

# Company Introduction

2023

**GLOBAL NO.1** INDUSTRIAL INTELLIGENCE SOLUTION PROVIDER





# 01 Company Overview

We are the driving force of the Fourth Industrial Revolution through automation solutions for the semiconductor / display sector and general small and medium sized manufacturing.

aim Systems, Inc.

**Head Office** 

aim Systems (SHANGHAI) CO., LTD.

Shanghai branch

**Incorporated 1996** 

**CEO Soohan Bae** 

**Business Software Solutions for Industrial** 

**Automation** 

**Employees 205** 

Address Bundang, Korea (<u>www.aim.co.kr</u>)

**Incorporated 2005** 

**Business** Tech-support, Sales support & UMS of

aim products

**Employees 79** 

Address Shanghai, China



# 01 Company History

2002

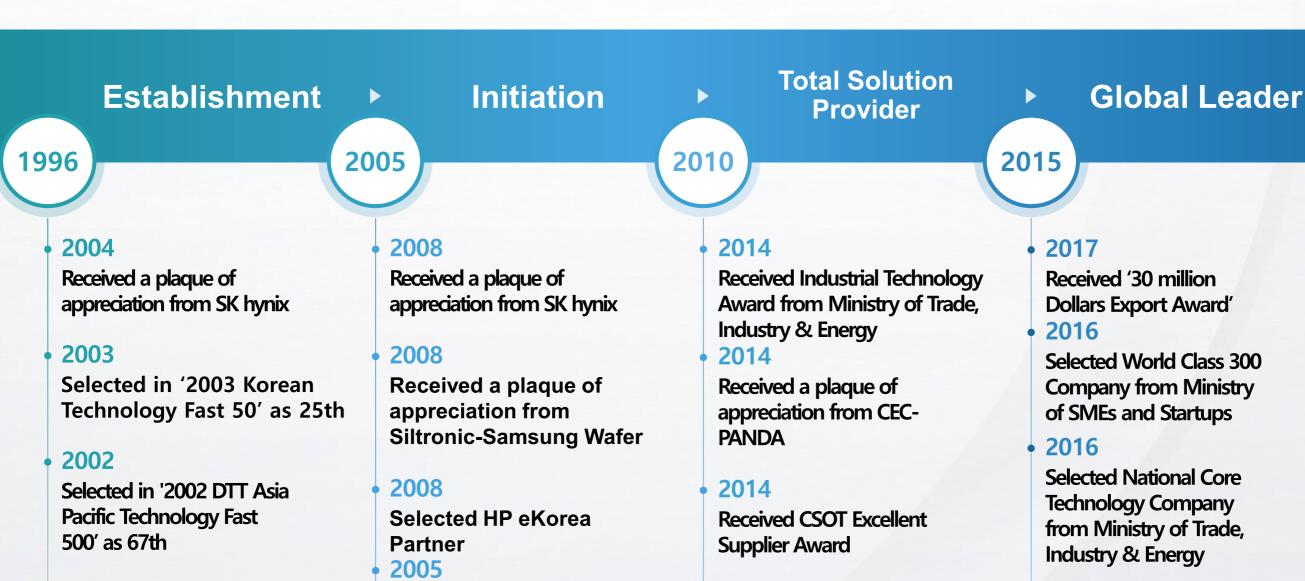
Received a plaque of

appreciation from Samsung

**№** We lead the industry with 20 years of technology and experience.

Received '5 million Dollars

**Export Award'** 



# **01** Business History

Since its establishment in 1996, it has localized the factory automation market, which had been dependent on foreign products, and secured the world's best semiconductor/display market such as Samsung, LG, and SK hynix. We are taking a leap forward as an automation company.

1996

#### Korean market Localization

- 2004BOE-OT LCD5th generation
- 2004hynix semi.Semiconductor 300mm
- 2003LG Display LCD6th generation

2005

# Overseas market expansion

- 2010 SHLMC (Shanghai) SEMI-CIM
- 2008
   LG Display Selected
   as Global MES Standard
- 2008 hynix semi. 300mm
- 2005
   Samsung SDI AMOLED

2010

## Chinese market expansion

- 2016 BOE B7, B10 MES/EAS/MCS
- 2016
   WHTM MES Project
- 2015
   Truly MES/EAS/
   MCS/EDA/EDB
- 2014
  BOE B8 LCD G8.5 MES
  & EAS (BC)
- 2013
   Seoul Semiconductor
   MES
- 2011
   CSOT t1 (Shenzhen)
   LCD G8.5 MES & EAS (BC)

2015

## Competitive advantage

- 2021
   Tianma TM18
   MES/EAS/MCS
- 2021
   LOTTE ALUMINIUM
   IT System(MES)
- 2021 Cotem MES/EAS
- 2020 BOE B12 MES/EAS/MCS
- 2020 HKC H5 MES
- 2020 SK on EAS
- 2019 Visionox V3 MES/EAS/MCS
- 2016
  BOE B9
  MES/EAS/MCS

# 01 Company Vision

### Global No.1 Industrial Intelligence Solution Provider

We will grow into a global smart factory leader by developing intelligent solutions that apply New IT (Big data, IoT, AI Engine, 5G, etc.) technologies.

# **Key Technology**

- ✓ Domain Knowledge
- ✓ Top industrial automation experts
- ✓ Specialized solution for semiconductor / display manufacturing factory and equipment automation
- ✓ Various Embedded Systems for factory and equipment automation
- ✓ New IT Technology

# Global Major Customer

- ✓ Market references for high-tech industry in Korea (Samsung, SK hynix, LG, etc.)
- ✓ Provide solutions and services to major Chinese manufacturers in China (BOE, Tianma, CSOT, CEC-PANDA, GVO, Truly, etc.)
- ✓ Many Taiwan, US, and Japanese customers

# Market competitiveness

- ✓ Technology advantage in competition with global company(IBM, AMAT, Siemens, etc.)
- ✓ No. 1 market share in display factory automation solution in China
- ☑ Rich high-tech industrial market reference
- ✓ Market competitiveness in entering new markets by diversifying solutions

# 01 Organization

AlM System consists of Korea Business Headquarter, China Business Headquarter, Global Management Support Officer, Global R&D Center, and excellent technical personnel with various project experience participate to carry out stable and successful business.



# 01 Business Model

Through the combination of automation software solution and engineering service, Whole Automation is implemented in semiconductor/display factories and general manufacturing industry sites, and total services related to airport automation solutions and embedded software are provided.



## **Product**

- ✓ Application Software
- ✓ Development Tools & System S/W
- ✓ Computer H/W (Distribution)
- ✓ Mechanic H/W : OEM

# Consulting

- Domain Consulting
- ✓ IT Infra Consulting

# SI

- ✓ Engineering & Custom Service
- System Integration Service

## SM

✓ System Operation and Maintenance Service

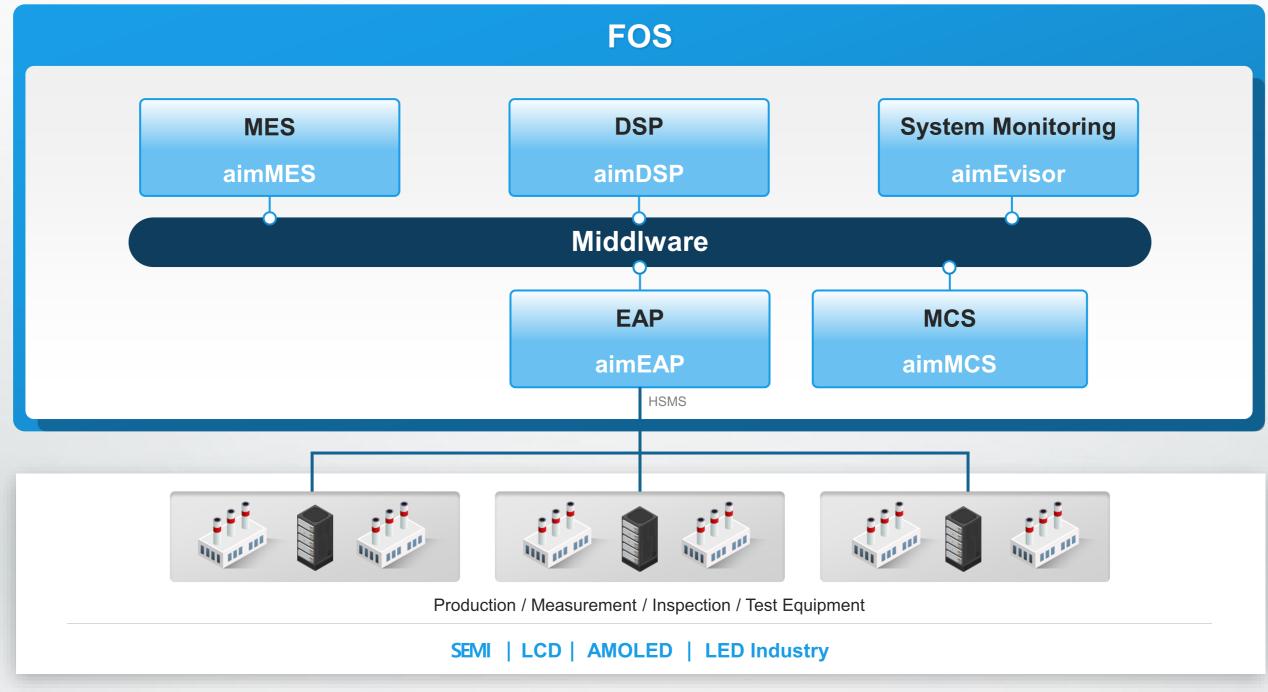


### aimSolution Architecture

#### Hitech **General Industry** aim **FOS FES Factory** (Factory Engineering (Factory operation system) System) aimi3.0 (Small / medium factory aim operation system) **EOS EES** Equipment (Equipment operation (Equipment engineering system) system) aim aimATS **Appliance** (Data backup and query system)

## FOS(Factory Operating System)

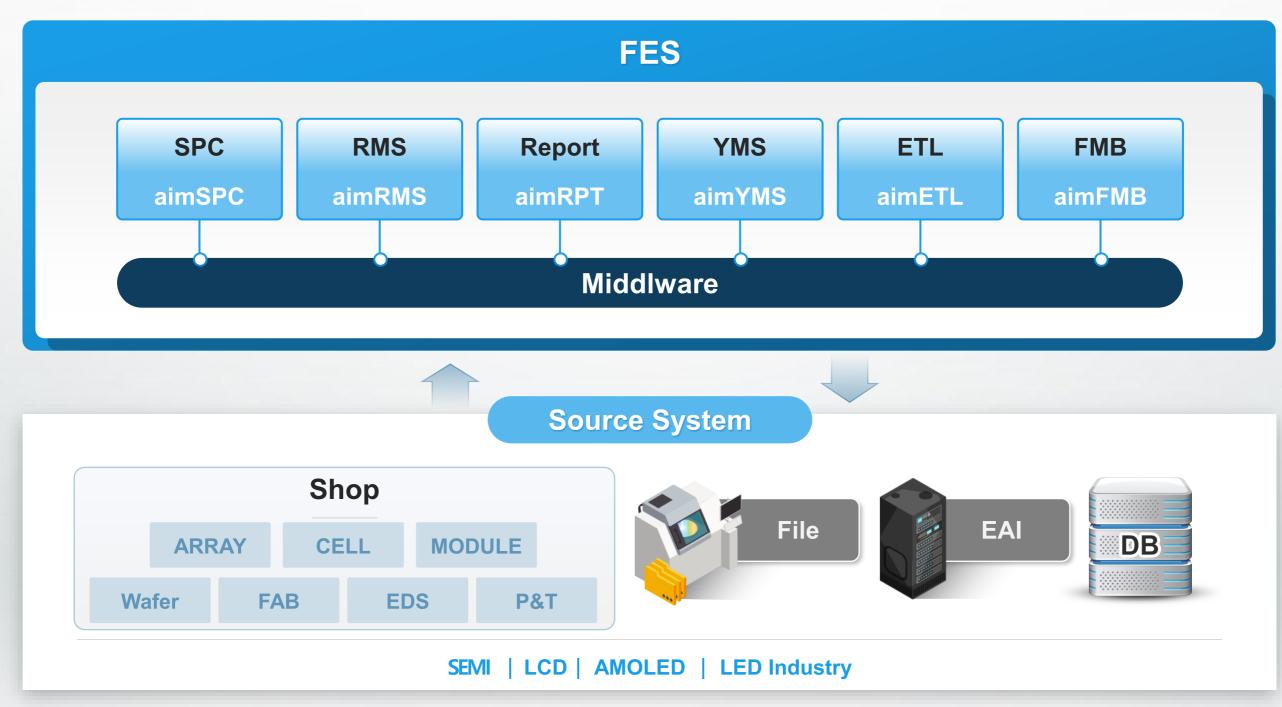
Factory operation system for integrated management of all activities such as schedule/work order/quality control/performance management



MES: Manufacturing Execution System / DSP: Dispatcher / MCS: Material Control System / ECS: Equipment Control System

## **▶ FES(Factory Engineering System)**

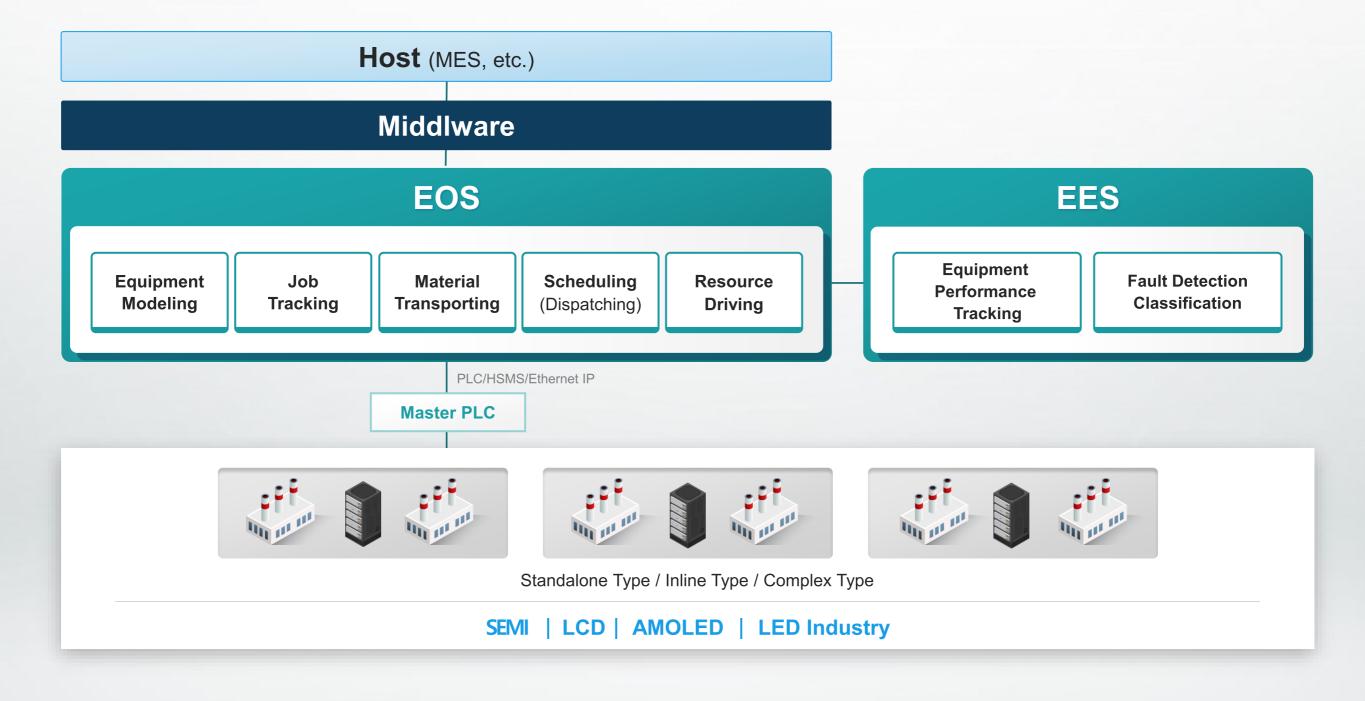
» Intelligent factory operation evaluation system that analyzes and extracts all data based on big data so that plant resources can be operated more efficiently



SPC: Statistical Process Control / RMS: Recipe Management System / YMS: Yield Management System / ETL: Extract, Transform, Load / FMB: Factory Monitoring Board

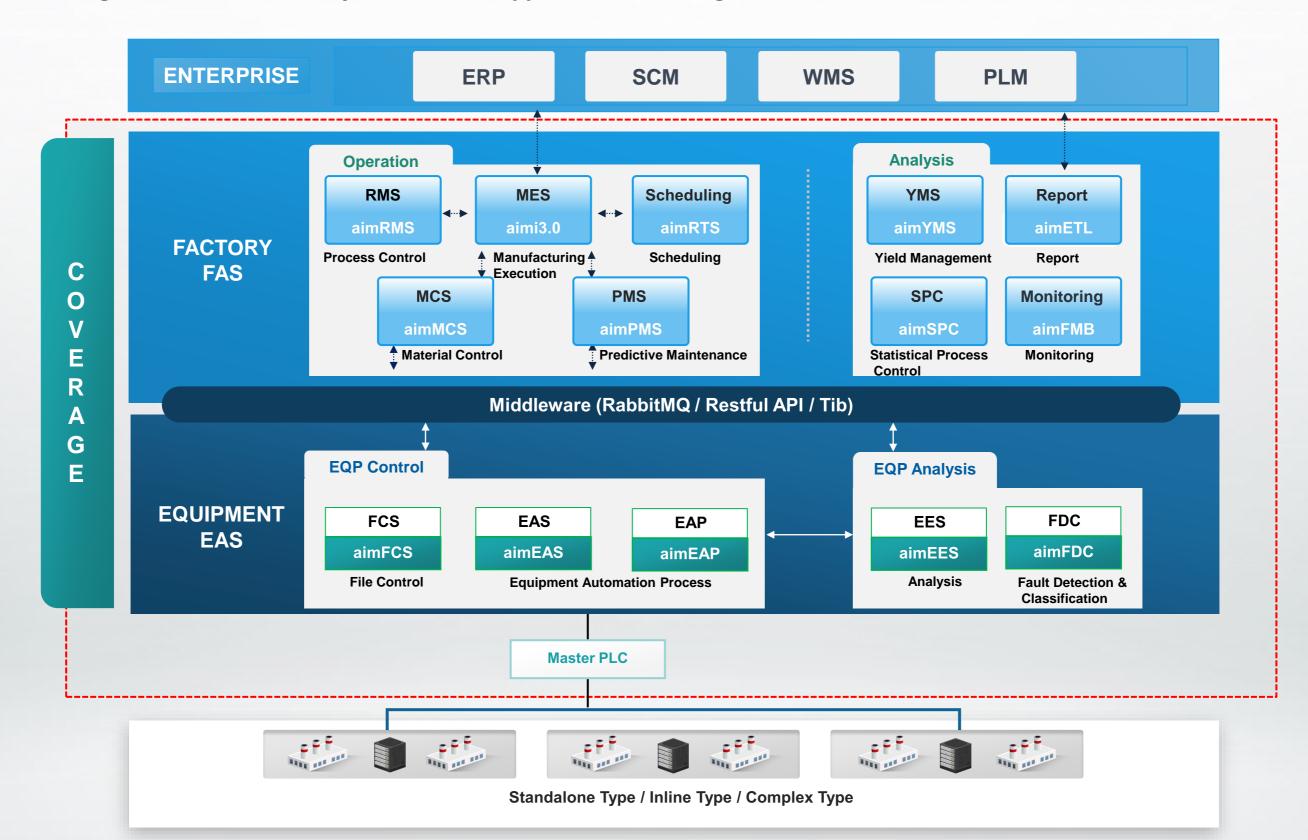
## **■ EOS(Equipment operating System) / EES(Equipment Engineering System)**

- Equipment automation system that provides comprehensive functions (equipment data collection, production control linked to host, equipment control, equipment and production status monitoring, etc.)
- » A system that supports engineering activities (data collection, analysis and maintenance / monitoring) of equipment performance and fault detection.



# General Industry – aimi3.0 solution

- aimi3.0 solution
  - » Next-generation smart factory solutions to support manufacturing innovation



# General Industry – aimi3.0 solution

#### aimi3.0 solution

| tandard Fu             | ınction                     |              |                          |                    |                      |
|------------------------|-----------------------------|--------------|--------------------------|--------------------|----------------------|
| Production<br>Planning | Packaging/<br>shipment mgt. | SPC          | Production status mgt.   | EQP<br>maintenance | Shipment report      |
| Work Order             | Work mgt.                   | Legacy I/F   | Barcode mgt.             | Recipe mgt.        | Standard information |
| Material mgt.          | EQP mgt.                    | Quality mgt. | Manufacturing<br>Control | LOT<br>Tracking    | Data<br>Collection   |

# **Industry Specific Function**

# Semiconductor material

# Process operation management

- TestPGM Control
- Bin map File Control
- COA auto-generated

# Electronic assembly

# Process operation management

- Multi Lot Trace
- Product/semi-finished product
   BOM management
- · Multi Device function

# Material chemistry

# Process operation management

- Raw material input management
- PQC management in the early, middle and late stages
- Balance Performance Interface
- Raw material stirring equipment control

## PCB/Automotive Parts

# Process operation management

- Mounter EQP management
- AOI inspection result management
- PCB Serial LOT tracking management

# Other general processing

# Process operation management

- Kiosk Performance
   Management
- RunCard Traceability

#### Reusable Material Management

- FOSB management
- · PCard management

#### Label creation management

- RunCard Label management
- Shipping label creation management

#### Reusable Material Management

 SolderCream history management



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**

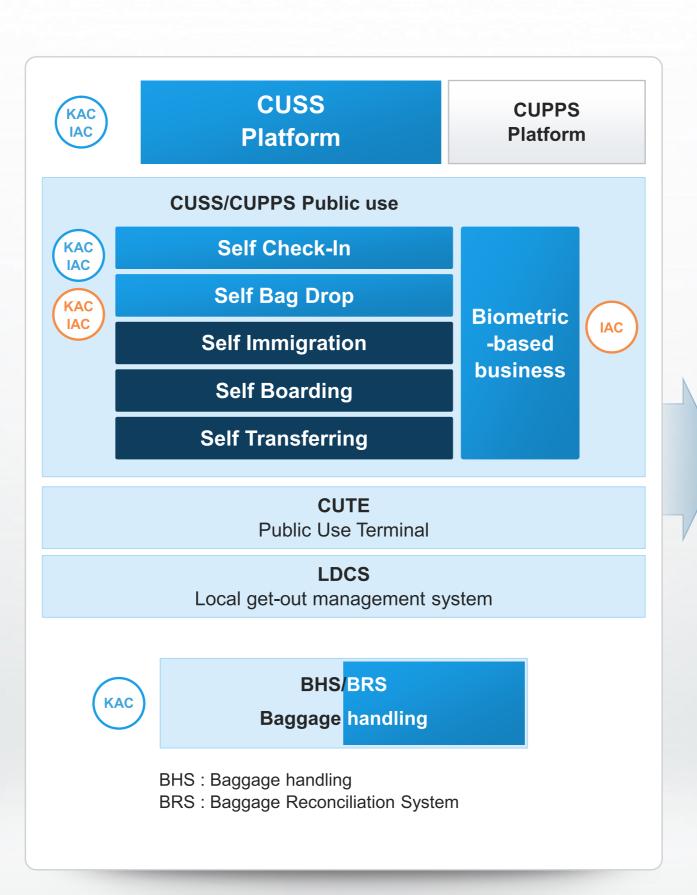
Air conditioning/air conditioning control

#### **PLM**

Rental management

**Environment/Climate** 

: aim's Coverage



AOMS
Airport Operation
Management

AODB/FIMS
Aircraft Operation
Management

**EVIDS**Information display

# Airport - aimAirport / Self Check-in

## Key Features

- ✓ IATA CUSS Technical Specification
- ☑ Easy installation and mobile operation as wireless network construction using LTE network is possible.
- ✓ Provide customized self-check-in initial screen design
- ✓ New device authentication that constitutes self-check-in and rapid technical support for airlines
- ✓ Proven stability at 8 airports operated by Korea Airports Corporation (since 2016 ~)

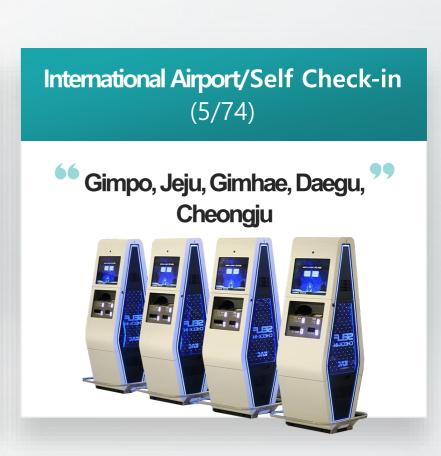


#### References





Domestic Airport/Self Check-in



# 02) Airport - aimAirport / Self Bag Drop

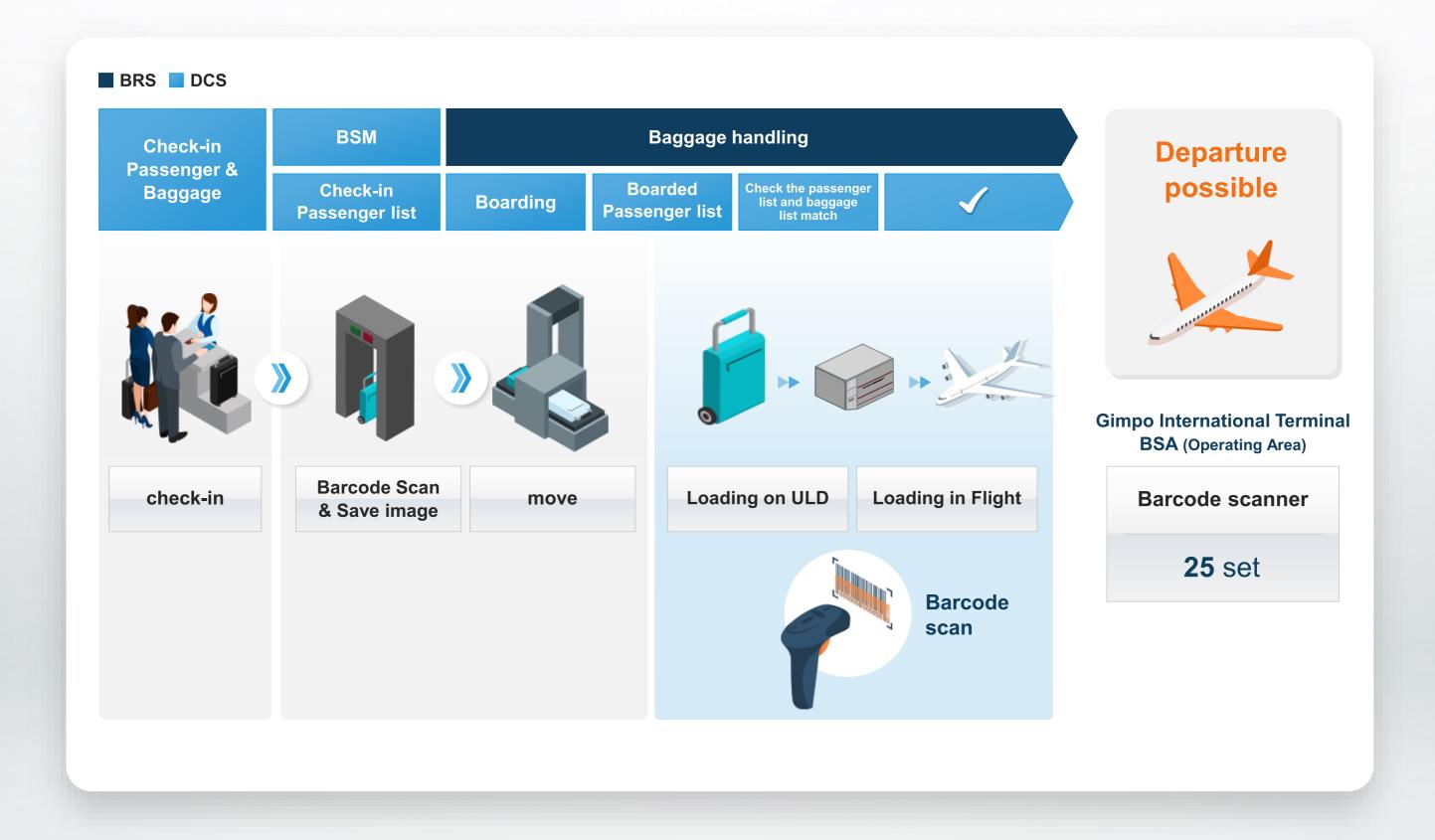
## Key Features

- **☑ IATA Recommended Practices 1701f**
- ☑ Apply the same platform as the selfcheck-in CUSS platform
- ☑ Securing self-check-in level of performance/quality and stability
- **☑** Support development in connection with external systems
- ☑ Rapid airline and device authentication
- **☑** Support for advanced technologies such as RFID and biometrics
- Localization of various devices available
- Beautiful design and improved convenience
- **☑** Quick response to airline requirements

References – CALT (City Airport, Logis & Travel, Korea, Co., Ltd)



BRS (Baggage Reconciliation System, IATA Resolution 753 Baggage Tracking)



# 02 Solution Roadmap - Overview

Using new IT technology, we will provide agile response to changes in the manufacturing environment and provide industrial system operation optimization and intelligence solutions that integrate manufacturing-related systems.



|            | Al           |
|------------|--------------|
| Artificial | Intelligence |

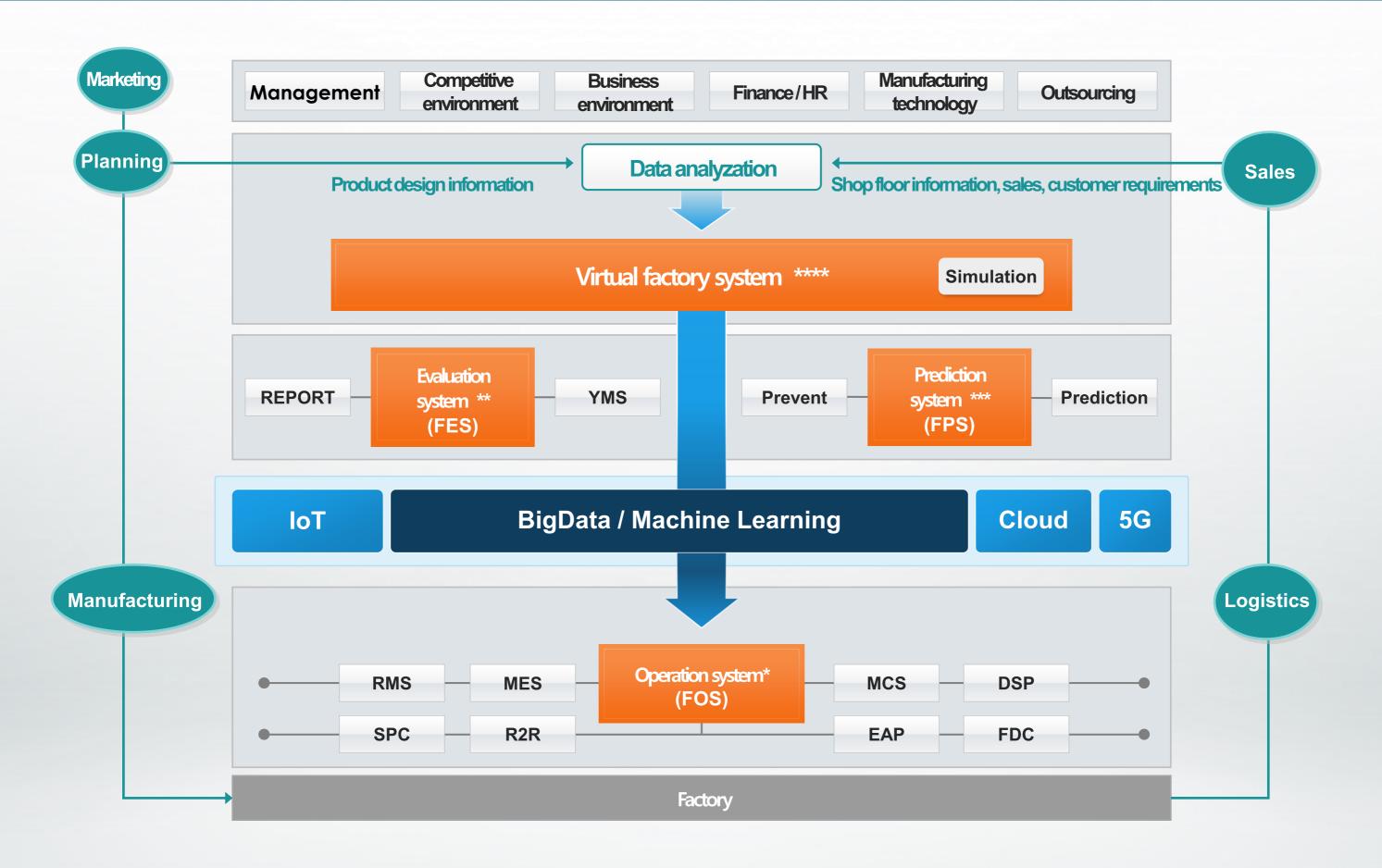
**Big Data** 

**IoT**Internet of Things

**CCP**Cloud Computing Platform

**CPS**Cyber Physical System

# Solution Roadmap - Conceptual Architecture





# **Domestic**

### **FAB**

- ✓ Samsung: 11 ~ 15Line, Back-end
- ✓ SK hynix : M10, M11, M12, M14, M15
  DRAM-WT, R3, R&D, Mask Shop
- ✓ Magnachip: C4, C5
- ✓ SK Siltron
- ✓ ATEC Solution

### **EDS/PKG**

- ✓ SK hynix Package Test, Probe
- ✓ Samsung Onyang Package
- ✓ SFA Semiconductor
- ✓ Signetics

# **Overseas**

### **FAB**

- ✓ SSW for Samsung Siltronic : 300mm
- ✓ SK Hynix China: 200mm, 300mm
- ✓ SHLMC: 300mm
- MEMC Wafer Level Control

### **EDS/PKG**

- ✓ SK hynix China Probe
- ✓ SFA Semiconductor SuZhou
- ✓ SFA Semiconductor Clark

# **Domestic**

## **LCD**

- ✓ LG Display P6 ~ P8
- ✓ Samsung Display L4 ~ L6, T7, T8
- ✓ LG Display CF
- ✓ LUSEM

## **AMOLED**

- ✓ Samsung Display : A1, A2
- ✓ DONGWOO FINE-CHEM : Touch For AMOLED

# **Overseas**

### **FAB**

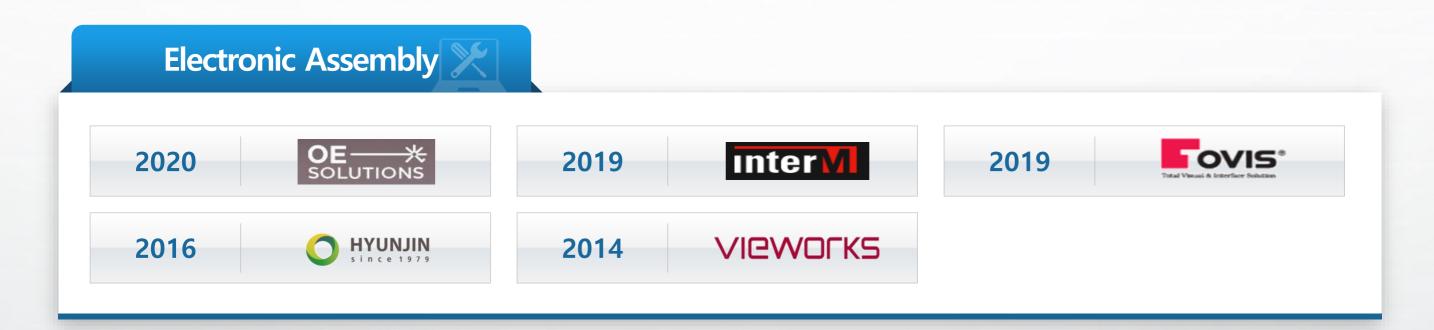
- ✓ BOE: B1, B3 ~ B6, B8 ~ B10, TM1, B17
- ✓ Tianma : T1 ~ T4, T6
- ✓ CSOT : t1 ~ t3, t6, t7
- ✓ Truly : HZ G4.5, RS G5, SW G5
- ✓ InnoLux: T0/T1
- ✓ HKC H2 ~ H5
- ✓ CHOT, CDY, CEC-Panda

## **AMOLED**

- ✓ BOE B6, B7, B11, B12
- ✓ Tianma : T5, T7, T8
- ✓ Visionox : V1, V2, V3
- ✓ Truly: Huizhou G4.5
- ✓ CSOT t4, EDO G6

# 03 References - Industry (1)

# Smart Factory











# 03 References - Industry (2)

# Smart Factory













