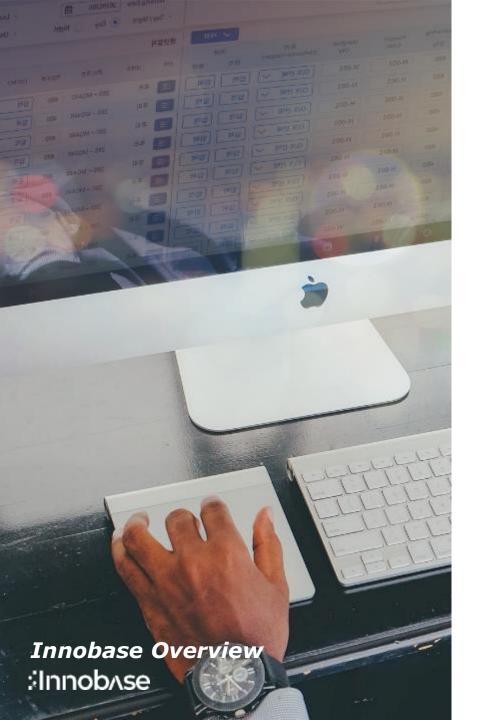


# **INNOBASE Inc.**





# Agenda

- 1. Company Overview
- 2. History
- 3. Organizational Configuration
- 4. Major area of business
- 5. Retained Solutions
- 6. Major clients
- 7. Major performances
- 8. Service system

### 1. Company Overview

• It is an IT company with extensive experience in information systems.

일반 현황			
Innobase			
Company	Innobase, Inc.		
CEO	Joon-Pyo Hong		
Company start date	October 18th, 2004		
Address	HQ. Unit 812,813, Anyang SKV1 Center, 25-32, LS-ro 116beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea Seoul office. Unit 777, Taejeong Building ,578, Seolleung-ro, Gangnam-gu, Seoul, Republic of Korea		
Business Type	Wholesale, retail, service, etc		
Business	Software development, computer peripherals, communication devices, etc		

#### 주 사업 분야

- **♦** Software Development and Consulting
- Solution business: ERP, MES, QMS, WMS, SCM,
   CMMS, Mold management, process conditions,
   SI
- Supply of factory automated barcode equipment and consumables
- RFID System Supply and Consulting
- Smart Factory Solutions (APS, Simulation Solution)



### 2. History

• InnoBase has devoted itself to technology development to delivering the best solutions to its customers.

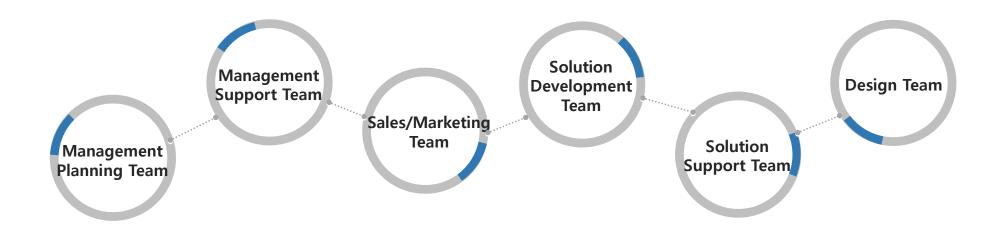


09 Selected as a partner of hyundaimovex.
05 SK Co., Ltd. selected a manufacturing platform-based partner (Eco)
03 Accreditation of Innovative Small and Medium Business (INNO-BIZ
03 Development of AI-based anti-wrap solution
10 SEBINE Technology Radar Sensor Supply Partner MOU signed
09 JIKYUNG SOLUTEC PLM Supply Partner MOU signed
08 Accreditation obtained from corporate research institutes
05 Software business registration
09 SMART BASE Mobile (Android) Framework Development
08 Signed a contract to supply simulation solution FLEXSIM
04 Development of Innobase Web Framework
04 Development of mold management solution
12 Capital increase (300 million won)
'16.12 Development of Process Condition Monitoring Solution
'15.07 Quality Management (QMS) Solution Development
'13.02 MES Solution Development
'11.11 ERP Solution Development
'04.10 Establishing Innobase

### 3. Organizational Configuration

Based on our experience in carrying out various projects, we have an organization and personnel that can efficiently support the diverse needs of our customers.

### **InnoBase Organization**



### 4. Major area of business

 Innobase provides solutions and consulting services for the establishment and development of customer information systems by experts with rich experience and technology.

#### **Technologies & Experiences** Solution **Business System Service Business Business** Package Solution Business (ERP, MES, SCM) Warehouse Management System System Integration Cloud / On-premise Service Quality Management System **ISP** Consulting System Maintenance CMMS (Facility Management) FA Master Planning Consumable Supply Mold Management System Barcode System Consulting FOOL PROOF System RF System Consulting Simulation Solution(FlexSim) PDA Development Mobile Development

## 5. Retained Solutions (1/3)

#### Retained Solutions

Solutions	Main functions			
ERP	■ HR, Accounting, Cost, Export/Import, MRO			
MES	■ BOM, sales, production, purchase, material, product, lot tracking			
QMS	<ul> <li>Process inspection, super heavy goods inspection, import inspection, forwarding inspection, claim, corrective action, 4M/ISIR management</li> </ul>			
WMS	<ul> <li>Material warehousing, production input, production packaging, warehouse warehousing, location management, first-in-first-out, pickup, shipment, inventory</li> </ul>			
SCM	<ul> <li>Production plan information, order information, payment plan, part identification table, warehousing settlement, and company information</li> </ul>			
FPS	<ul> <li>Welding, injection, painting/plating (Facility process condition data monitoring and FOOL PROOF)</li> </ul>			
CMMS	<ul> <li>Facility standard information, facility maintenance history, facility maintenance materials, preventive maintenance, and rate of operation</li> </ul>			
MMS	<ul> <li>Mold information, mold life, mold preservation, mold purchase/stock, mold management monitoring</li> </ul>			
Simulation Solution	■ APS(PreActor-Siemens), Simulation Solution (FlexSim)			
Groupware	<ul> <li>Mail, electronic payment, messenger, community, calendar, document management</li> </ul>			
PMS	<ul> <li>Project information, schedule management, resource management, cost management, output management, statistics management, issue management</li> </ul>			

### 5. Retained Solutions (2/3)

#### Solution Development Concept

- Performance and reliability of applied technology
- ◆ Self-developed source technologies and latest IT technologies

- The economics of technology introduction
- Apply IT technology with both performance and affordability

**Efficiency of maintenance** 

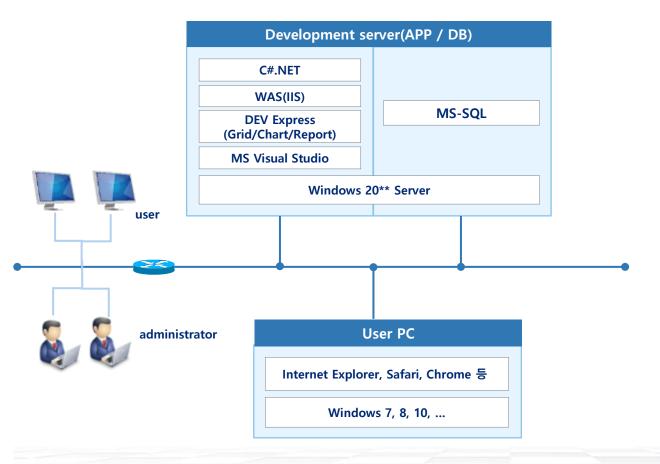
• Speed, efficiency, and ongoing system upgrades with remote support

#### **Development tool**

Sort	Details
Development tool	<ul><li>Innobase Development Framework</li><li>ASP.net Framework // Microsoft C#.Net</li></ul>
Database	■ Microsoft SQL Server
Reports	■ Dev Express Report
Server	<ul> <li>O/S: Windows Server 2012 or later</li> <li>Web Server: IIS 8 or later</li> </ul>
Client	<ul> <li>PC: Windows 7 or later // Bar Code, RFID (optional), Facility Interface (optional)</li> <li>Mobile Device : PDA, Tablet PC (Android), Smart Phone (Android)</li> </ul>

### 5. Retained Solutions(3/3)

Solution Deployment and Production Environment



순번	Tools
1	WAS(IIS)
2	DEV Express(Grid/Chart/Report)
3	DBMS(MS-SQL)
4	Windows20** Server
5	Windows O/S
6	C#.NET
7	MS Visual Studio

### 5. Retained Solutions\_ Development plan

How to Build a Solution

## Build a package-based customized system SI consulting Customized **Systems Package** Solution S/W, H/W, DB **Technical** System Support integration

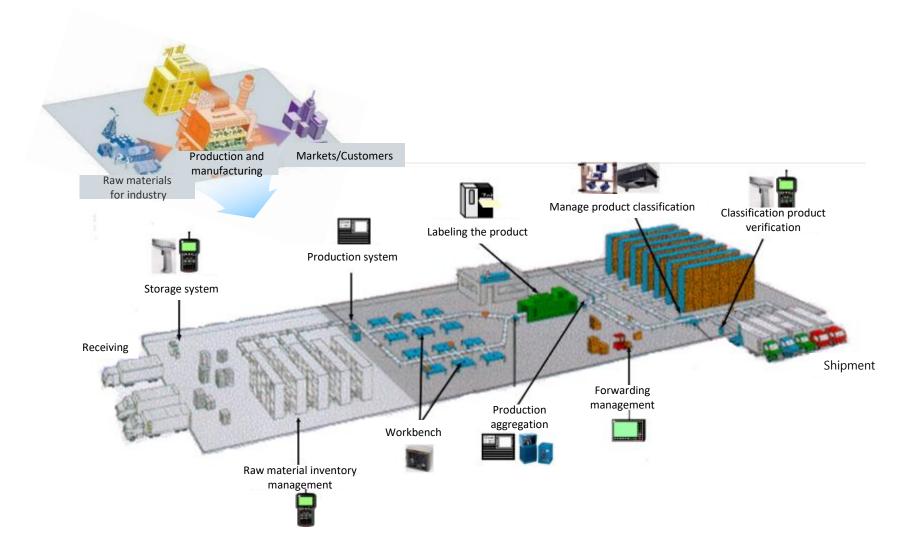
- ♦ Rich experience and optimized package solutions
- ♦ Best Professional and Systematic Methodology
- ◆ Integration of IT resources and best-of-breed maintenance services

#### **Building a Cloud-Based System**



- ◆ Low initial cost (rent of S/W, H/W, etc.)
- **♦** Easy maintenance (using supplier infrastructure)
- ♦ Latest feature (version) real-time updates

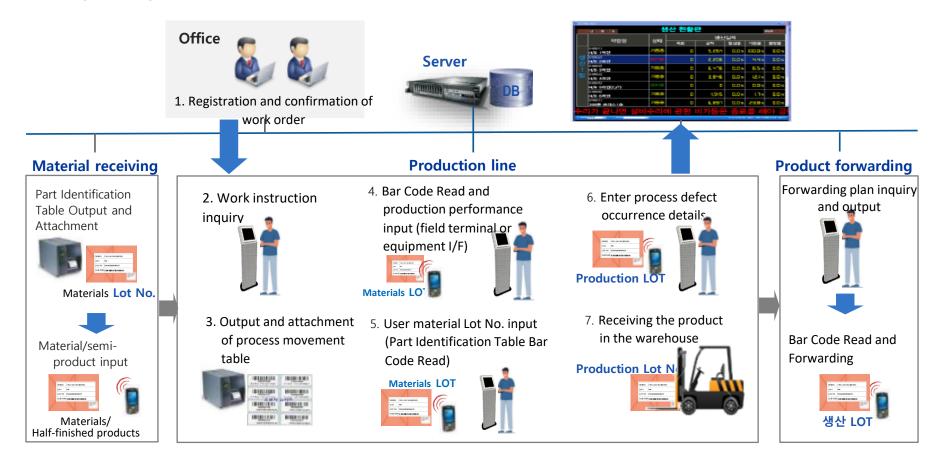
Production Manufacturing Field Application



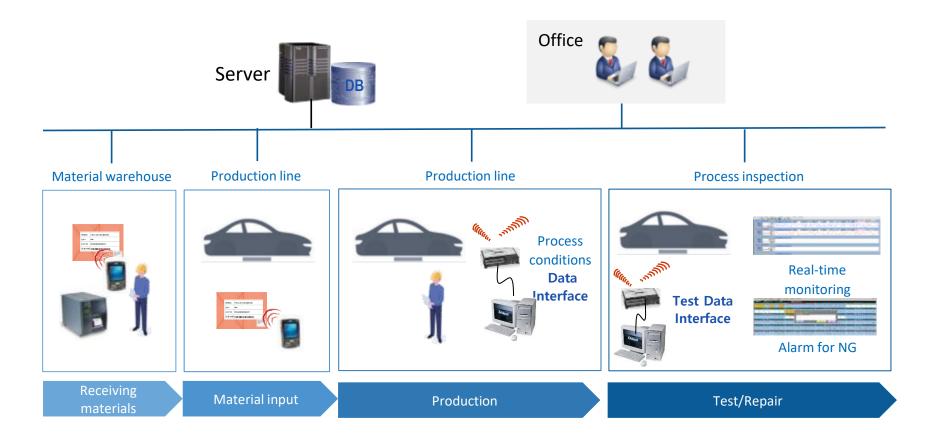
Process Operations Process

Instead of the manual work daily, the production performance data through the Bar Code Label and field terminal or equipment interface

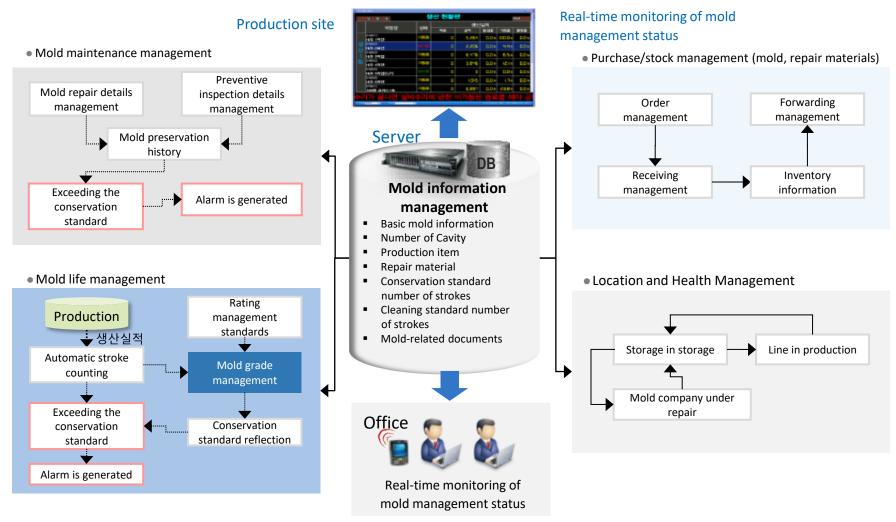
Establish an operating system that enables real-time visibility and efficient management of field operational information by collecting/entering



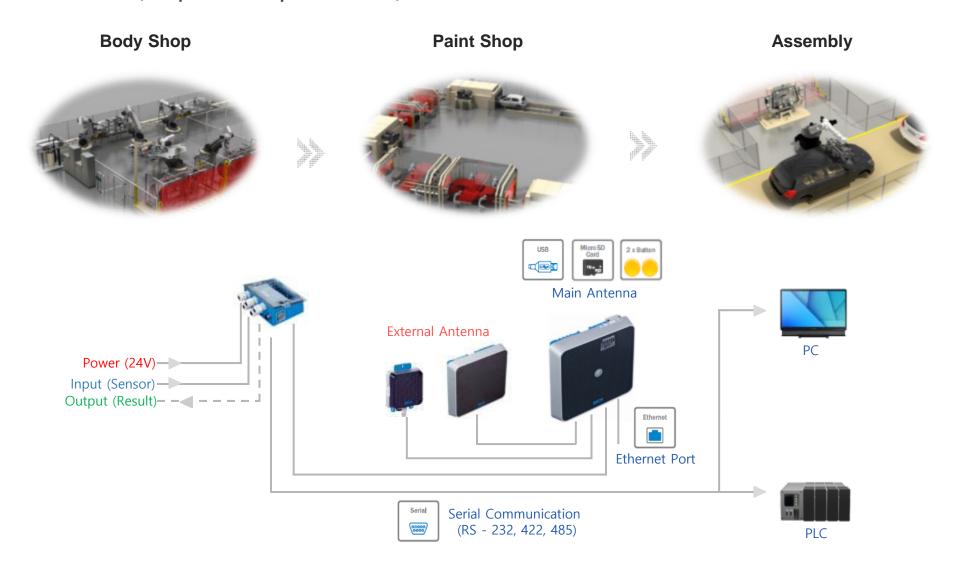
- Process condition monitoring
  - 1. It monitors process condition data in real time and automatically stores data that is generated at the same time.
  - 2. In case of NG, send an alarm to the operator/manager to take immediate action.
  - 3. It fundamentally blocks the leakage of defects.



Mold management system



RFID SYSTEM (Complete vehicle production line)



### 6. Major clients

 We have a track record of building and operating smart factory solutions for companies in various manufacturing industries

Finished cars / Electric car







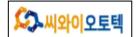




**Automobile parts** 

**Press/Welding** 







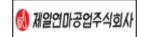




**Plating/Painting** 











**Manufacturing** 











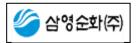
Chemistry





PolyOne Technology





**Others** 











이노에어

INTERMOLD

Donga





## 7. Major performances (1/10)

#### Major performances

Company	System	Deployment content	Business period
	BOM System	(Benchmarking the Mercedes-Benz System in Germany)	1995 ~ 1996
	Production specification management system	<ul> <li>Management of vehicle production specifications and establishment of a system that provides specification information to the production process and parts suppliers</li> </ul>	1995 ~ 1996
	Material Management System	<ul> <li>Introduction of a New Material Management System Using Toyota Signage System</li> </ul>	1997 ~ 1998
SSANGYONG MOTOR	Customs refund system	<ul> <li>Development of a system that can handle tariff refund of introduced materials in a short period of time</li> </ul>	1998 ~ 1999
	Export system	<ul> <li>Establishment of Export System for Finished Vehicles and KD Vehicles</li> </ul>	1999 ~ 2000
	KD Systems	<ul> <li>Establishment of a total system to run KD business</li> <li>(Benchmarking by other companies such as GM Daewoo and Mercedes-Benz)</li> </ul>	2003.10 ~ 2004.11
	LLP System	<ul> <li>Consulting for Improvement of Parts Procurement Logistics System</li> </ul>	2008.04 ~ 2008.11
<b>7</b> НҮППОЯІ	BOM System	<ul> <li>For the development of next-generation BOM systems such as E-BOM and M-BOM,</li> <li>Equipment Analysis and Basic Design</li> </ul>	2001.08 ~ 2001.12
CHEVROLET	LLP System	<ul> <li>Consulting for Improvement of Parts Procurement Logistics System</li> </ul>	2007.06 ~ 2007.12
<b>Остат</b>	Process Innovation System	<ul> <li>Consulting on process improvement in production and materials sectors</li> </ul>	2009.05 ~ 2009.11
-master- 마스타자동차	MES System	MES System  Construction of Electric Vehicle Production and Process Inspection System (Equipment Interface)	

## 7. Major performances (2/10)

Company	Industries	Project Overview	Details	Business period
SSANGYONG MOTOR	Car	BOM System: Building a BOM System for New Factory/New Model Operations (Benchmarking of German Mercedes-Benz Systems)	<ul><li>E-BOM &amp; M-BOM</li><li>ECO Management</li><li>BPN Management</li></ul>	1995 ~ 1996
SSANGYONG MOTOR	Car	Production specification management system: Vehicle production specification management, production process, and parts supplier Build a system that provides specification information	<ul><li>Production Spec.</li><li>Management</li><li>A.L.C. Management</li></ul>	1995 ~ 1996
SSANGYONG MOTOR	Car	Material management system: Introduction of a New Material Management System Using Toyota Signage System	<ul> <li>Materials management of light-duty vehicle plant</li> </ul>	1997 ~ 1998
SSANGYONG MOTOR	Car	Customs refund system:  Development of a new system that can handle tariff refund of introduced materials in a short period of time	<ul> <li>Customs refund BOM management</li> <li>Export and import site management</li> <li>Customs refund calculation</li> <li>Send EDI</li> </ul>	1998 ~ 1999
SSANGYONG MOTOR	Car	Export System: Establishment of Export System for Finished Vehicles and KD Vehicles	<ul><li>CBU/CKD Export Management</li></ul>	1999 ~ 2000

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## 7. Major performances (3/10)

Company	Industries	Project Overview	Details	Business period
<b>Ø</b> НҮПППЯІ	Car	BOM System: Feasibility Analysis and Basic Design for the Development of Next Generation BOM Systems such as E-BOM and M-BOM	<ul> <li>BOM System Design Consulting</li> </ul>	2001.08 ~ 2001.12
SSANGYONG MOTOR	Car	KD System: Establishment of a total system to run KD business (Benchmarking by other companies such as GM Daewoo)	<ul> <li>Order Leader</li> <li>KD BOM Leek</li> <li>Packing BOM</li> <li>Material management</li> <li>Production management</li> <li>Claim Lee claim</li> </ul>	2002.11 ~ 2003.07
SSANGYONG MOTOR	Car	KD BOM Operations and Business Consulting: KD BOM Management Outsourcing Operation and KD System Operational Support	<ul> <li>Configuring/Managing KDBOM Data</li> <li>Consulting on KDBOM management tasks and training personnel in charge</li> <li>Support for KD system operation/improvement</li> </ul>	2003.10 ~ 2004.11
s}net	ΙΤ	ERP : Build an IT Enterprise ERP System	<ul><li>ERP System</li><li>Import Management System</li><li>Call Center Service Material Management</li></ul>	2000.11 ~ 2001.07
Donga stone	Building materials	ERP	■ ERP System	2002.01 ~ 2002.08

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## 7. Major performances (4/10)

#### Detailed performances

**Innobase Overview** 

Company	Industries	Project Overview	Details	Business period
Youngchang Precision Works	Press welding	ERP	■ ERP System	2005.03 ~ 2006.02
INTERMOLD	Molded	ERP	<ul><li>ERP System</li><li>Homepage</li></ul>	2006.06 ~ 2007.03
CHEVROLET	Car	LLP : Consulting for Improvement of Parts Procurement Logistics System	<ul><li>LLP Business Process Design</li><li>Logistics System Design Consulting</li></ul>	2007.06 ~ 2007.12
SSANGYONG MOTOR	Car	LLP : Consulting for Improvement of Parts Procurement Logistics System	<ul> <li>Logistics Cost Management System Design</li> <li>Parts Procurement Logistics Cost Analysis</li> </ul>	2008.04 ~ 2008.11
K©REAN AIR	Airline	ERP : Participate in Oracle ERP System Deployment (Korea Oracle Partners)	<ul> <li>Catering System</li> <li>Material/Cost Management System</li> <li>Maintenance management system</li> </ul>	2008.09 ~ 2009.06
<b>⊕ст&amp;т</b>	Electric car Golf car	Process Innovation :  Electric vehicle manufacturers establish processes, improve operations, and  System Deployment Consulting	<ul><li>Production, Material Division Process</li><li>Consulting</li></ul>	2009.05 ~ 2009.11
TRUWIN	Automotive parts (Sensor, injection)	ERP	■ ERP System	2011.03 ~ 2011.11
	Automotive parts (Sensor, injection)	Cost system: Building a Manufacturing Cost System	■ Post cost system	2011.12 ~ 2012.02

## 7. Major performances (5/10)

Company	Industries	Project Overview	Details	Business period
Anpung Industrial	Automotive parts (injection, assembly)	ERP	■ ERP system	2012.03 ~ 2012.08
HAN HYUN's P&T	Automotive parts (Assemblies)	ERP	■ ERP system	2012.09 ~ 2013.01
SI	Automotive parts (main forging, assembly)	ERP	■ ERP system	2012.10 ~ 2013.03
SI	Automotive parts (main forging, assembly)	MES	Installation Interface	2013.01 ~ 2013.06
Samyang Chemical Industry	Automotive parts (electrodeposition coating)	Construction of Process Condition Monitoring System for Electrodeposition Paints	Fool Proof system	2013.04 ~ 2013.07
FURI	Automotive parts (electrodeposition coating)	Construction of Process Condition Monitoring System for Electrodeposition Paints	<ul> <li>Fool Proof system</li> </ul>	2013.04 ~ 2013.07
Daesung ENG	Automotive parts (electrodeposition coating)	Construction of Process Condition Monitoring System for Electrodeposition Paints	<ul> <li>Fool Proof system</li> </ul>	2013.04 ~ 2013.07
Yeonil metal	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.08 ~ 2013.09
Wanghyung tech	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.08 ~ 2013.09
Buyeongsa	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.09 ~ 2013.10
Gwang-u R&A	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.09 ~ 2013.09

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7. Major performances (6/10)

Company	Industries	Project Overview	Details	Business period
Dong-yang Tech	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.10 ~ 2013.10
Angug Finetech	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.12 ~ 2013.12
Samhwa Tech (Seongseo Factory)	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof system</li> </ul>	2013.11 ~ 2014.03
Samhwa Tech (Golyeong Factory)	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	Fool Proof system	2014.12 ~ 2015.05
Ilgwang	Automotive parts (injection, assembly)	ERP	ERP system	2013.10 ~ 2014.08
AFFC	Automotive parts (injection, assembly)	ERP	ERP system	2014.08 ~ 2014.12
Donghee Industry	Automotive parts (press, assembly)	Development of MES System for Donghee Industrial Partners	MES system	2014.07 ~ 2014.11
Yeonil metal	Automotive parts (presses, welds)	MES	<ul><li>MES system</li><li>Press installation Interface</li></ul>	2014.12 ~ 2015.06
Buyeongsa	Automotive parts (presses, welds)	MES	<ul><li>MES system</li><li>Press installation Interface</li></ul>	2014.12 ~ 2015.06
Samhwa Tech	Automotive parts (presses, welds)	MES	<ul><li>MES system</li><li>Press installation Interface</li></ul>	2014.12 ~ 2015.06
Truwin	Automotive parts (sensor, injection)	MES	<ul><li>MES system</li></ul>	2015.05 ~ 2016.04
SI	Main Forging, Automotive Parts (Assembled)	Building an Inspection Manager System	<ul> <li>Inspection Manager</li> </ul>	2016.04 ~ 2016.07

## 7. Major performances (7/10)

Company	Industries	Project Overview	Details	Business period
Sungyun Hitech	Automotive parts (presses, welds)	POP	<ul> <li>BOM, Production, Purchase, Material</li> </ul>	2016.06 ~ 2016.08
Sungyun Hitech	Automotive parts (presses, welds)	Building an Inspection Manager System	<ul> <li>Inspection Manager System</li> </ul>	2016.06 ~ 2016.08
Sungyun Hitech	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof System</li> </ul>	2016.06 ~ 2016.08
Jungah Precision	Automotive parts (presses, welds)	Construction of a welding process condition monitoring system	<ul> <li>Fool Proof System</li> </ul>	2016.07 ~ 2016.12
Seojin Precision	Automotive parts (welding, assembly)	Building an Inspection Manager System	<ul> <li>Inspection Manager System</li> </ul>	2017.12 ~ 2018.02
Dong-yang Tech	Automotive parts (presses, welds)	Building an Inspection Manager System	<ul> <li>Inspection Manager System</li> </ul>	2018.01 ~ 2018.03
Sungyun Hitech	Automotive parts (presses, welds)	Building a Mold Management System	<ul> <li>Mold Management System</li> </ul>	2017.11 ~ 2018.05
Seojin Precision	Automotive parts (welding, assembly)	MES	<ul> <li>MES System</li> </ul>	2018.11 ~ 2019.02
Seoha Industry	Automotive parts (plated)	Building a MES System	<ul> <li>MES System</li> </ul>	2018.11 ~ 2019.02
Sungyun Hitech	Automotive parts (presses, welds)	MES System Advancement	MES System	2018.10 ~ 2019.02
Dong-yang Tech	Automotive parts (presses, welds)	MES, Mold management system	MES, Mold management system	2018.10 ~ 2019.01

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## 7. Major performances (8/10)

Company	Industries	Project Overview	Details	Business period
Seongho Polytechnic	compound manufacturing	Building a WMS System	<ul> <li>WMS system</li> </ul>	2019.06 ~ 2019.10
Master electric car	Electric car	Building a MES System	<ul><li>MES system,</li><li>Process inspection system</li></ul>	2019.06 ~ 2019.12
FURI	Automotive parts (electrodeposition coating)	Electrodeposition coating process condition monitoring system upgrade	■ Fool Proof system	2019.10 ~ 2019.12
FURI	Automotive parts (electrodeposition coating)	Building a MES System	<ul> <li>MES system</li> </ul>	2020.05 ~ 2020.11
CY Auto tech	Automotive parts (presses, welds)	Building an Inspection Manager System	<ul> <li>Inspection Manager System</li> </ul>	2020.08 ~ 2020.10
Samyang Chemical Industry	Automotive parts (electrodeposition coating)	Construction of Welding Condition Monitoring System	<ul> <li>Fool Proof system</li> </ul>	2020.08 ~ 2020.10
Cheil grinding wheel	Metalworking products	Establishment of mold management system	Mold management system	2020.08 ~ 2020.12
Eum Tech	Electronic components, power supplies	Building a MES System	MES System	2020.11 ~ 2020.12
Sungwon PF	Automotive parts (presses, welds)	Building a MES System	MES System	2020.07 ~ 2021.01
Rockit Healthcare	Medical substances and medicines	Building a MES System	MES System	2020.10 ~ 2021.04
HB Global	Fabric conditioner, Detergent	Building a WMS System	■ WMS System	2020.11 ~ 2021.05
ESung industry	Automotive parts (Integrated materials)	MES System Advancement	<ul> <li>MES System</li> </ul>	2020.11 ~ 2021.05

## 7. Major performances (9/10)

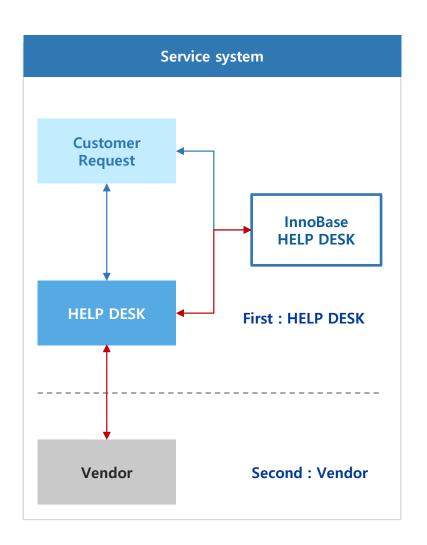
Company	Industries	Project Overview	Details	Business period
Sam Young Soonhwa	Chemicals for semiconductor production	Building a Shipment RFID System	Shipment RFID System	2021.01 ~ 2021.07
Daeyoung Air Conditioning System	Air conditioning system	Building a MES System	■ MES System	2021.05 ~ 2021.10
Pain Famille	Manufacture of bread	Building a MES System	■ MES System	2021.05 ~ 2021.10
Seoha Industry	Processing/wholesale recyclables	Building a MES System	■ MES System	2021.07 ~ 2022.05
Seoha Industry	Automotive parts (plated)	Building a MES System	■ MES System	2021.09 ~ 2021.12
HB Global	Fabric conditioner, Detergent	Al System	<ul> <li>AI-based anti-wrap system</li> </ul>	2021.09 ~ 2021.12
CY Auto tech	Automotive parts (press, welding)	Building a MES System	<ul> <li>MES System (Equipment Management System)</li> </ul>	2021.09 ~ 2021.12
Hyundai Elevator	Elevator Manufacturing	Building a MFCM System	■ MFCM System	2021.10 ~ 2022.06

## 7. Major performances (10/10)

Company	Industries	Project Overview	Details	Business period
Hanwha Compound	Manufacture of synthetic resins, plastics	Building a WMS System	■ WMS System	2022.06 ~ 2022.10
Gangneung B&C	Manufacture of bread	Building a MES System	■ MES System	2022.07 ~ 2022.11
Louders	Production of audio system equipment	Building a MES System	■ MES System	2022.07 ~ 2022.11
inoar	Industrial machinery, refrigeration parts	Building a MES System	■ MES System	2022.07 ~ 2022.11
Hyundai Elevator	Elevator Manufacturing	MFCM System Maintenance	■ MFCM System	2022.07 ~ 2022.12
Dongbang Plantech	Production of iron-making equipment and industrial machinery	Building a MES System	■ MES System	2022.08 ~ 2022.12
Master electric car	Electric car	Demonstrate AI solutions	<ul> <li>AI-based Foresight Conservation System</li> </ul>	2022.08 ~ 2022.12
Motovelo	Smart Mobility	Building a MES System	■ MES System	2022.08 ~ 2023.02

### 8. Major performances

• Innobase enables seamless and reliable use of systems through HelpDesk and a systematic customer support system.



Maintenance Services				
Sort	H/W(Commercial S/W)	Application program		
Warranty	1 year (Server 3 years)	1 year		
List	1 Year Warranty Service - Free repair and parts replacement - No service charge  Repair Service after 1 year -equipment manufacturer, distributor or Paid repairs at the service center -Replacement of paid parts -Our own repair is possible	<ul> <li>Repair application defects</li> <li>Replenish application modifications (less than 10 M/D)</li> <li>Other than that, after the development discussion, Progress</li> </ul>		
Maintenance Rate (year))	10% of construction costs (or per Call)	12% of deployment costs		



#### <u>InnoBase</u>

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