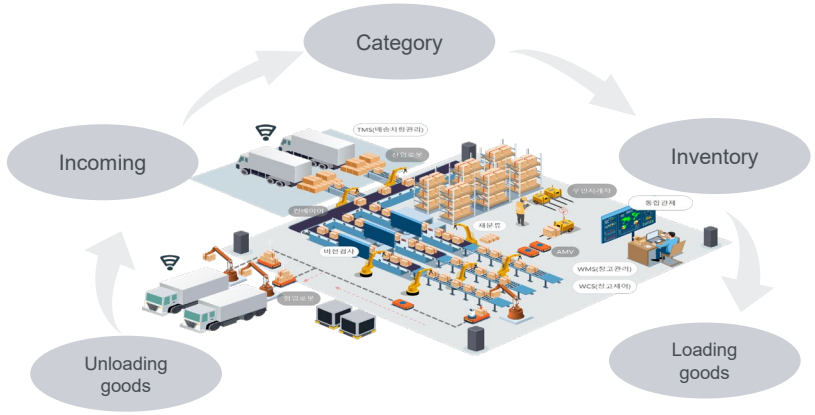
ACS	OCS	CCS	SCS	MCS

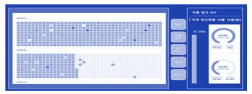
Warehouse Automation

- Building smart warehouse automation is a key element in improving the efficiency of logistics centers, saving time and costs, and providing better customer service. Smart warehouse automation can be built through the supply of automatic logistics equipment control and warehouse management systems.

Implementation Details

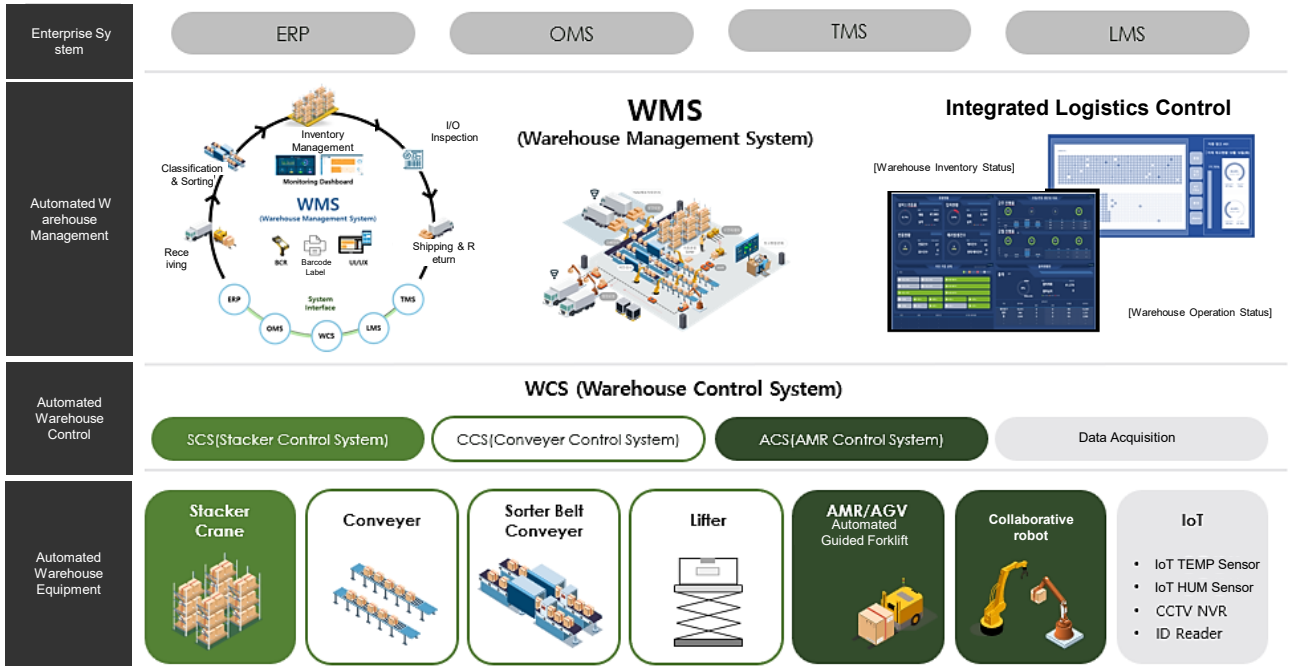
Implementation Details





[WMS : Warehouse Management]

[WCS : Warehouse Control]



Supply Solutions

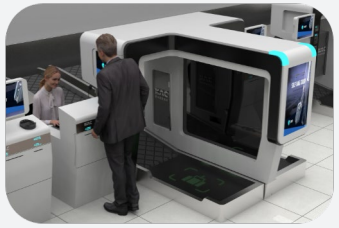
WMS	WCS	ACS	CCS	SCS

Smart Airport

Creating new value with smart airport automation solutions.

We have developed our own smart airport integrated automation solution and successfully implemented it in major domestic airports.

We are improving airport operation efficiency and passenger convenience through a common use passenger processing system, self check-in, and self bag drop system that comply with IATA international standards.



Next Generation Common Use Passenger Processing Systems

Common Use Self Check-in

Self Bag Drop

BRS

Smart Airport

Common Use Self Check-in / Common Use Passenger Processing System	Self Bag Drop	Security Check Record Management System	BHS (Baggage Handling System)	BRS (Baggage Reconciliation System)
Development and Production of Common Use Passenger Processing System and Common Use Self Check-in Platform/Enclosure	Development and Production of Self Bag Drop Platform/Enclosure	Development and production of Security Check Record Management System Platform/Enclosure	Supply of Baggage Tag Barcode Scanner for BHS	BRS Baggage Tag Barcode Scanner Supply, Solution Development and Airlines Linkage
International Standard • IATA CUSS TS • IATA RP1706c • IATA Technical Peripheral Specifications(ITPS)	**International Standard** • IATA CUWS (Common Use WEB Service) Guide • IATA RP1701f • IATA Technical Peripheral Specifications(ITPS)	**International Standard** • IATA RS753	**International Standard** • IATA RS753	**International Standard** • IATA RS753
Support Device • Passport reader • Barcode reader • Boarding pass printer • Baggage tag printer • Biometrics (palm vein/facial recognition)	**Support Device** • Passport reader • Barcode reader • Boarding pass printer • Baggage belt (PLC linked) • Various sensors • Biometrics (palm vein/facial recognition)	**Support Device** • Barcode reader • RFID reader • Touch screen • Tentacle check switch	**Support Device** ▪ ATR (Automatic Tag Reader)	**Support Device** ▪ Android-based portable barcode terminal • Barcode reader
Linked Airlines • Korean Air/Asiana Airlines • Jeju Air/T'way Air, etc. • Air France/Air China/Cathay Pacific, etc.	**Linked Airlines** • Korean Air • Jeju Air	**Linked Airlines** • Korean Air/Asiana Airlines/Jeju Air/T'way Air BSM(Baggage Source Message) linkage	**Linked Airlines** • Korean Air/Asiana Airlines/Jeju Air BSM (Baggage Source Message) linkage	**Linked Airlines** • Korean Air/Asiana Airlines/Jeju Air BSM (Baggage Source Message) linkage

Check-in Passenger and Baggage	Security Scan and Data Storage (“SSDS”)	BHS (Baggage Handling System)	BRS (Baggage Reconciliation System)

Next Generation Common Use Passenger Processing System

- The Next Generation Common Use Passenger Processing System' jointly developed with Korea Airports Corporation is a solution that integrates common use passenger processing and self-bag drop, and is a system that can be operated at global airports as it complies with IATA (International Air Transport Association) standards (CUPPS, CUSS, CUWS)

Details

- Compliant with IATA CUPPS Technical Specification 1.04.
- Compliant with IATA CUSS Technical Specification 2.2.0
- Compliant with IATA CUWS Technical Specification 2.0
- Same platform as the Self Check-in CUSS platform applied
- Efficient system operation possible by integrating the manned check-in system and the self bag drop system into one system
- Baggage shape recognition function (tub, luggage, etc.)
- Intrusion detection using LIDAR sensors
- Cutting-edge technologies such as RFID and biometrics support
- Support for localization of various devices is possible
- Ability to respond quickly to airline requirements

Linked Airlines

KOREAN AIR ASIANA AIRLINES JEJUair t'way AIR SEOUL JINAIR

Common Use Self Check-in

- We have successfully developed and commercialized the first Common Use Self Check-in System in Korea and are currently operating it stably at major domestic airports such as Incheon Airport and Gimpo Airport. It is a proven solution that can be operated at global airports in compliance with IATA's CUSS international standard.

Implementation Details

- Complies with IATA CUSS Technical Specification
- Reduced introduction costs compared to ARINC/SITA self check-in
- Possible to build a wireless network using the LTE network, making installation and mobile operation easy
- Providing customized self check-in initial screen design
- New device authentication for self check-in and rapid technical support for airlines
- Proven reliability at 9 airports operated by Korea Airports Corporation (2016 to present)

Airlines (8+3)

KOREAN AIR, ASIANA AIRLINES, JEJUair, AIR BUSAN, t'way, EASTAR JET, ANA, CATHAY DRAGON, Vietnam Airlines, JAPAN AIRLINES, EVA AIR

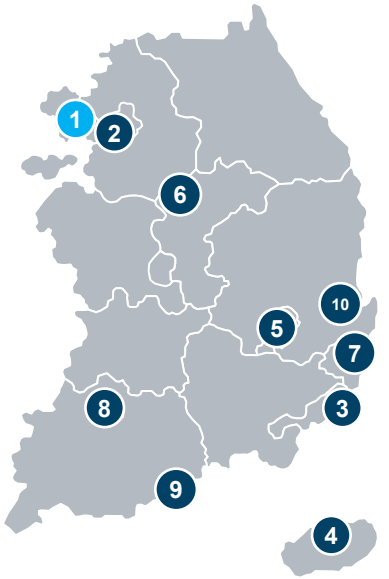
Domestic Airport/Self Check-in (9/155+10)

"Gimpo, Jeju, Gimhae, Cheongju, Daegu, Gwangju, Ulsan, Yeosu, Pohang"

International Airport/Self Check-

"Gimpo, Jeju, Gimhae, Daegu, Cheongju"

● Korean airport locations



	Airport	Number of installations	
		Domestic flights	International flights
1	Incheon Airport	0	250 units
2	Gimpo Airport	67	31
3	Gimhae Airport	30	47
4	Jeju Airport	73	8
5	Daegu Airport	10	18
6	Cheongju Airport	14	4
7	Ulsan Airport	8	0
8	Gwangju Airport	8	0
9	Yeosu Airport	8	0
10	Pohang Airport	2	0

Self Bag Drop

- We have successfully developed the platform software and enclosure of the Self Bag Drop System and installed it at Incheon Airport (currently 68 units in operation), and are continuing to expand it. We are also promoting the replacement of aging systems at global airports with proven solutions that comply with IATA's CUSS/CUWS international standards.

Details

- Compliant with IATA CUSS Technical Specification 2.2.0
- Compliant with IATA CUWS Technical Specification 2.0
- Same platform as self check-in CUSS platform applied
- Ensuring self check-in level performance/quality and stability
- Baggage shape recognition function (tub, luggage, etc.)
- Intrusion detection using LIDAR sensors
- Cutting-edge technologies such as RFID and biometrics supported
- Development linking with external systems support
- Support for localization of various devices is possible
- Improved design and convenience
- Ability to respond quickly to airline requirements

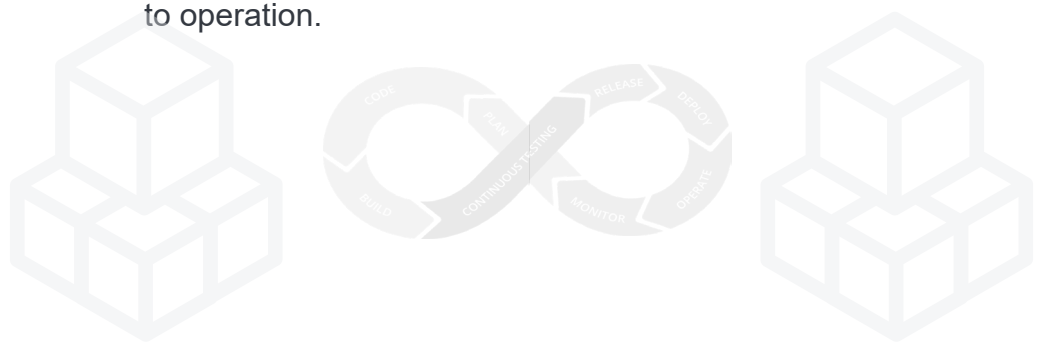
Linked Airlines

KOREAN AIR · ASIANA AIRLINES · JEJUair · t'way · AIR SEOUL · JINAIR

Enterprise Manufacturing Platform

An enterprise platform that integrates and manages all phases of a manufacturing solution from development to operation.

We implement digital innovation with a Manufacturing Integration Platform that covers all manufacturing areas from development to operation.

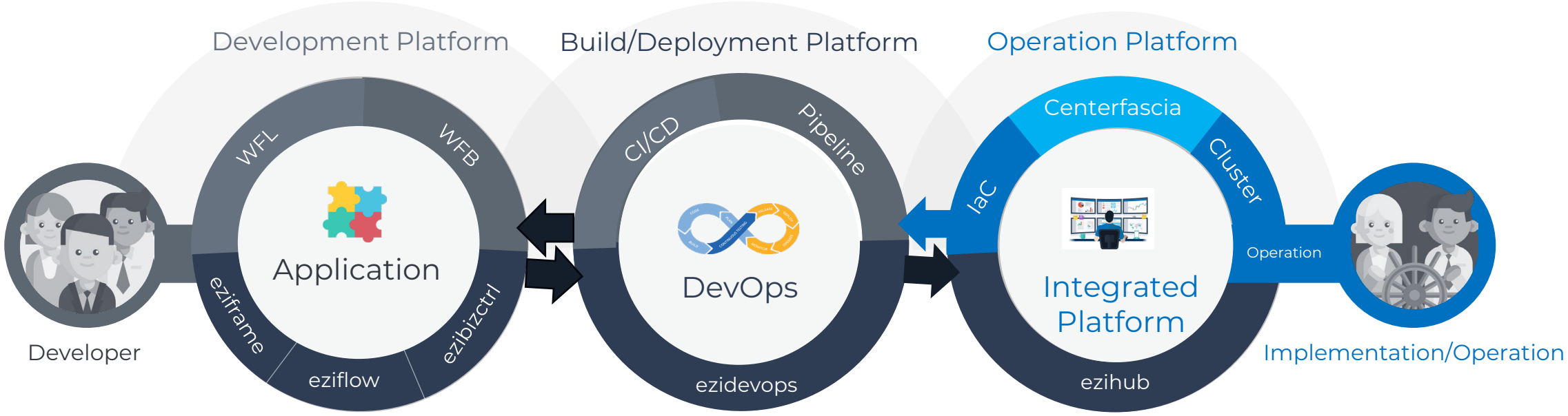


ezieco

ezieco

Manufacturing Integration Platform

- Automate your build, test, and deployment processes with aim's ezieco to increase your development productivity. Use the CI/CD (Continuous Integration/Continuous Deployment) environment quickly and conveniently, and analyze performance with continuous monitoring services to ensure stable operation.



Provides an agile collaborative environment based on standards and modernization to support efficient and innovative software development.

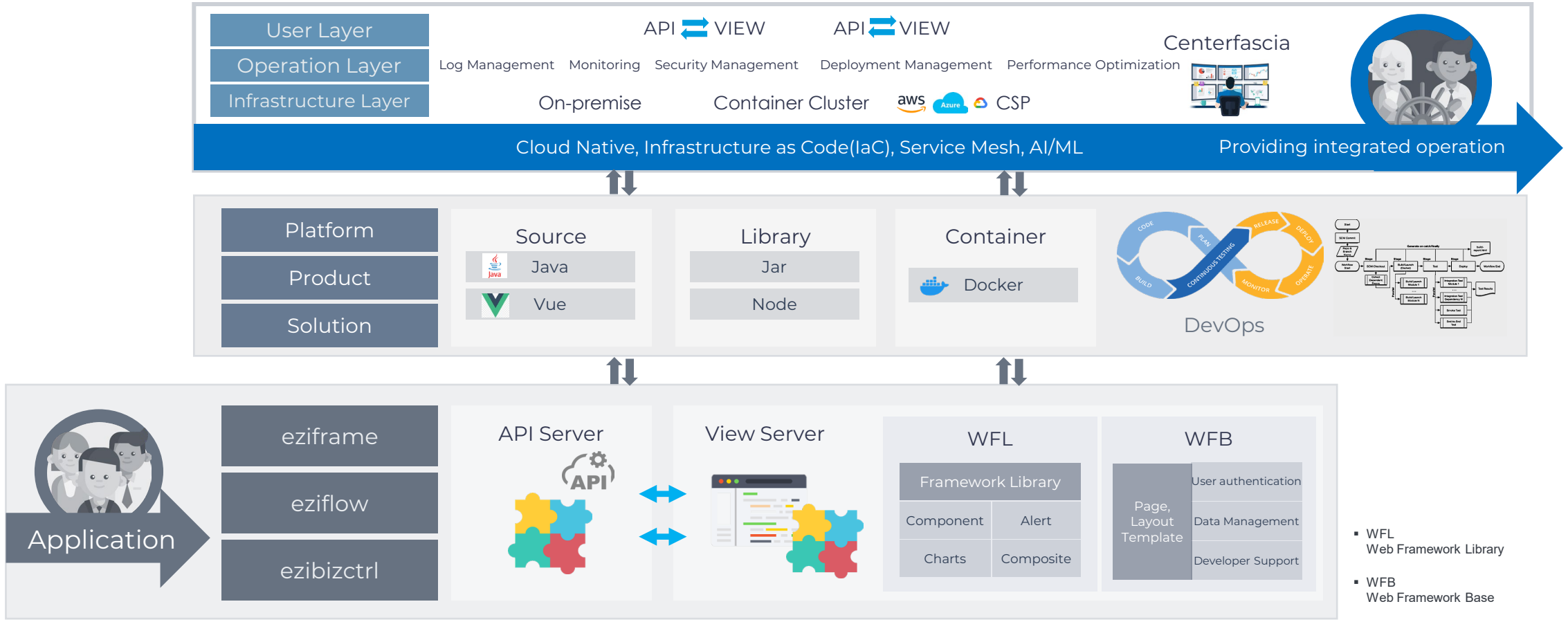
Implementing continuous and seamless processes and ensuring fast and stable service provision through automated and reliable release management.

Provides efficient and stable service operation by building a proactive and scalable management system centered on automation and centralization.

Cloud Native / Microservices / Automation / Container / AI,ML / IaC (Infrastructure as Code) / IAM (Identify and Access management)

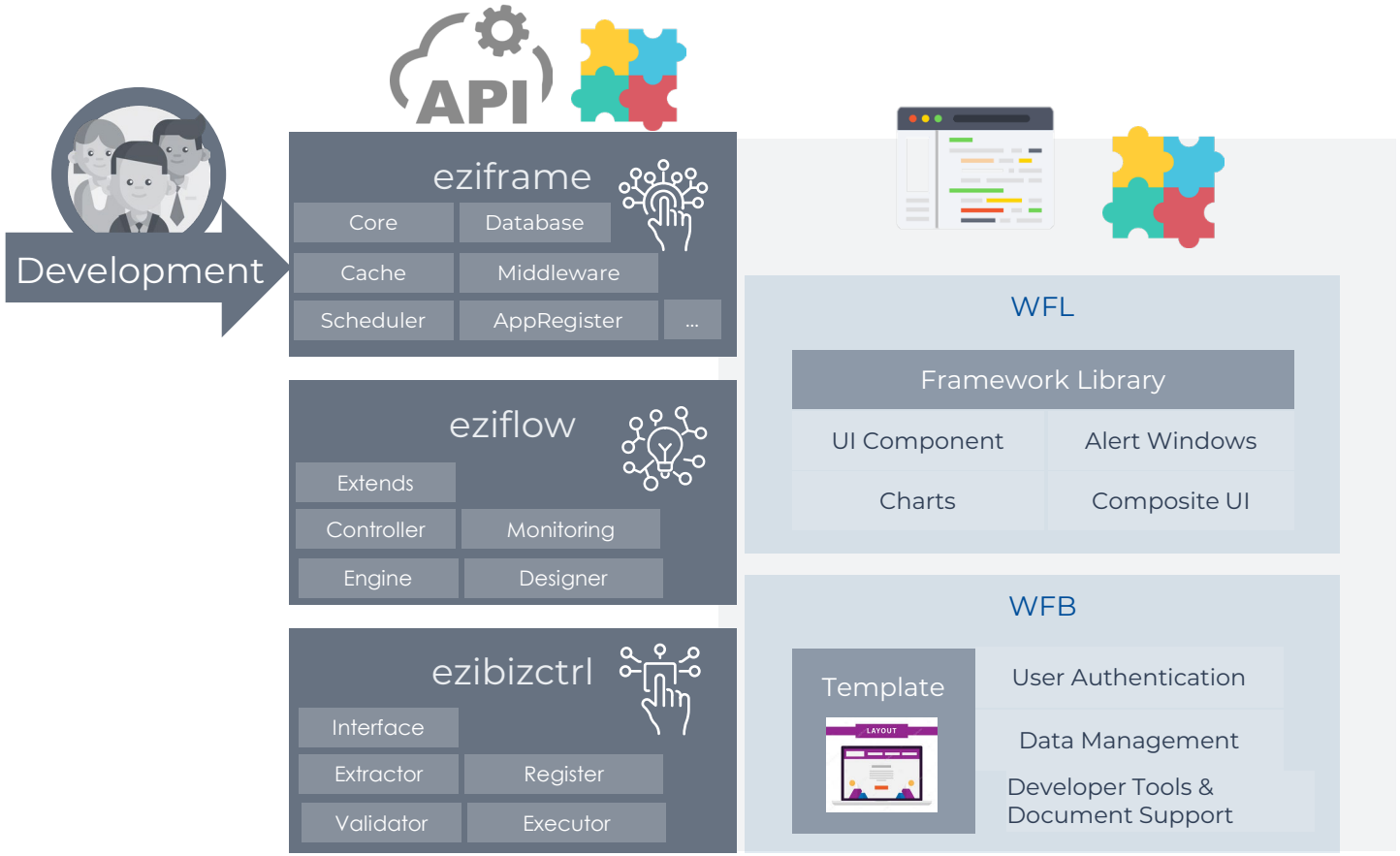
Tech Heritage / Modernization / DevOps / Continuous Everything / Agile / Customer-Centric

- aim develops automation solutions in a standardized environment within the ezieco ecosystem that covers the entire life cycle from development to operation. This provides customers with an integrated operating environment along with the solution, enabling them to manage the system consistently and efficiently throughout the entire process.



- WFL
  Web Framework Library
- WFB
  Web Framework Base

- Harmonizing tradition and innovation: A modern, standard-based, agile collaborative development platform



Key Features

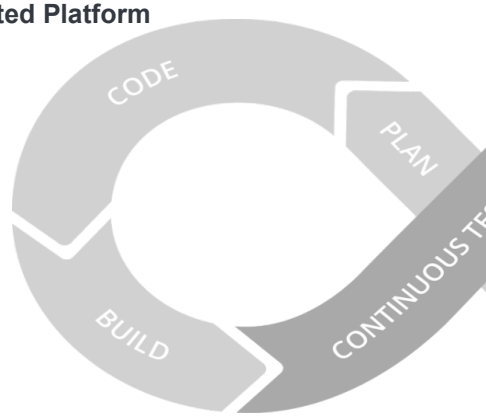
Efficient Development Environment Configuration

It provides various libraries and templates based on accumulated know-how required for front-end and back-end application development, allowing quick and efficient project configuration.

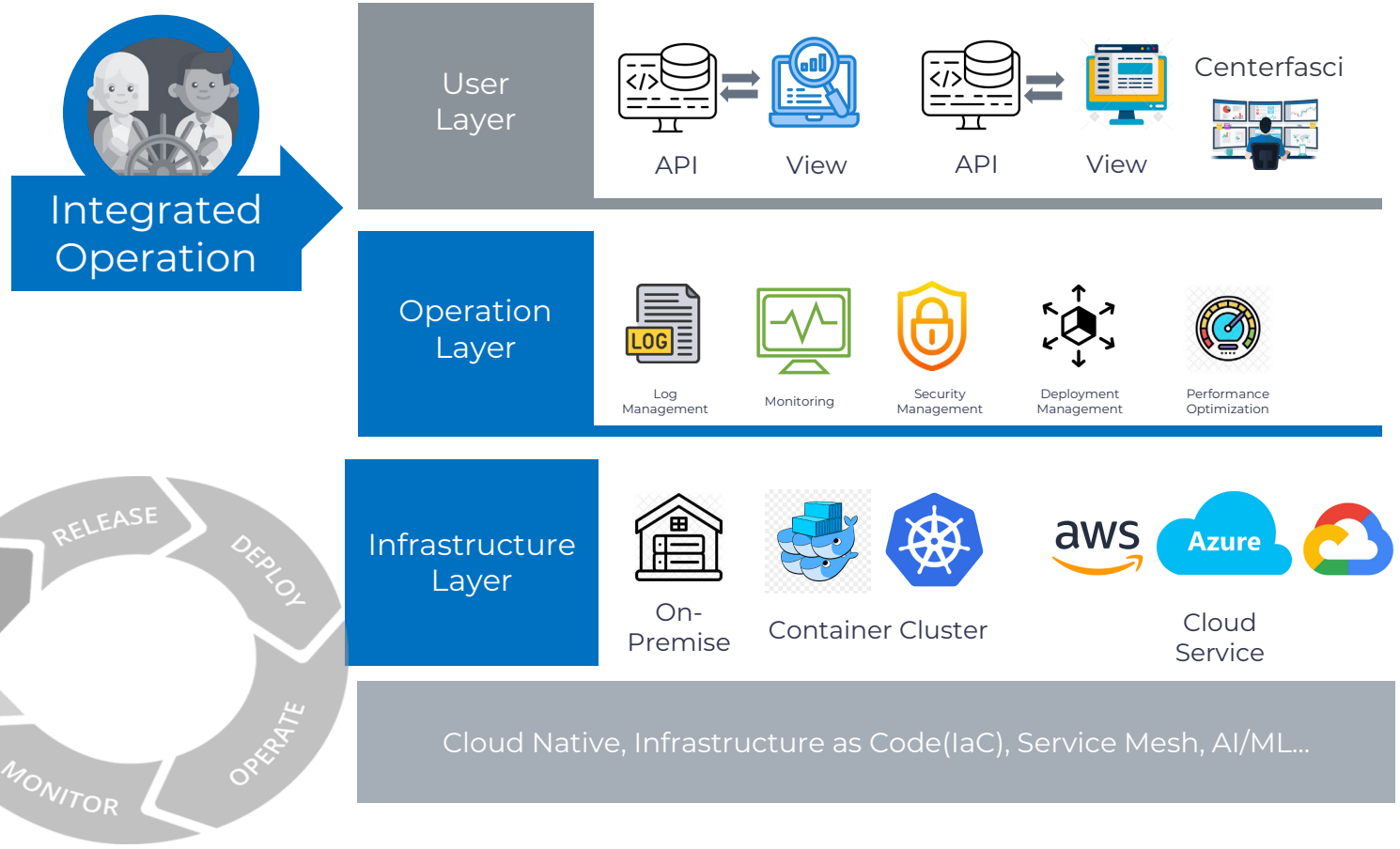
In addition, it provides a mechanism for flexibly building business logic and a flow engine that can quickly respond to changes in user application requirements, maximizing business flexibility.

CI/CD Tool Integration Linkage

Instant Connection to the Integrated Platform



- Synergy of Automation and Centralization: A Preemptive, Scalable, and Stable Operation Platform



Key Features

Integrated Platform

It is designed to be deployed and operated immediately on various operational infrastructures. It provides standardized operational functions to ensure consistent user experience and operational level.

It minimizes context switching and optimizes workflow by providing security management of integrated authentication and consistent interface through a single approach.

It also improves the speed of problem detection and response through centralization of system status and Notifications and supports continuous operational advancement through data integration and correlation analysis functions.

CI/CD Tool Integration Linkage

IaC, IAM, Centerfascia, API Gateway

- IaC
  Infrastructure as Code
- IAM
  Identify and Access Management

Solution Introduction

In 2024, we provide a next-generation smart factory integrated solution converged with digital technologies.

Designed with a flexible architecture, our solutions support continuous technological innovation and business growth.

Smart Factory Solution Configuration Chart

Manufacturing Analysis Solution

boostbe+

Intelligent Engineering Data Analysis

- **YMS** Yield management system
- **FDC** Equipment engineering/real-time monitoring & analysis
- **RPT** Reporting system of data

Automated Operations Control Integrated Solution

nexbe+

Operation

- **DSP** Dispatching system
- **MES** Manufacturing execution system
- **FMB** Real-time monitoring
- **WMS** Warehouse Management System
- **QMS** Quality Management System
- **MCS** Material Control System
- **EAP** Equipment Application Program
- **RMS** Recipe Management System
- **WCS** Warehouse Control System
- **rSPC** Real-time Statistical Process Control

IOBridge — **BridgeX** **BridgeP**

Operation(MHS)

- **OCS** Vehicle route control

TSC(Transportation System Control)

- **SCS** Port, shelf, and crane control

- **ACS** AMR/AGV control

Operation(EQP)

- **EAS** Equipment automation S/W

Integrated Development Operations Support Tool

ezieco

- **eziframe** (Libraries)
- **eziflow** (Workflow)
- **ezibizctrl** (CIM Framework)
- **ezidevops** (CI/CD)
- **ezihub** (Centralization)

Bigdata / AI | Container Cluster

Cloud | Infrastructure

Smart Factory Solution Configuration Chart

- **Our company enhances customer competitiveness through automation and digitalization with a smart factory integrated platform.**
  nexbe+ and boostbe+ provide integrated management from production to facility management. They support optimized operations through advanced technology-based manufacturing operation analysis and intelligent facility connection. IOBridge and ezi platform enable rapid and efficient solution construction, leading customers' manufacturing innovation.

Data Utilization Optimization Operations Control Automation

Integrated Operations Platform

nexbe+
넥스비

Automated Operations Control Integrated Solution

We provide convenient and stable services from installation to operation through a smart factory platform with various package-type solutions for building optimized factory automation.

By utilizing equipment-to-equipment data, we provide integrated operations management from production operations to facility maintenance and monitoring / immediate processing services enabling customers to utilize resources more effectively and maximize operational efficiency.

boostbe+
부스트비

Manufacturing Analysis Solution

It's an evolved factory that produces customized products. The integration of IoT, AI, and big data into this process to automate and digitalize the process is what differentiates it from existing factory automation.

boostbe+ has objects related to manufacturing, such as procurement, logistics, and consumers. Each of these objects is given intelligence and connected to the Internet of Things (IoT) to operate as a factory that autonomously connects, collects, and analyzes data.

IOBridge
아이오브릿지

Equipment Automation Core Solution

The IOBridge series is a proven equipment automation and integration solution with over 20 years of experience, providing improved user APIs by seamlessly handling communication connections and sending and receiving messages

BridgeX is a SECS communication driver that ensures reliable equipment connectivity with modernized user experience and performance. BridgeP standardizes various PLC communications to enable flexible equipment control and integration.

ezieco
이지에코

Integrated Development and Operations Support Tools for Fast and Flexible Development and Operation

ezi helps developers and engineers perform projects efficiently through various automation modules.

It can easily implement data management, web development, business process processing, DevOps support, and integrated operations. It realizes innovation by quickly building, deploying, and operating solutions. Maximize the efficiency of your development and operating environments with ezi.

Smart Factory MES Introduction

Solution Introduction

- nexbe+ MES (Manufacturing Execution System) manages and monitors the manufacturing process in real time and automates and optimizes various activities at the production site.

Based on the technology and experience accumulated in high-tech industries such as semiconductors and FPD,
we provide a system to efficiently manage production resources in various automation industries.

MES Key Roles and Features

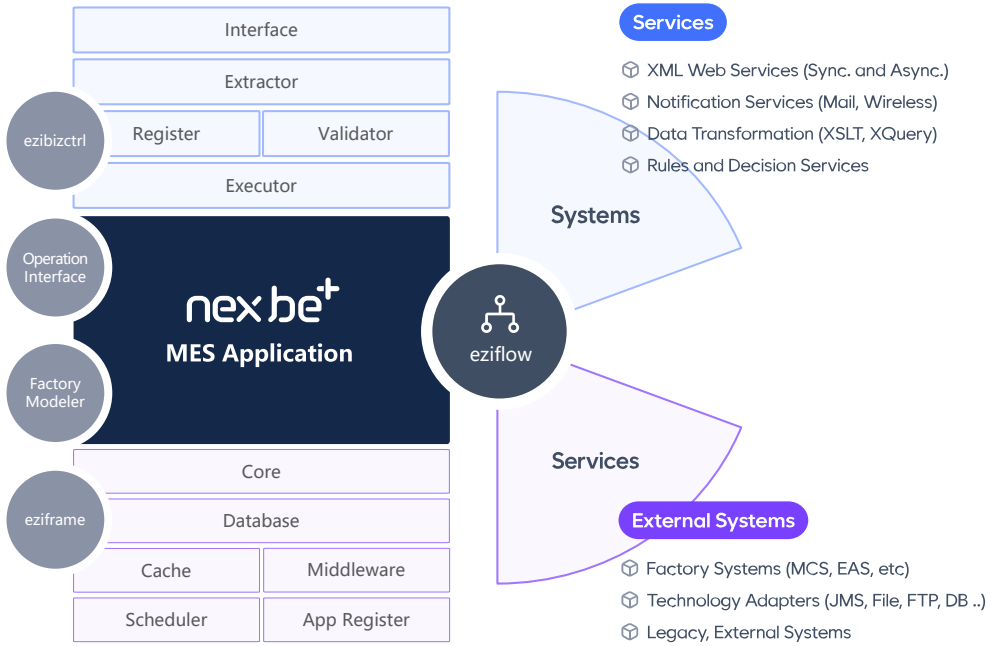
- **Production Plan Execution**
  It executes and manages production plans received from upper-level systems (such as ERP) on site and manage the creation and priorities of work orders.
- **Production Management**
  It manages production performance through work start/end processing via the worker screen, production/defect quantity performance data management, lot tracking management, etc.
- **Real-time Monitoring**
  It collects data generated in the production process in real time. Monitors equipment operation status, production volume, and detects various on-site problems.
- **Quality Control**
  It collect quality data generated during the product manufacturing process, analyze it to detect quality problems early, and support improvement. It also manages quality history by process.
- **Inventory Management**
  It tracks inventory status in real time, from raw materials to finished products, preventing stock shortages or excesses.

Provides MES functions considering user convenience

Statistical-based quality management industry standards

A proven system that maximizes efficiency

System Configuration Chart



Smart Factory EAS Introduction

- nexbe+ EAS is a software for integrated equipment automation and operation, providing comprehensive functions required for equipment automation. It helps users operate equipment effectively and intelligently.

30 years of experience in building and operating factory automation systems!
Experience factory operation optimization services provided by field experts

EAS Key Roles and Features

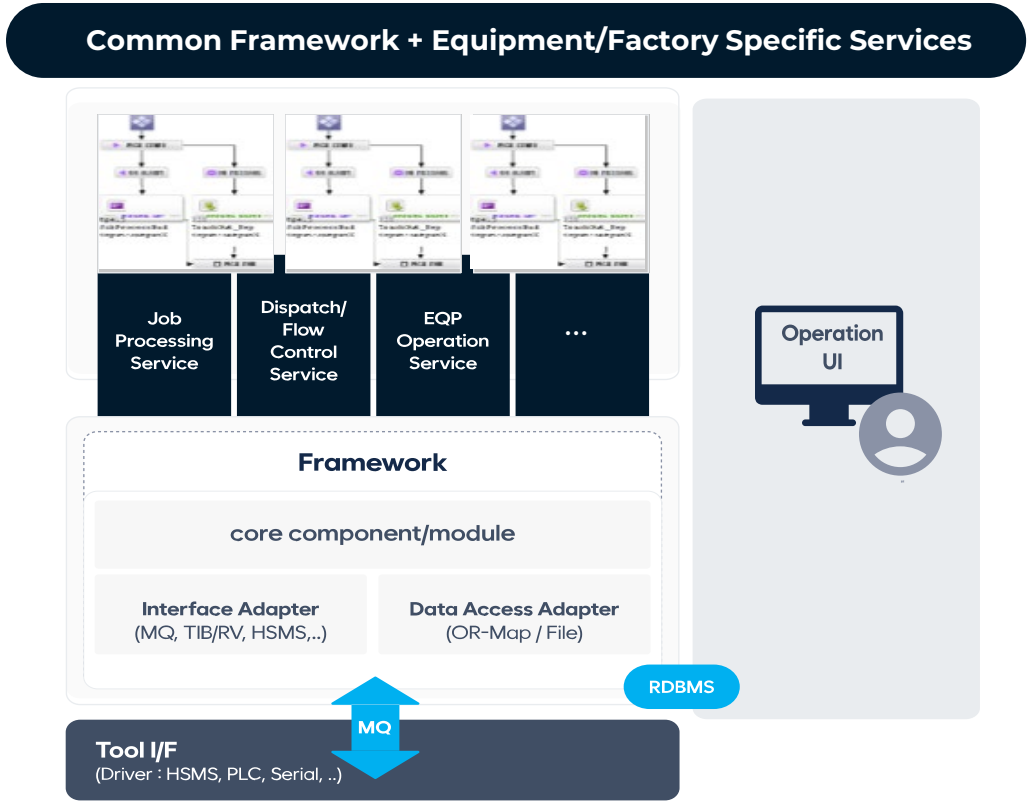
- **CIM Implemented Architecture**
  PLC communication network support/HSMS/Serial communication support
- **Common Framework + Equipment/Factory Specific Services**
- Service-oriented architecture/component-based development (CBD)/providing features for customization/extensible architecture
- **Fast Data Processing**
  It collects quality data generated during the product manufacturing process and analyze it to help detect and improve quality problems early.
- **Tool-based Development - Workflow**
  Business Logic Flow Modeling/Flexibility (Real-time patch application and execution)/Visualization (Intuitive visualization of business logic flow)
- **ATT (Automated Testing Tool)**

It helps reduce costs and improve test quality through tools that automate the overall equipment testing process.

Industry Automation Specialized Company

Equipment Automation Operation
- Inline/Online Job Processing
- Equipment CIM Operation

Engineering to improve equipment productivity
- Fast data collection
- Return tact time



Smart Factory MCS Introduction

- nexbe+ MCS is the core control software of AMHS (Automated Material Handling System). It is an online control system that optimizes the movement of materials and products in the manufacturing process through digital modeling and real-time monitoring based on the factory logistics layout.

Based on our extensive experience in implementing and operating semiconductor and FPD factories,
we provide evolving solutions through continuous linkage with various AMHS systems.

MCS Key Roles and Features

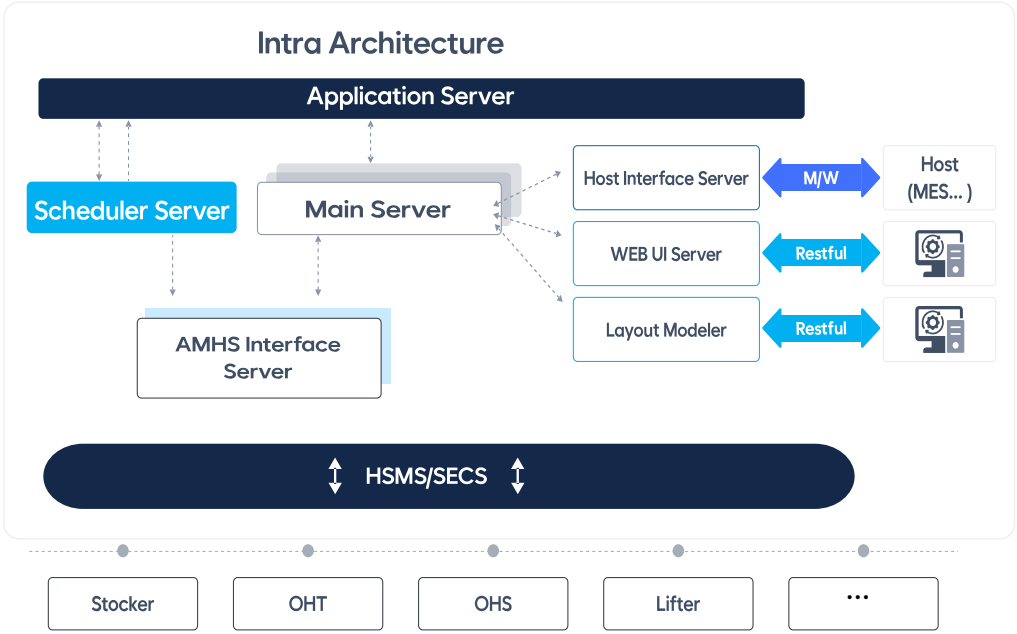
- **Digital Modeling and Monitoring**
  Accurate digital twin implementation based on the factory's logistics layout/Optimization and readjustment of return/Support for simulation and optimization of logistics return
- **Flexible Online Control and System Integration**
  Online control through mediation between logistics H/W and upper-level systems/Providing a highly flexible and scalable control structure/Smooth integration with upper-level systems such as MES and ERP
- **Advanced Optimization and Decision-making Support**
  Application of transportation route optimization and bottleneck prevention algorithms/Operational data collection and advanced analysis functions/Support for real-time user decision making
- **User Management Service**
  Manage user groups based on user class and level/Restrict menu use by setting account permissions

Standardized functional reliability and customized solutions

Industry-specific experience
Continuous development for reliability and wide application

User-driven system management and optimization

SW Configuration Chart



Smart Airport Solution Configuration Chart

VAMS
Video Analysis System

PAS
Information broadcasting system

ARS
Automatic response system

ISS
Integrated security and safety system

ELSCADA
Power-management system

FAS
Fire alarm system

HVAC
Air conditioning/air conditioning control

PLM
Rental management

Environment/Climate

: aim's Coverage

KAC IAC

CUSS Platform

CUPPS Platform

CUSS/CUPPS Public use

KAC IAC

Self Check-In

KAC IAC

Self Bag Drop

Self Immigration

Self Boarding

Self Transferring

Biometric-based business

IAC

CUTE
Public Use Terminal

LDCS
Local get-out management system

KAC

BHS/ BRS
Baggage handling

BHS : Baggage handling System
BRS : Baggage Reconciliation System

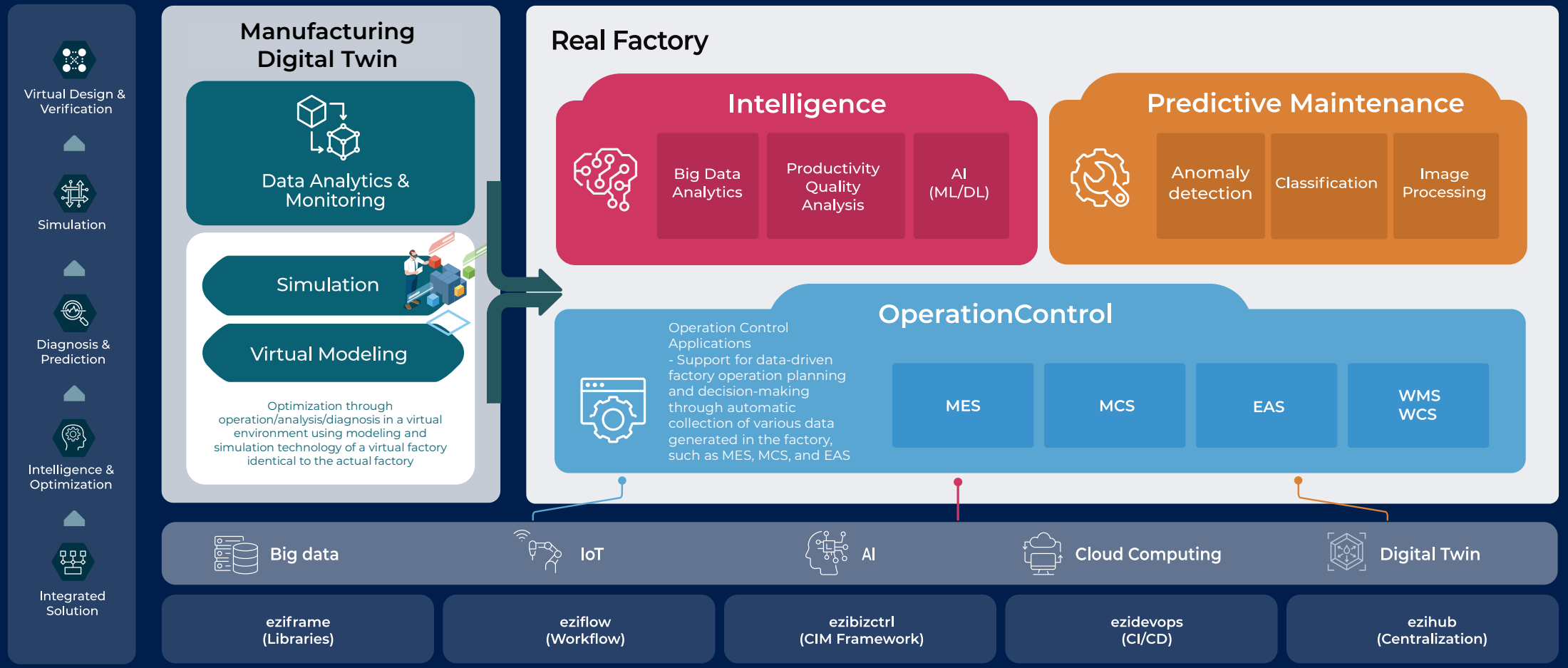
AOMS
Airport Operation Management

AODB/FIMS
Aircraft Operation Management

EVIDS
Information display

aim Future (1/2) Future Intelligent Solutions

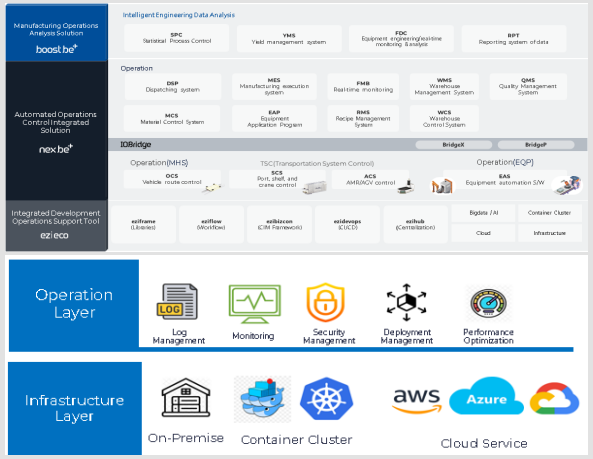
Providing factory automation solutions for verification, intelligence, and optimization through Cyber Physical Systems based on Digital Twin technology



aim Future (2/2)

Smart Manufacturing Innovation – Beyond Automation, Toward Autonomy

Autonomy stages



One-Stop Solutions

- Automation & operational Optimization
- Modernization & advancement of manufacturing solutions
- Standardized & Scalable Manufacturing Framework

One-Touch Solutions

- Inteligent automation solution
- Configuration-based modular system
- Cloud-based Smart Manufacturing
- AI-Driven Data Analysis

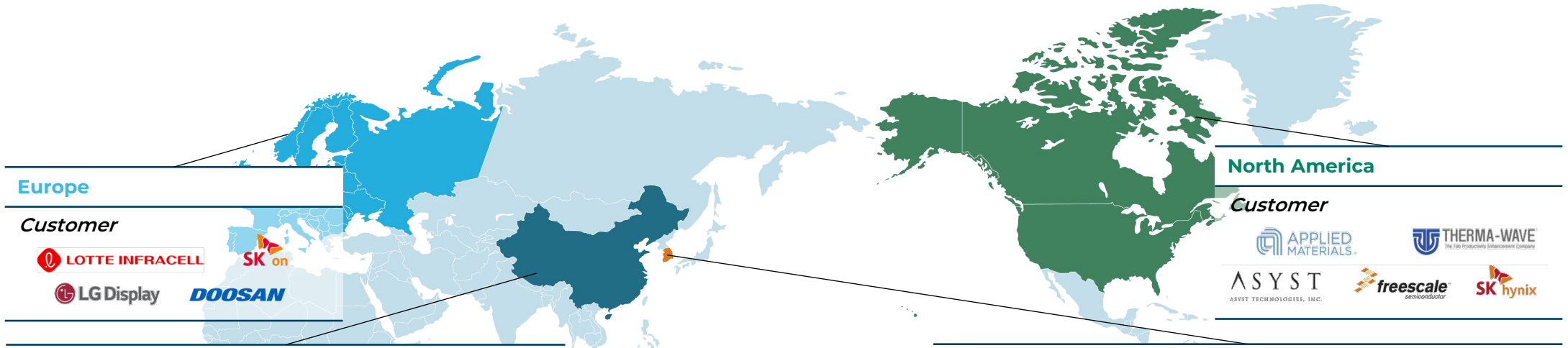
Zero-touch Solutions

- Autonomous automation
- AI-Driven Real-time decision making system
- Hyperconnected Smart Manufacturing with Digital twin.
- Self-Learing AI & Adaptive Optimization

Core values

Providing modernized integrated solutions for digital transformation	AI-based automation for operational optimization	AI-driven real-time optimization and decision-making operational environment
• Production and operation optimization through an integrated system • Establishing a standardized production process and data-driven operational system • Flexible deployment tailored to various manufacturing environments • Establishing a foundation for quality improvement and operational cost reduction	• Production schedule optimization and AI-based quality control • Flexible production operation • AI-based equipment anomaly detection and maintenance application • Operational optimization through system performance analysis and optimization	• Automatically establishing and executing the optimal production plan • Utilizing Digital Twin and AI-based process simulation • Establishing an autonomous operation system • Light-out Factory

Clients & Partners



Europe

Customer

LOTTE INFRACELL · SK on · LG Display · DOOSAN

North America

Customer

APPLIED MATERIALS · THERMA-WAVE · ASYST TECHNOLOGIES, INC. · freescale semiconductor · SK hynix

China

Customer

BOE · SFA SEMICON · HLMC · TRULY · HKC · TCL · CEC 中国电子 · Visionox 维信诺 · CTDSP · EDO 和辉光电 · INNOLUX · LG Display · SK hynix · TIANMA · PANDA

Global partner

NEC · H3C · hp

Korea

Customer

SK hynix · SK siltron · SK innovation · SK C&C · SK keyfoundry · LOTTE INFRACELL · LOTTE FINE CHEMICAL · LOTTE · LG Electronics · LG Display · LG Innotek · LG CNS · DAEDUCK · SFA SEMICON · DB HiTek · SEOUL SEMICONDUCTOR

Global partner

SK C&C · LG CNS · IBM · hp · ORACLE · KAIST

aim Systems

Will be+
today & future

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Please visit us using the QR code.

- Business Proposal / Partnership
- Product Demonstration/Trial Performance
- Technical Consultation/Inquiry
- Others

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