



# Industry & Distribution Business Strategy

Hitachi IR Day 2018

**June 8, 2018**

**Jun Abe**

**Vice President and Executive Officer  
CEO of Industry & Distribution Business Unit  
Hitachi, Ltd.**

# Industry & Distribution Business Strategy

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- 1. Business Overview**
2. Growth Strategy
  - (1) Scaling
  - (2) Profitability Improvement
  - (3) Cost Strategy and Strengthen Cash Generation
3. Summary

# 1-1. FY2018 Target

	FY2018	Compared with FY2015
Revenues	633.0 billion yen	(5.9) billion yen [(1)%]
Adjusted operating income [ratio]	46.5 billion yen [7.3%]	+59.4 billion yen
EBIT [ratio]	41.1 billion yen [6.5%]	+57.6 billion yen
Overseas revenue ratio	13%	(3)%

## Mission

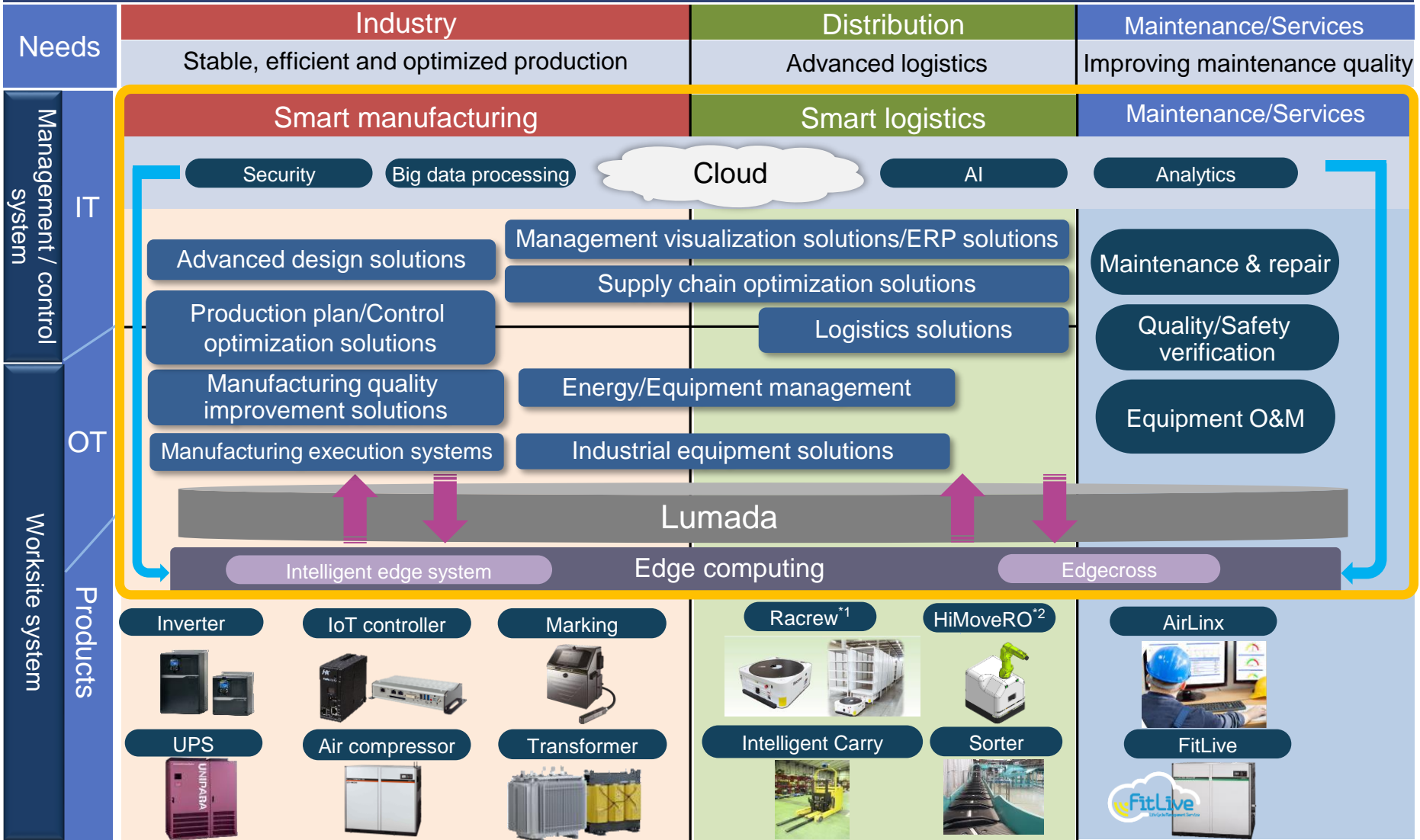
- Withdrawal from low-profit businesses
- Create the digital solution business by utilizing its wide business domain of the Industry & Distribution Business



Accomplish the FY2018 plan and gain a foothold for putting businesses on the next growth track

# 1-2. Positioning in Hitachi Group

Provide digital solutions by utilizing OT × IT × Products as a strength



\*1 Compact and low-floor automated guided robot \*2 Autonomous moving robot (Mounted robot made by FANUC)

OT: Operational Technology ERP: Enterprise Resources Planning O&M: Operation and Maintenance

UPS: Uninterruptible Power Supply

## Changing demographics

### [China]

- ✓ The working-age population is already decreasing
- ✓ By 2030 wages will become more than 5 times compared with 2010

Source : Estimated by Hitachi based on IHS Markit data, "IHS Markit, Global Economy [May 2018]"

### [U.S.]

- ✓ Immigrants keep increasing, and labor force will become more diverse.

Source : Estimated by Hitachi based on data from Migration Policy Institute (MPI) Data Hub

### [Europe]

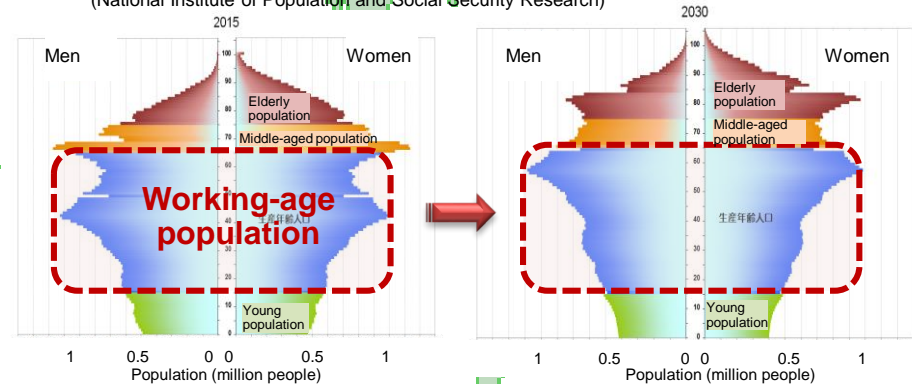
- ✓ The working-age population has started to decrease since early 2010s.

Source : Estimated by Hitachi based on IHS Markit data "IHS Markit, Global Economy [May 2018]"

### [Japan]

- ✓ Continuous decrease in working-age population (77 million people in 2015 ⇒ 68 million people in 2030)

Source : Population Projections for Japan (July 2017) (National Institute of Population and Social Security Research)



### [APAC]

- ✓ Wage increases throughout APAC (increased by 6.1% YoY in 2018)

Source : Willis Towers Watson Salary Budget Planning Survey – Asia Pacific Report (2012-2017)

- ✓ The megatrend of introducing IoT is progressing globally. **Automated worksites, use of big data and AI**, and sophisticated commerce and industry integrating OT and IT have accelerated.
- ✓ In response to a decrease in the working-age population and diversification of labor worldwide, **efficiently improving worksites and logistics, human resource saving, and digitalization of experts' skills and expertise** are progressing.

**A sustainable society in which everyone can live energetically and comfortably**



## Hitachi's Social Innovation Business

Digital solutions / Collaborative creation

OT

IT

Products

Social and Environmental Values

Promote the optimization of production plans, support quality improvement, decrease the environmental load, and contribute to building a base for technological innovation.

Corresponding SDGs

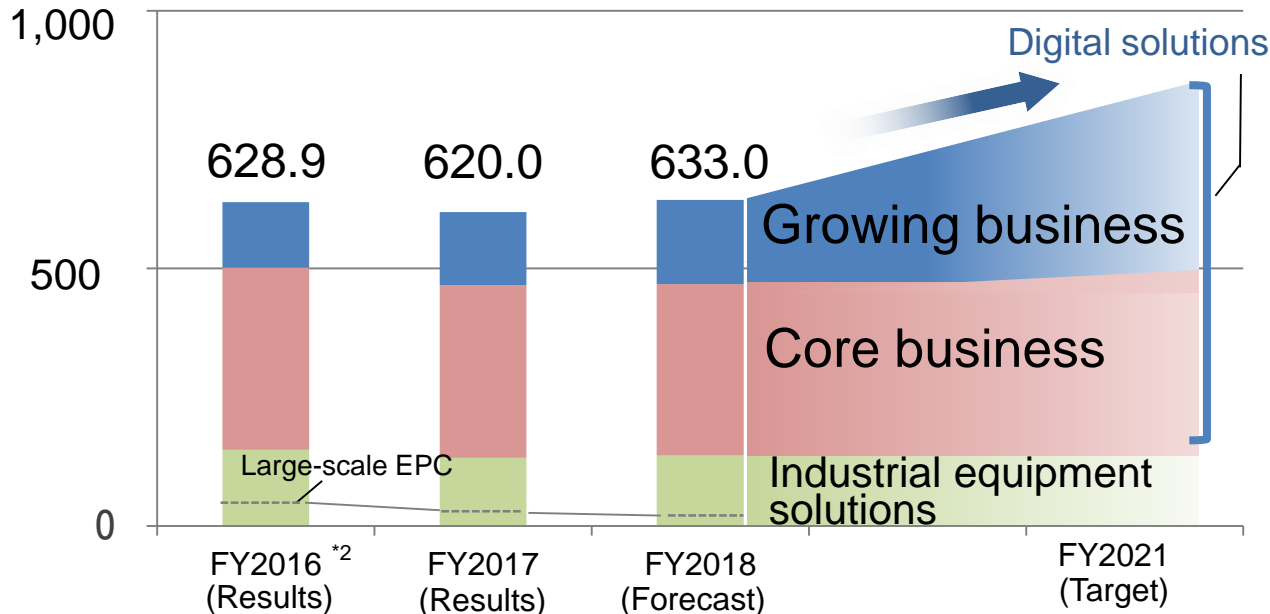


# 1-5. Vision

## (Transforming Business Portfolio into High-Profit Areas)

### Revenues\*1

(Unit: Billion yen)



### Growing business

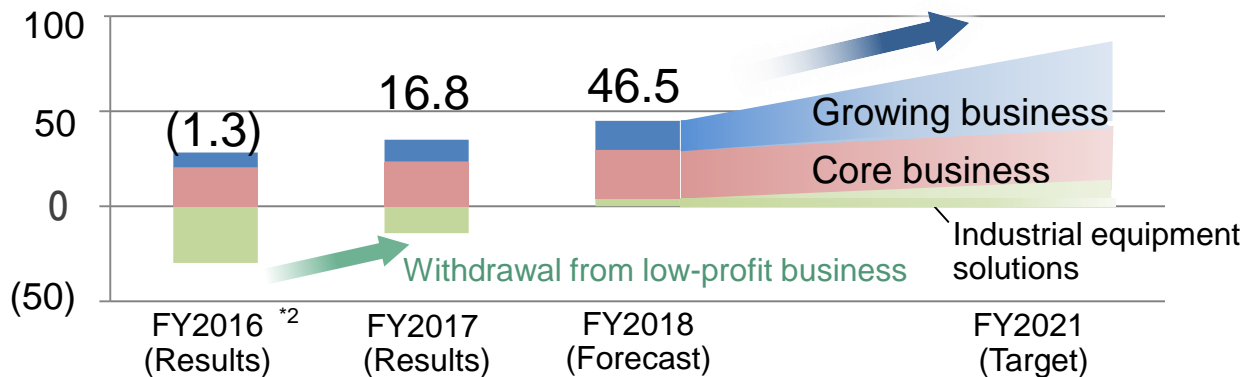
- Smart manufacturing
- High-value added services (logistics solutions, maintenance & repair, etc.)
- ERP solutions

### Core business

- SI
- Outsourcing services
- Security solutions
- Embedded engineering, etc.

### Adjusted operating income\*1

(Unit: Billion yen)



\*1 Including Hitachi Solutions, Ltd.

\*2 Figures of Hitachi Plant Construction, Ltd., which was transferred to the Nuclear Energy Business Unit in April 2017, were corrected retroactively.

EPC: Engineering, Procurement and Construction SI: Systems Integration

# 1-6. Progress of 2018 Mid-term Management Plan

	FY2015 results* <sup>1</sup>	FY2016 results* <sup>1</sup>	FY2017 previous forecast* <sup>2</sup>	FY2017 results	FY2018 previous target* <sup>2</sup>	FY2018 forecast
Revenues (Billion yen)	638.9	628.9	600.0	620.0	666.0	633.0
Adjusted operating income ratio	(2.0)%	(0.2)%	5.0%	2.7%	7.5%	7.3%
EBIT ratio	(2.6)%	(0.6)%	3.8%	0.5%	7.4%	6.5%

## Growing business: Expand the digital solution business utilizing Lumada

- Use Omika Works' highly efficient production model as the solution core
- Acquire new customers and create new services through collaborative creation
- Add value starting with SAP S/4HANA®\*<sup>3</sup>

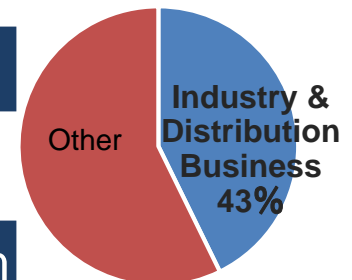
## Core business: Improve profitability in SI business

- Strengthening the project management / development of human resources

## Industrial equipment solutions: Implementation of structural reform

- Consolidate industrial equipment business into Hitachi Plant Services to strengthen mid-scale business (April 2018)

Lumada revenues  
FY2017 results



Hitachi total  
1,006.0 billion yen

\*1 Figures of Hitachi Plant Construction, Ltd., which was transferred to the Nuclear Energy Business Unit in April 2017, were corrected retroactively.

\*2 Announced on June 8, 2017. \*3 SAP and SAP logos are registered trademark of SAP SE in Germany and other countries.



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### Basic policy

- Expansion of digital solution business through OT × IT × Products
- Acceleration of global business deployment

### Hitachi's strengths

- Abundant R&D resources
- Advanced manufacturing capabilities / experiences
- Wide customer base

### Focus points

- Business scaling
- Further profitability improvement

### Growth strategy

#### (1) Scaling

- ① Increase target customers
- ② Expand target areas (global)
- ③ Multiply smart manufacturing (utilize as solution cores)
- ④ Multiply smart manufacturing (collaboration with partners)
- ⑤ Extend business domain starting with ERP solutions

#### (2) Profitability improvement

- ① Provide high-value added services to total value chain
- ② Add value through maintenance & repair business
- ③ Add value through quality and safety data analysis and verification services

# Industry & Distribution Business Strategy

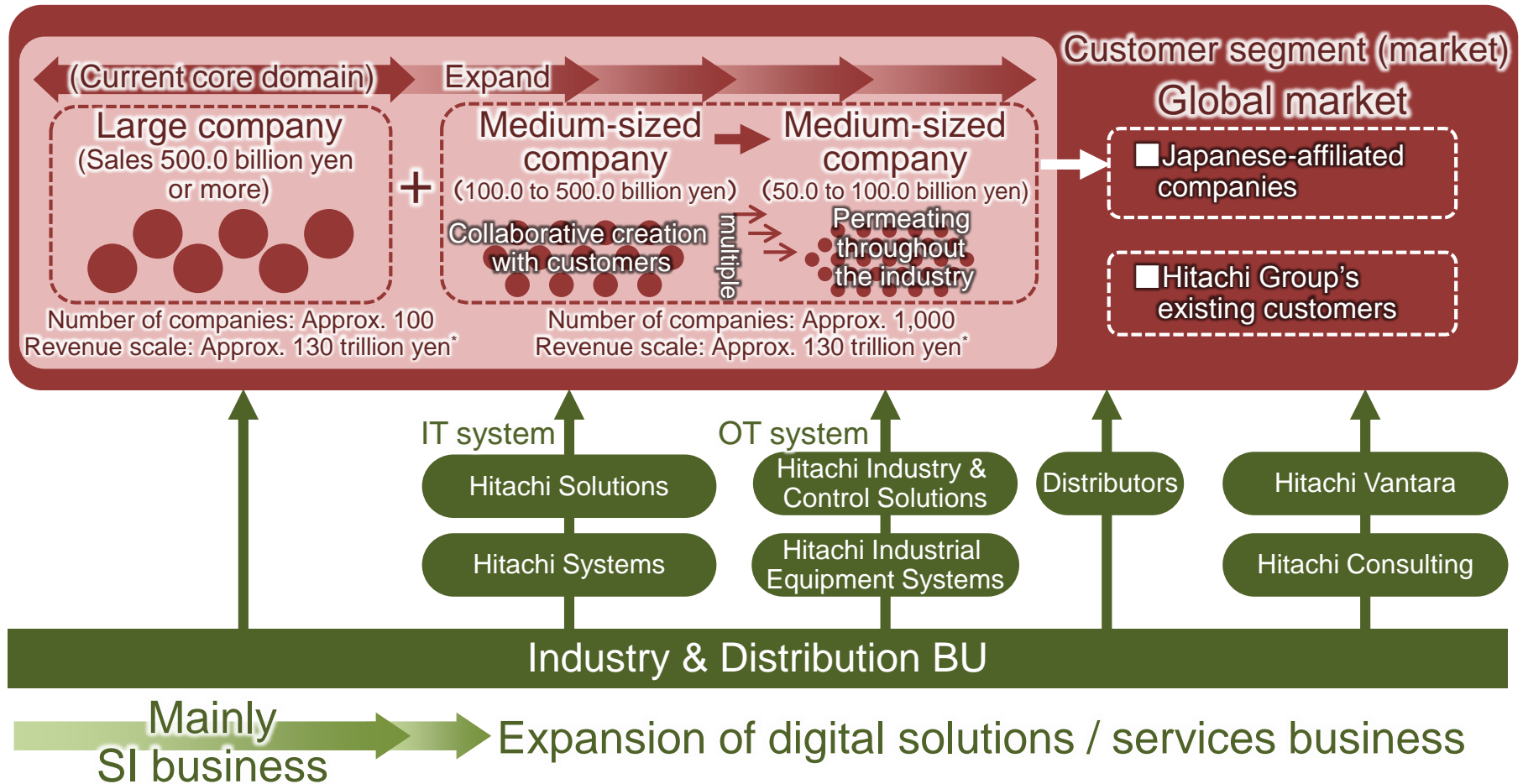
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# ① Increase target customers

Strengthen approach to medium-sized companies through collaboration with Group companies



\*Indicates the number of companies and total sales scale in industries, such as manufacturing, distribution, and retailing, which the Industry & Distribution BU targets. Hitachi estimation.

## 2-2. (1) Scaling

### ② Expand target areas (global)

**Asia:** Provide digital solutions for the manufacturing industry to Japanese companies

**North America:** Business deployment by strengthening collaboration with Sullair and Penske

#### Made in China 2025

Model project for smart manufacturing in 12 cities and 4 combined cities

#### China

Provide digital solutions to Japanese manufacturers in cooperation with Hitachi Group local subsidiaries.

Area representative Hitachi (China), Ltd.

Local base Hitachi Engineering & Construction (China) Co., Ltd.

#### Industrial Internet

Accelerate digitalization in the manufacturing industry

#### North America

- Digital solution business deployment in collaboration with Sullair (maintenance & repair)
- Collaborative creation with Penske aiming for vehicle performance improvement

Area representative Hitachi America, Ltd.

#### Southeast Asia

Provide digital services utilizing the Lumada Center to be established in Thailand (2018).

Area representative Hitachi Asia Ltd.

Local base Hitachi Plant Technologies (Vietnam) Co., Ltd.  
MHPT Engineering Sdn. Bhd.  
PHPC Co., Ltd. Inc.

Collaborate globally:

- Hitachi Consulting Corporation
- Hitachi Vantara Corporation

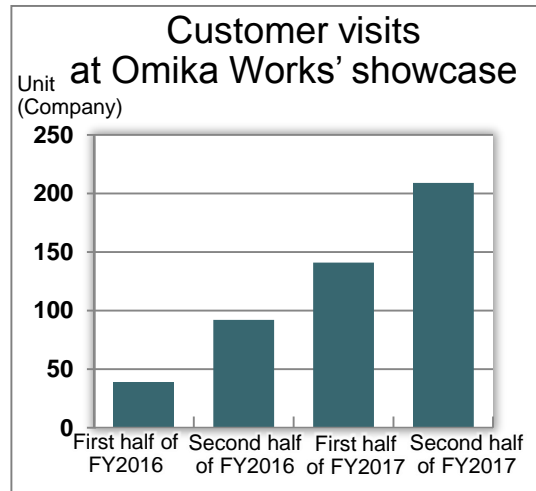
#### Thailand 4.0

- Investment of a total of 1.5 trillion baht (approx. 5 trillion yen) in the new special economic zone “Eastern Economic Corridor (EEC)” development plan
- Hitachi signed a cooperation agreement with the EEC policy committee aiming for utilization of IoT technology (September 2017)

## 2-2. (1) Scaling

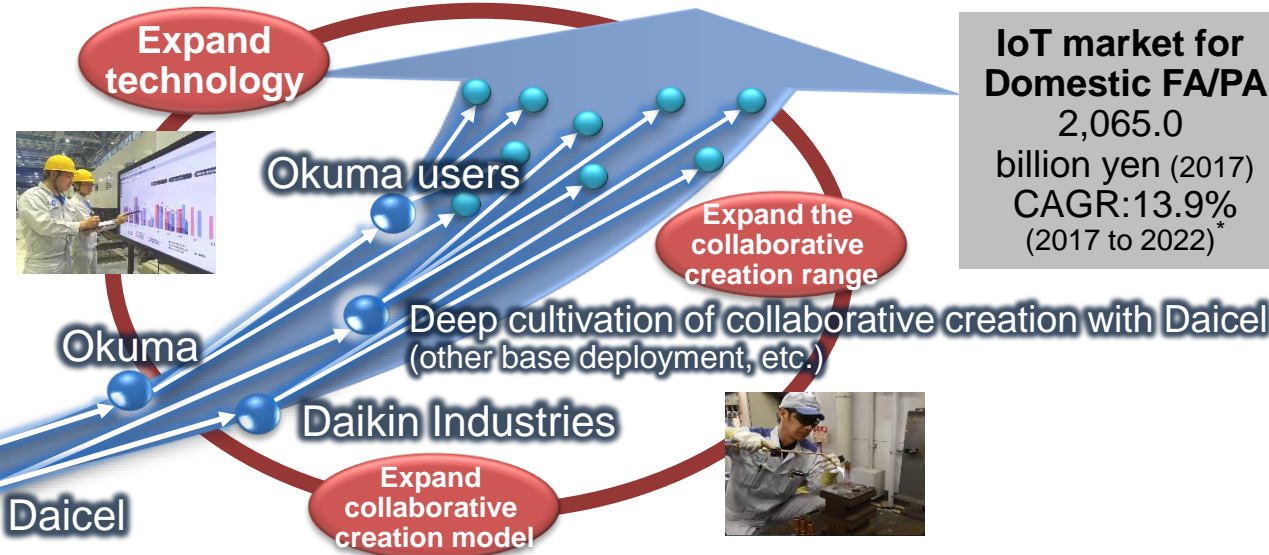
### ③ Multiply smart manufacturing (utilize as solution cores)

## Expand services utilizing Lumada



Using Omika Works' highly efficient production model as the core for solutions

## Expand digital solution business

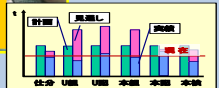


### Progress & Operation Monitoring (RFID Production Monitoring)

Dynamic monitoring of workers and items

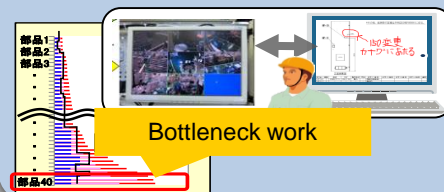


Making in-factory distribution visible



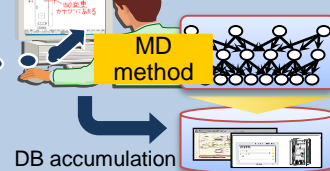
### Kaizen activity support

Analyze bottleneck work and take necessary countermeasures



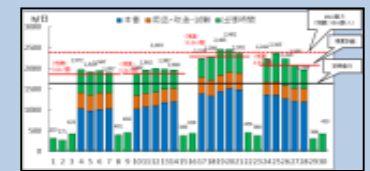
### Modular Design

Speedy design feedback system



### Factory Simulator

Drafting a plan of action & processes  
Forecasting in-floor distribution



\* Source: IDC Japan, March 2018 "Domestic IoT Market estimated by industry area/usecases, 2018-2022", calculated by Hitachi based on IDC Research  
FA: Factory Automation PA: Process Automation CAGR: Compound Annual Growth Rate  
RFID: Radio Frequency Identification MD: Modular Design

## 2-2. (1) Scaling

### ④ Multiply smart manufacturing (collaboration with partners)

B2B2B business deployment collaborating with a machine tool manufacturer as a partner

Approach

Collaboratively provide support business to partner's users

First Step

Industry & Distribution BU

Provide digital solutions

Okuma Corporation

Second Step

**B2B2B business deployment**  
Domestic and overseas Okuma users  
(automotive parts manufacturers and others)



Solutions

Shop floor visualization

Production optimization scheduling

Monozukuri<sup>\*1</sup> service

Information infrastructure

Lumada  
Operation records, configuration, maintenance and others

Business deployment starting from products

Approach

Provide digital solutions through Hitachi Industrial Equipment Systems' product provision partner

Second Step

Industry & Distribution BU

First Step

Provide digital solutions

Hitachi Industrial Equipment Systems

Provide products and systems

AMADA CO., LTD.

Toki Works



Deep cultivation of collaborative creation

Fujinomiya Works



Business deployment for domestic and overseas Amada users

Lumada

Collaboration  
Expansion of solution menu

V-factory<sup>\*2</sup>

\*1 Monozukuri: The art of making things better than ever

\*2 IoT solution for factories providing by Amada



## 2-2. (1) Scaling

### ⑤ Extend business domain starting with ERP solutions

Create value jointly using product operation data and business data

#### Customer issues

- Upgrade to S/4HANA by the 2025 maintenance deadline is required
- Visualizing KPI and improving efficiency of the entire operation through IT investment

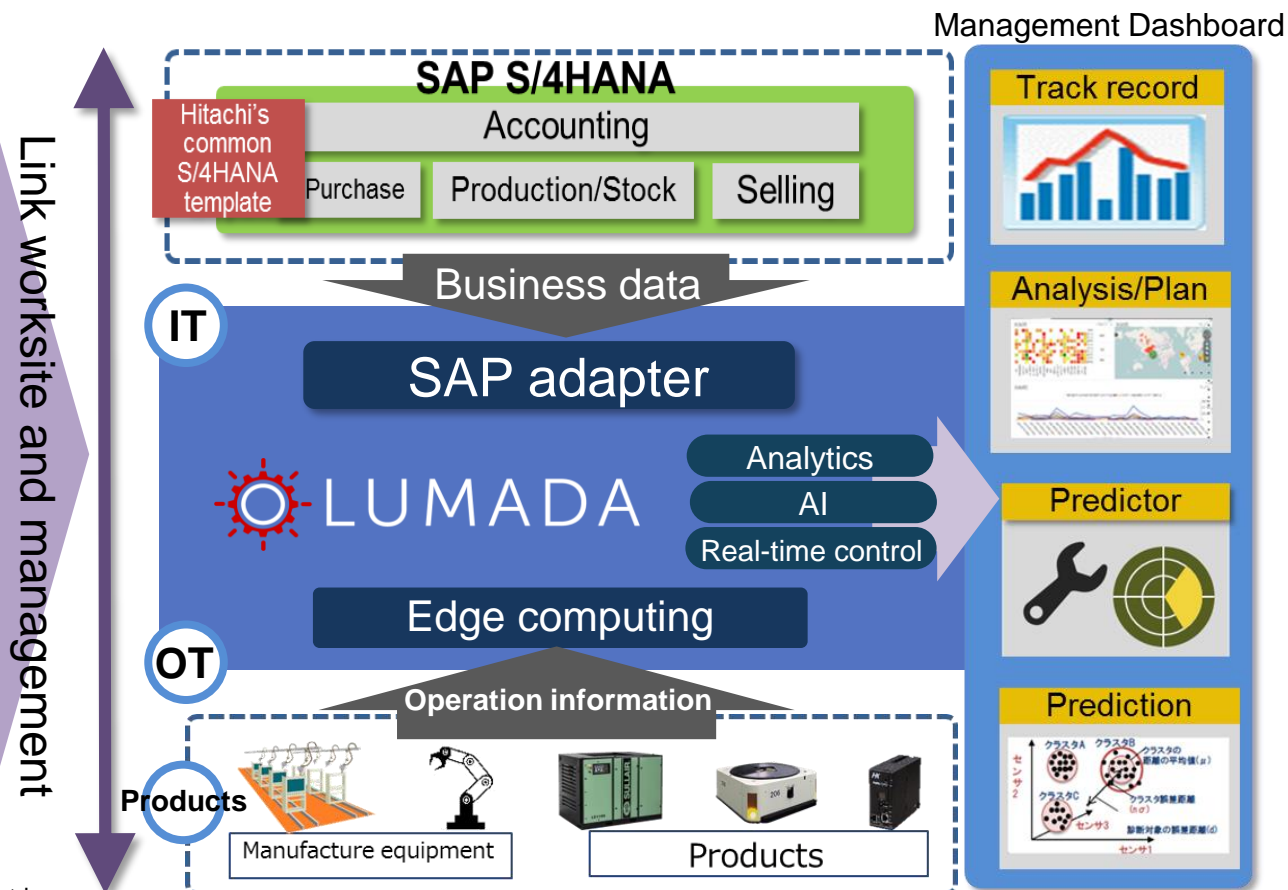
#### Domestic ERP package license market

113.0 billion yen (2016)  
CAGR: 4.8% (2016 to 2019)\*3

#### Hitachi's strengths

- Top class track record in Japan\*1 for SAP-related business
- Abundant SAP application know-how in Hitachi Group\*2
- OT knowledge obtained as a manufacturer

Provide solutions from management to worksites starting with SAP S/4HANA upgrade



\*1 Hitachi estimation

\*2 Introduced to 400 companies (612 bases) in 32 countries.

\*3 Source: Created by Hitachi based on "ERP Market in Japan: Key Research Findings 2017" published by Yano Research Institute Ltd.

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## 2-2. (2) Profitability Improvement

### ① Provide high-value added services to total value chain

## Provide manufacturing / logistics platform in China

### Customer issues

- From individual optimization to total optimization
- Sophisticated logistics operation

### Hitachi's strengths

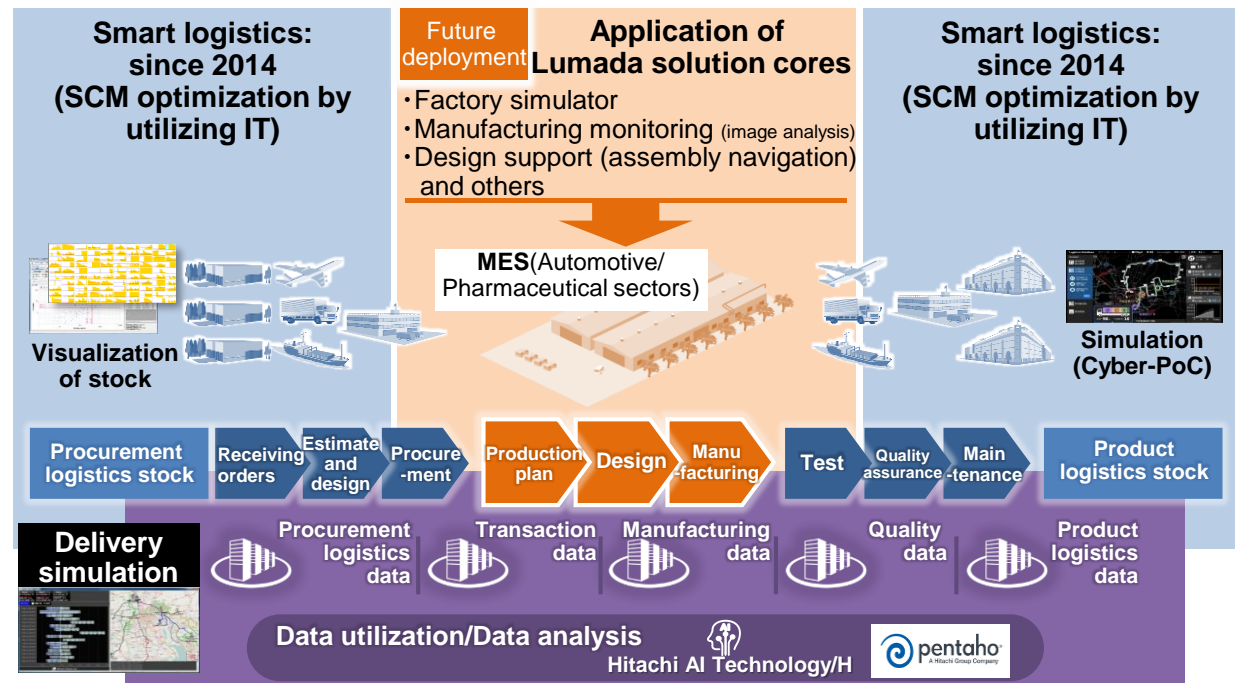
- Offering solutions to a wide range of industries, such as manufacturing, distribution, and others
- Optimization technologies utilizing IoT

Provide a platform that contributes to visualization and efficiency improvement in logistics operations for the entire supply chain + Expand smart manufacturing business

### Smart manufacturing market in China

Approx. 600.0 billion yen (2015)  
CAGR: 9.4% (2015 to 2020)\*

## Smart Manufacturing Field



## 2-2. (2) Profitability Improvement

### ② Add value through maintenance & repair business

Expand services after sales  
starting from parts repair and preventive maintenance

#### Customer issues

- Quality improvement of repair services
- Minimizing opportunity loss caused by a failure

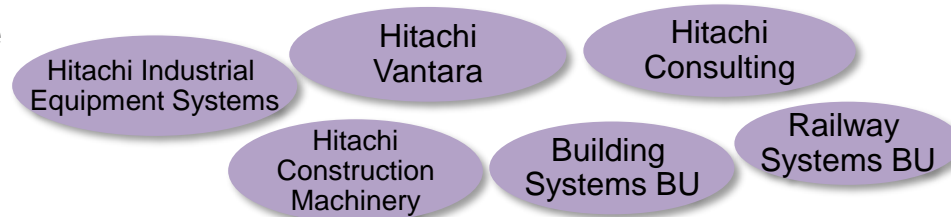
**Worldwide market size of Repair sector  
(customers' IT-related spending)**

37.3 billion dollars (2017)  
CAGR: 6% (2017 to 2022)\*

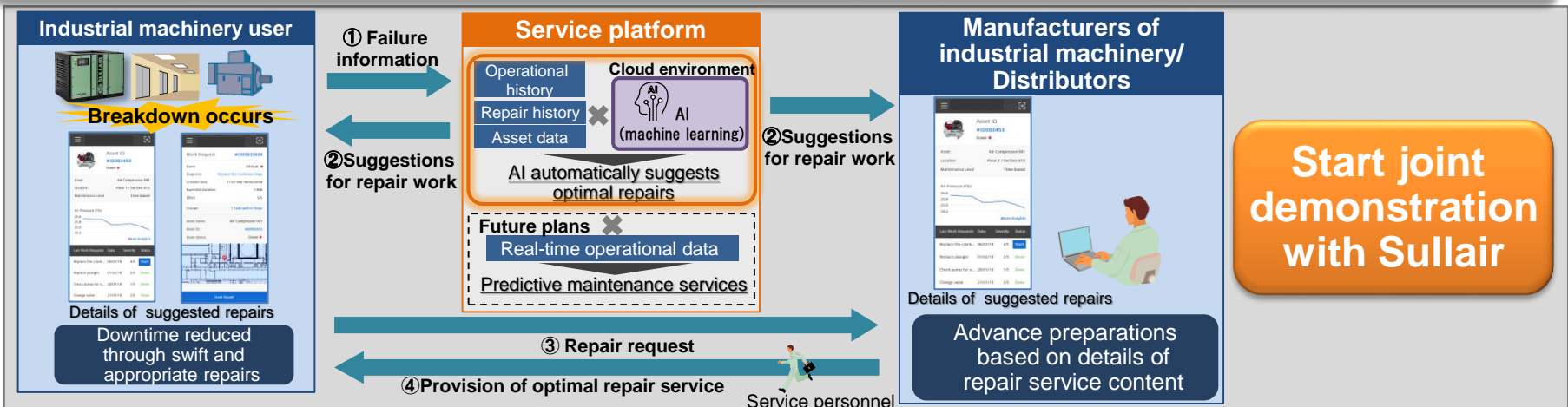
#### Hitachi's strengths

- Wide range of maintenance experience in the industrial equipment and machinery sectors
- Sophisticated analytical abilities utilizing AI

#### Group collaboration



Provide repair recommendations that achieve optimized repair work and preventive maintenance



\* Source: Calculated by Hitachi based on Causeway Connections

## 2-2. (2) Profitability Improvement

### ③ Add value through quality and safety data analysis and verification services

## Service deployment aiming to strengthen quality assurance systems in the manufacturing industry

### Customer issues

Data utilization and strengthening of a highly reliable quality assurance system

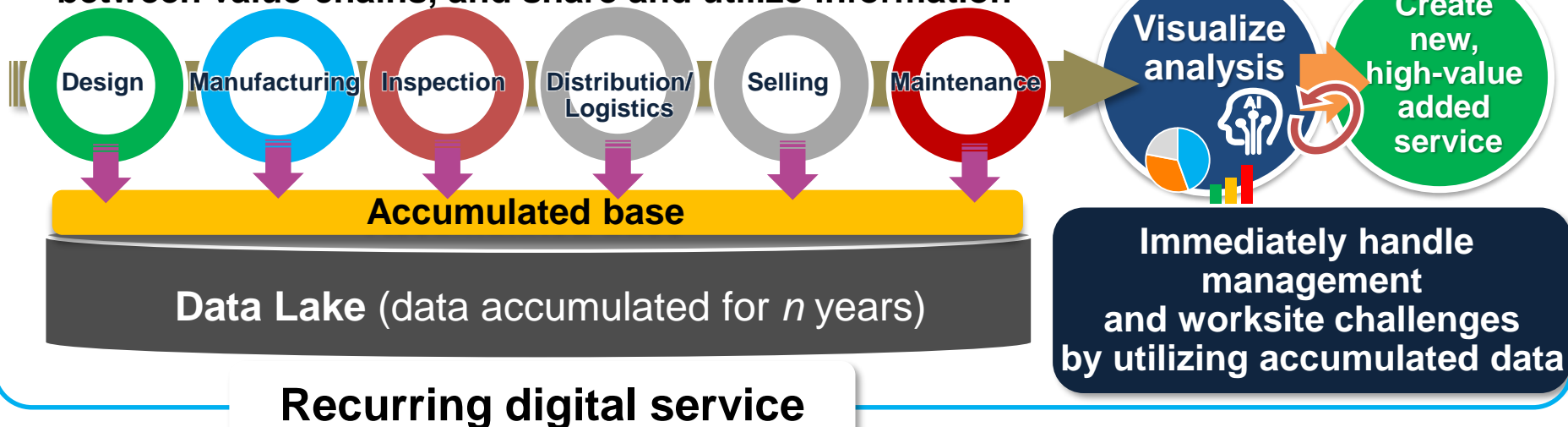
### Hitachi's strengths

Abundant experience in meeting regulatory requirements in a mission-critical sector, such as the pharmaceutical industry

Worldwide market size of  
Quality/Safety sector  
(customers' IT-related spending)  
8.7 billion dollars (2017)  
CAGR: 11.5% (2017 to 2022)\*

Secure traceability without manual operations  
for preventing human errors

With data, link a variety of industries and companies  
between value chains, and share and utilize information



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## Evolution of the Hitachi Smart Transformation

### SG&A expense

- Reinforcing the front-line to expand the digital solution business
- Improving business efficiency by setting pipeline management of the total value chain

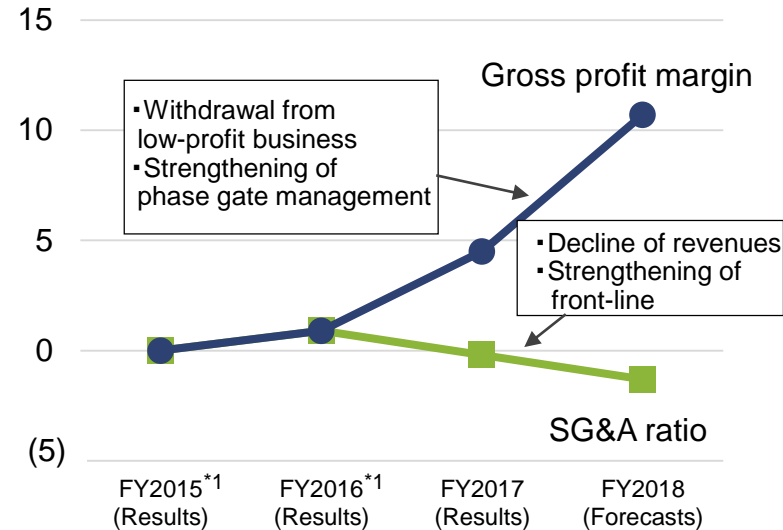
### Gross profit

- Improving projects and reducing loss cost through phase gate operation
- Expanding the digital solution business to add value and achieve horizontal application

### Cash generation

- Strengthening management of cash flow in major domestic and overseas projects
- Accelerate cash in through contract splitting, advance receipt, and other means, and liquidating receivables

Improvement point



	FY2015*1 (Result)	FY2016*1 (Result)	FY2017 (Result)	FY2018*2 (Forecast)
CCC	55.4 days	61.1 days	59.8 days	65.5 days

\*1 For FY2015 and FY2016, figures of Hitachi Plant Construction, Ltd., which was transferred to the Nuclear Energy Business Unit in April 2017, were corrected retroactively.

\*2 Figures exclude a large-scale construction project in the Middle East

CCC: Cash Conversion Cycle

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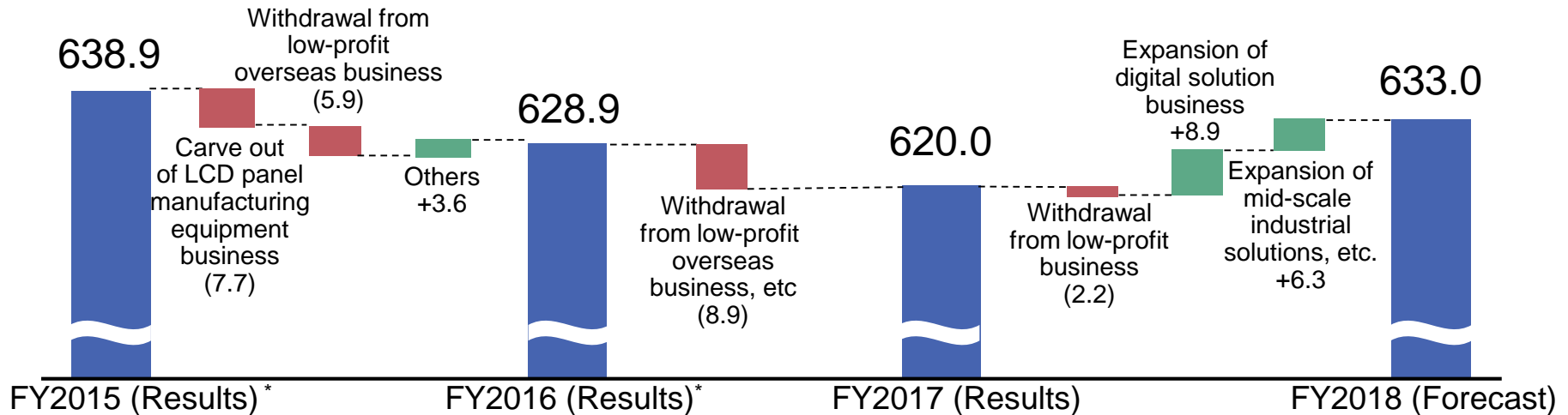
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# 3-1. Factors of Increase/Decrease of Revenues, Adjusted Operating Income/Loss

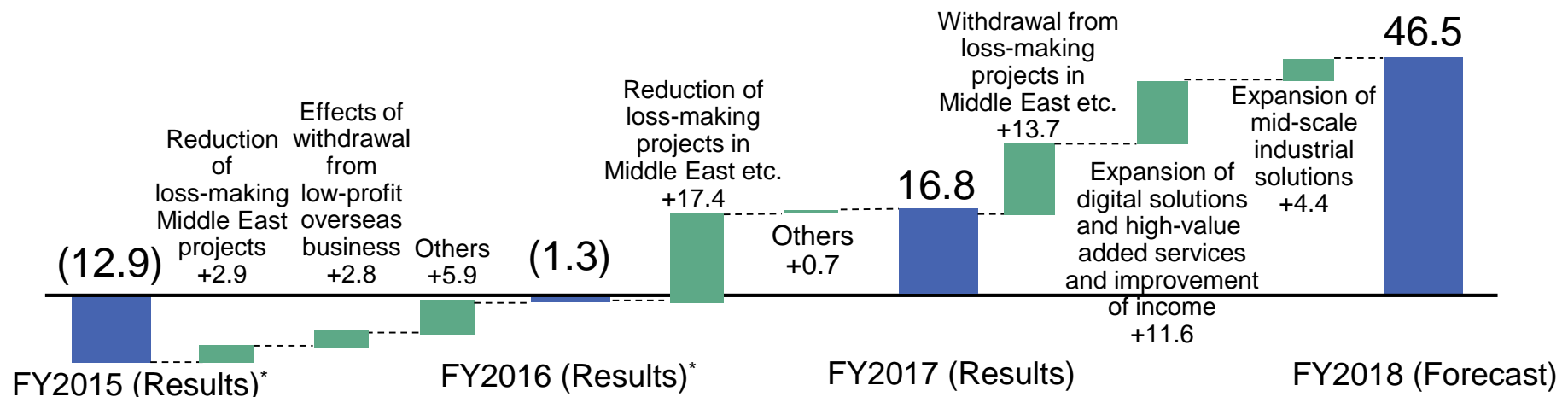
## Revenues

(Unit: Billion yen)



## Adjusted operating income/loss

(Unit: Billion yen)



\* For FY2015 and FY2016, figures of Hitachi Plant Construction, Ltd., which was transferred to the Nuclear Energy Business Unit in April 2017, were corrected retroactively.

### FY2018 Target

	FY2018	Compared with FY2015
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Adjusted operating income [ratio]	46.5 billion yen [7.3%]	+59.4 billion yen
EBIT [ratio]	41.1 billion yen [6.5%]	+57.6 billion yen
Overseas revenue ratio	13%	(3)%

### Toward next Mid-term Management Plan

- Transform to high-profitable (service) business models
- Lead Hitachi's digital solution business

# Cautionary Statement

Certain statements found in this document may constitute “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such “forward-looking statements” reflect management’s current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as “anticipate,” “believe,” “expect,” “estimate,” “forecast,” “intend,” “plan,” “project” and similar expressions which indicate future events and trends may identify “forward-looking statements.” Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the “forward-looking statements” and from historical trends. Certain “forward-looking statements” are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on “forward-looking statements,” as such statements speak only as of the date of this document.

Factors that could cause actual results to differ materially from those projected or implied in any “forward-looking statement” and from historical trends include, but are not limited to:

- economic conditions, including consumer spending and plant and equipment investment in Hitachi’s major markets, particularly Japan, Asia, the United States and Europe, as well as levels of demand in the major industrial sectors Hitachi serves;
- exchange rate fluctuations of the yen against other currencies in which Hitachi makes significant sales or in which Hitachi’s assets and liabilities are denominated;
- uncertainty as to Hitachi’s ability to access, or access on favorable terms, liquidity or long-term financing;
- uncertainty as to general market price levels for equity securities, declines in which may require Hitachi to write down equity securities that it holds;
- fluctuations in the price of raw materials including, without limitation, petroleum and other materials, such as copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- the possibility of cost fluctuations during the lifetime of, or cancellation of, long-term contracts for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
- credit conditions of Hitachi’s customers and suppliers;
- fluctuations in product demand and industry capacity;
- uncertainty as to Hitachi’s ability to implement measures to reduce the potential negative impact of fluctuations in product demand, exchange rates and/or price of raw materials or shortages of materials, parts and components;
- uncertainty as to Hitachi’s ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- increased commoditization of and intensifying price competition for products;
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel;
- uncertainty as to Hitachi’s ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- uncertainty as to the success of acquisitions of other companies, joint ventures and strategic alliances and the possibility of incurring related expenses;
- uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness;
- the potential for significant losses on Hitachi’s investments in equity-method associates and joint ventures;
- general socioeconomic and political conditions and the regulatory and trade environment of countries where Hitachi conducts business, particularly Japan, Asia, the United States and Europe, including, without limitation, direct or indirect restrictions by other nations on imports and differences in commercial and business customs including, without limitation, contract terms and conditions and labor relations;
- uncertainty as to the success of cost structure overhaul;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property;
- uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity-method associates and joint ventures have become or may become parties;
- the possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- the possibility of disruption of Hitachi’s operations by natural disasters such as earthquakes and tsunamis, the spread of infectious diseases, and geopolitical and social instability such as terrorism and conflict;
- uncertainty as to Hitachi’s ability to maintain the integrity of its information systems, as well as Hitachi’s ability to protect its confidential information or that of its customers; and
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its employee benefit-related costs.

The factors listed above are not all-inclusive and are in addition to other factors contained in other materials published by Hitachi.

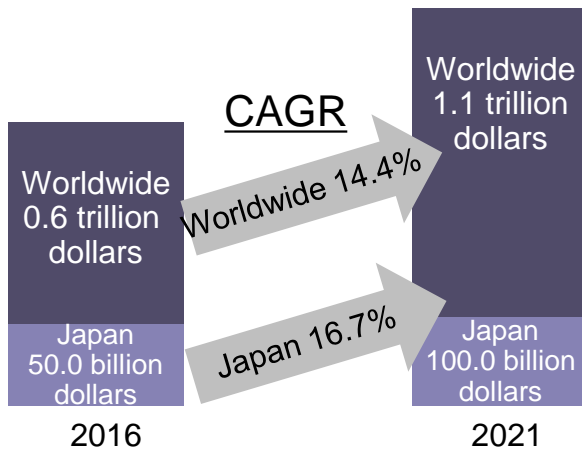
**HITACHI**  
Inspire the Next 

# Appendix (1) Market Environment (Industry and Distribution Sectors, Digital Business)

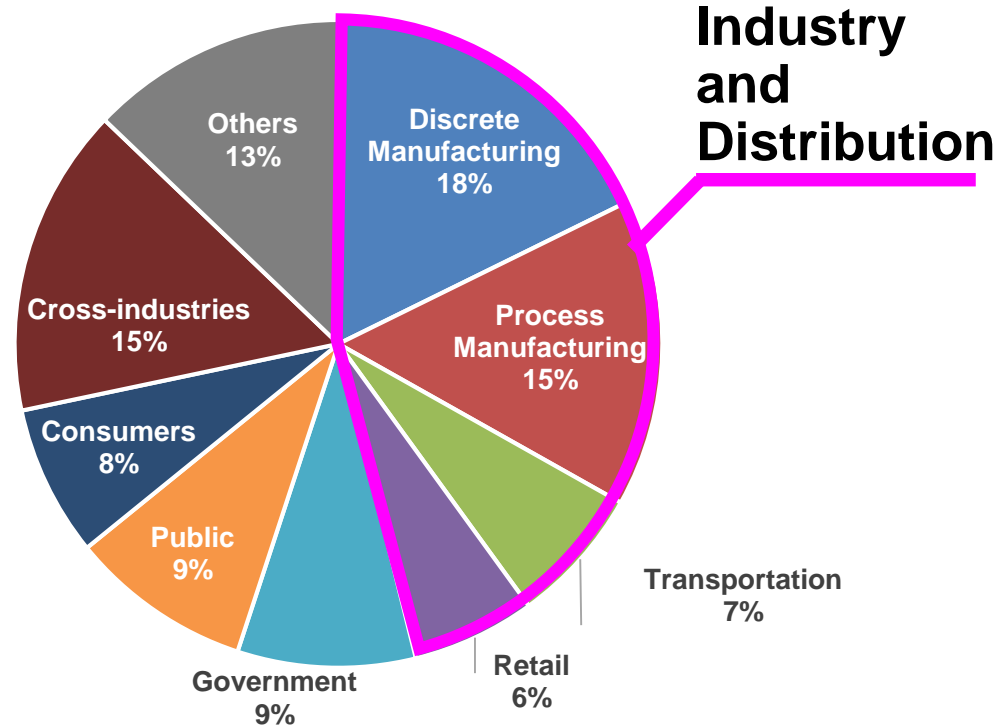
Continuous expansion of IoT investment in the manufacturing and distribution industries toward advancing business

IoT market size prediction\*1

Forecast of domestic IoT market by major industrial segments\*2  
(Estimated amount in 2017: 6.2 trillion yen in total)



- Increasing IoT investment toward digitalization and globalization
- Increasing investment for advanced marketing and distribution









\*1 Source: IDC, November 2017 "Worldwide Semiannual Internet of Things Spending Guide", chart created by Hitachi based on IDC Research

\*2 Source: IDC Japan, March 2018 "Domestic IoT Market estimated by industry area/usecases, 2018-2022", chart created by Hitachi based on IDC Research

# Appendix (2) Business Overview

Handle a wide range of business domains from customer management to worksites  
Provide digital solutions that create new value by integrating OT and IT

<b>Business support solutions*1</b> <span style="background-color: #ffc107; border-radius: 50%; padding: 2px 10px; display: inline-block; margin-top: 10px;">62%</span>	<ul style="list-style-type: none"> <li>■ ERP solutions</li> <li>■ SI/services</li> <li>■ Logistics solutions</li> <li>■ Outsourcing services</li> </ul> <div style="text-align: center; margin-top: 10px;">  </div>	<div style="text-align: center; font-weight: bold; margin-bottom: 10px;">Smart manufacturing</div> <div style="display: flex; flex-wrap: wrap;"> <div style="background-color: #34495e; color: white; padding: 5px; margin: 5px; border-radius: 5px;">Management visualization solutions</div> <div style="background-color: #34495e; color: white; padding: 5px; margin: 5px; border-radius: 5px;">Supply chain optimization solutions</div> <div style="background-color: #34495e; color: white; padding: 5px; margin: 5px; border-radius: 5px;">Advanced Design solutions</div> <div style="background-color: #34495e; color: white; padding: 5px; margin: 5px; border-radius: 5px;">Production plan/Control optimization solutions</div> <div style="background-color: #34495e; color: white; padding: 5px; margin: 5px; border-radius: 5px;">Manufacturing quality improvement solutions</div> </div> <div style="text-align: center; margin-top: 10px;">  </div>	Provide services on a one-stop basis from management to the worksite
<b>Control solutions</b> <span style="background-color: #ffc107; border-radius: 50%; padding: 2px 10px; display: inline-block; margin-top: 10px;">17%</span>	<ul style="list-style-type: none"> <li>■ Manufacturing execution systems</li> <li>■ Process control</li> <li>■ Energy/Equipment management</li> <li>■ Security solutions</li> <li>■ Embedded engineering</li> </ul> <div style="text-align: center; margin-top: 10px;">      </div>		
<b>Industrial equipment solutions</b> <span style="background-color: #ffc107; border-radius: 50%; padding: 2px 10px; display: inline-block; margin-top: 10px;">21%</span>	<ul style="list-style-type: none"> <li>■ Design, installation, and maintenance services of industrial equipment</li> </ul> <div style="text-align: center; margin-top: 10px;">  </div>		

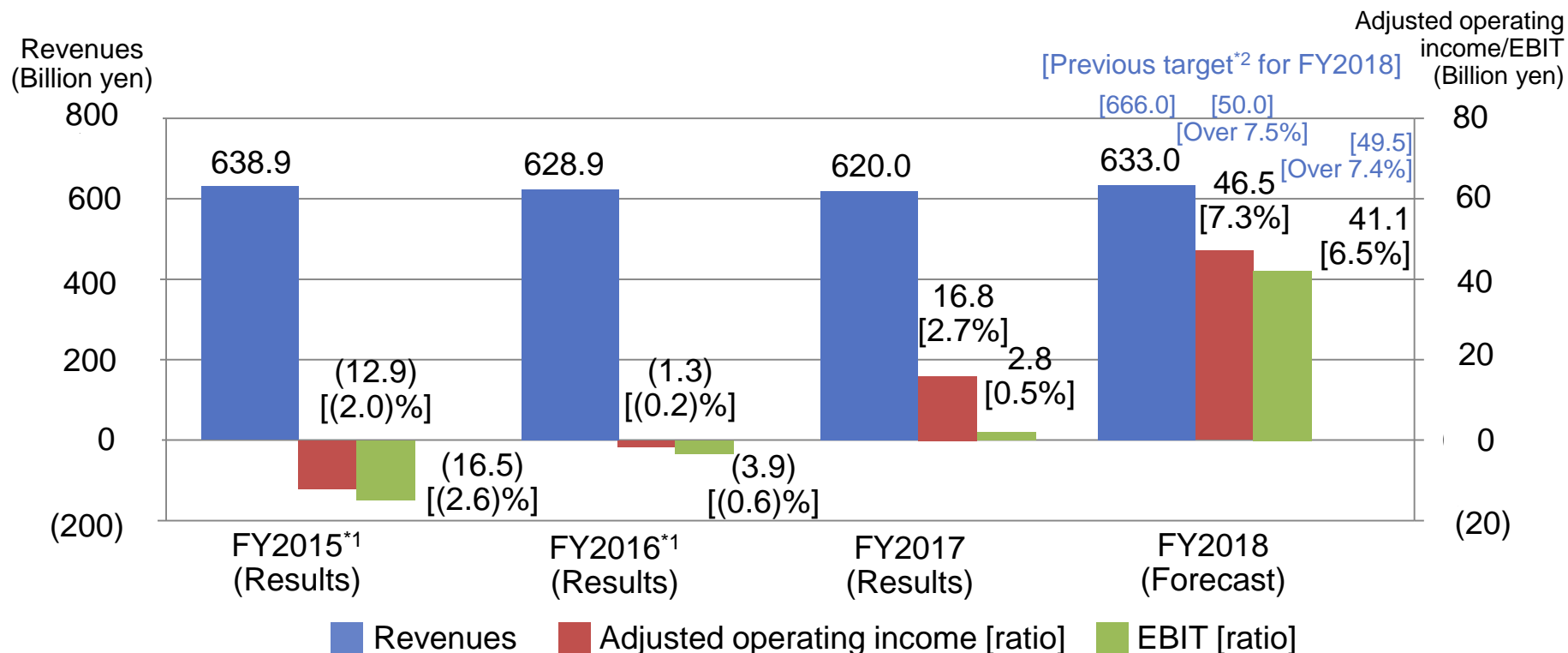
● FY2017 revenue ratio  
■ Revenues from Lumada (Billion yen)

	FY2016 (Results)	FY2017 (Results)	FY2018 (Forecast)
	Industry and distribution business/Overall company	Industry and distribution business/Overall company	Industry and distribution business/Overall company
Lumada business	Approx. 420.0/900.0	Approx. 430.0/1,006.0	Approx. 440.0/1,070.0
(Lumada core business included in the above)	Approx. 25.0/120.0	Approx. 42.0/230.0	Approx. 48.0/310.0

\*1 Business support solutions including Hitachi Solutions. \*2 Automobile production management system  
 \*3 Integrated manufacturing management solutions \*4 Pharmaceutical products manufacturing management system  
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# Appendix (3) Business Performance Trends

	FY2015*1 (Results)	FY2016*1 (Results)	FY2017 (Results)	FY2018 (Forecast)
Orders received (Billion yen)	700.6	600.4	646.9	649.5
Overseas revenue ratio	16%	12%	11%	13%



\*1 For FY2015 and FY2016, figures of Hitachi Plant Construction, Ltd., which was transferred to the Nuclear Energy Business Unit in April 2017, were corrected retroactively.

\*2 As of June 8, 2017