
Expanding Social Innovation Business with Lumada

Hitachi IR Day 2017

June 8, 2017

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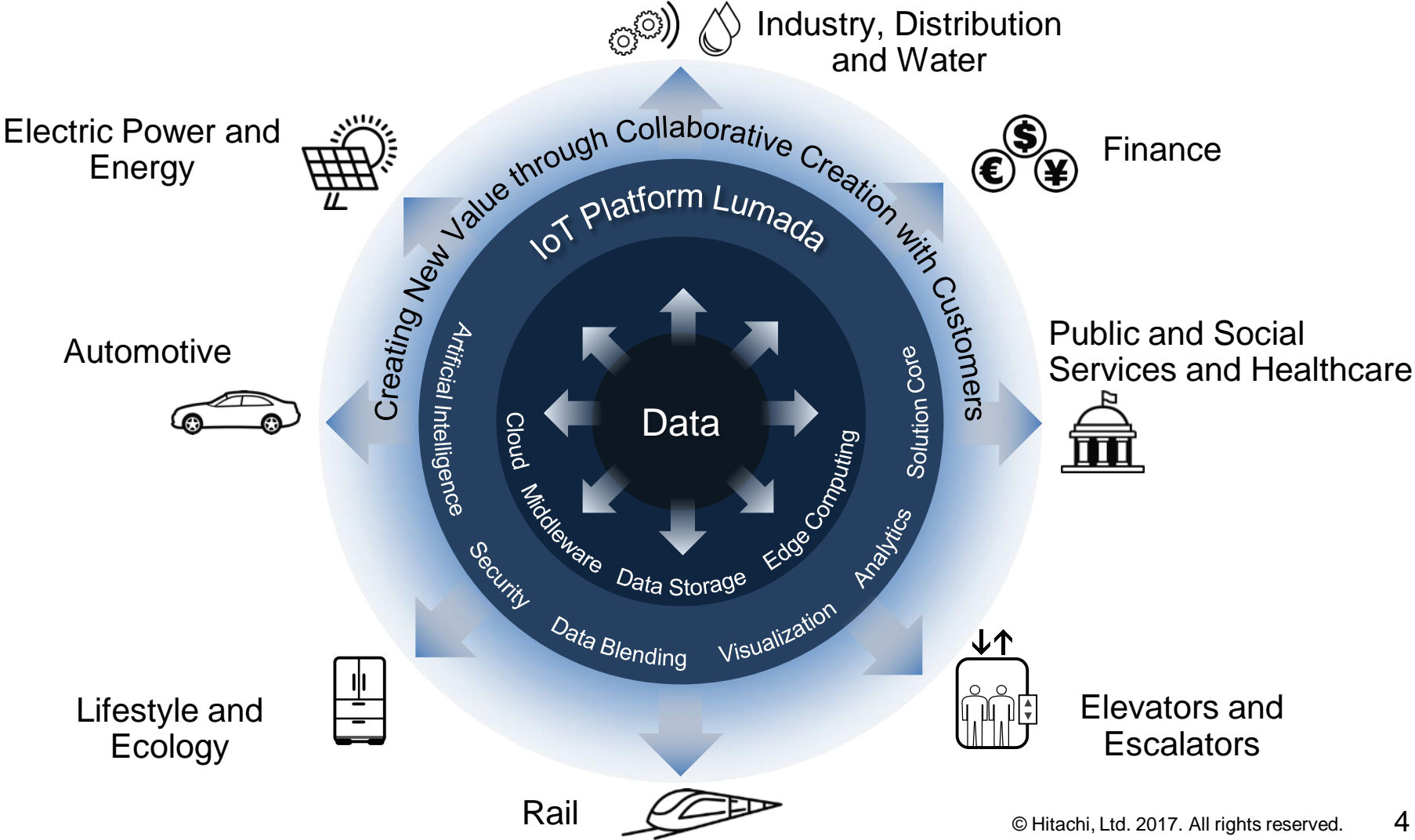
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1-1. Model for Utilizing Hitachi's IoT Platform

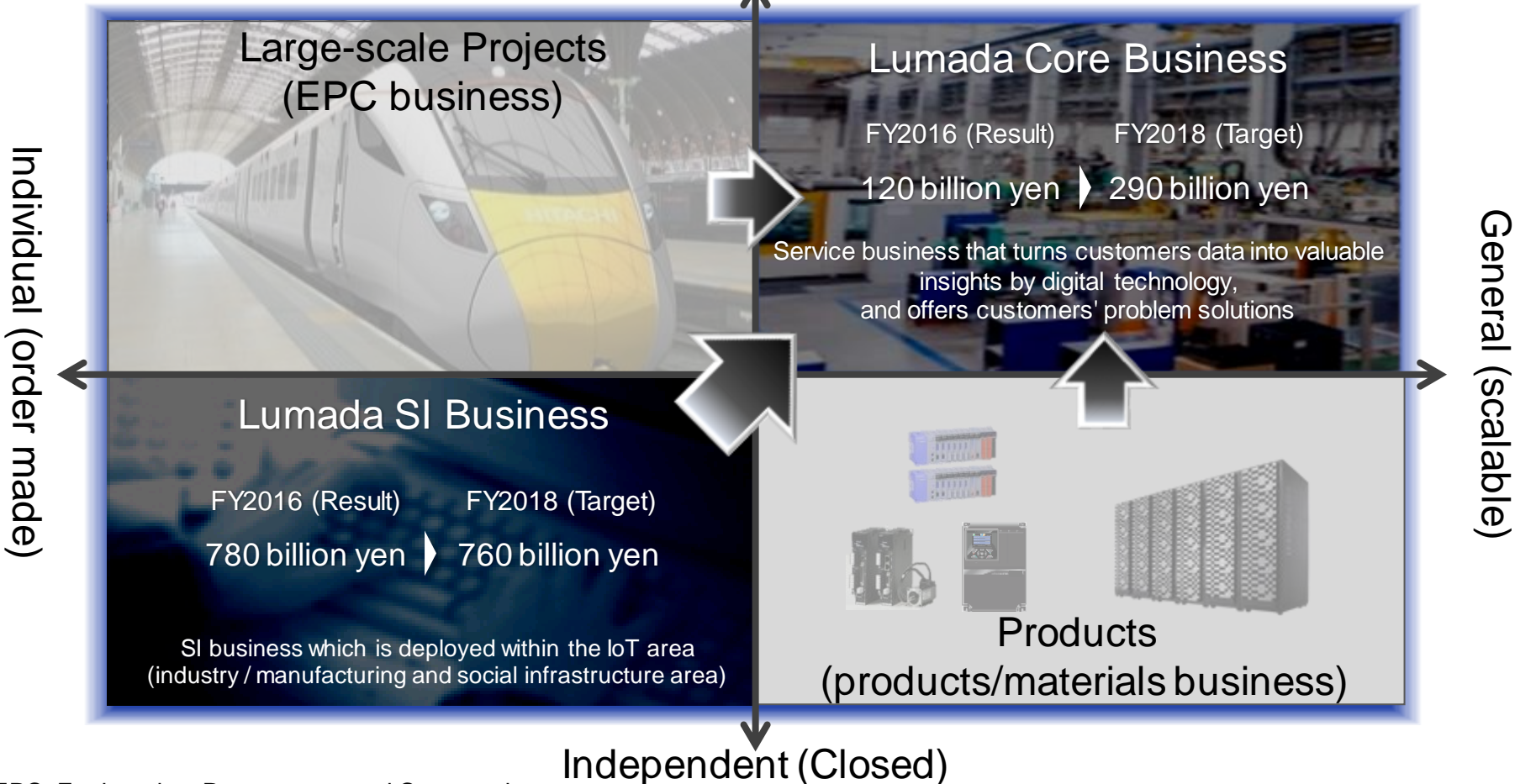
Creating new value through collaborative creation with customers is supported by data-centric IoT platform Lumada



1-2. Lumada Business

Hitachi aims to generate more than one trillion yen across the entire Lumada business in FY2018, through expanding the open and scalable Lumada Core Business based on Lumada SI Business as an individual SI

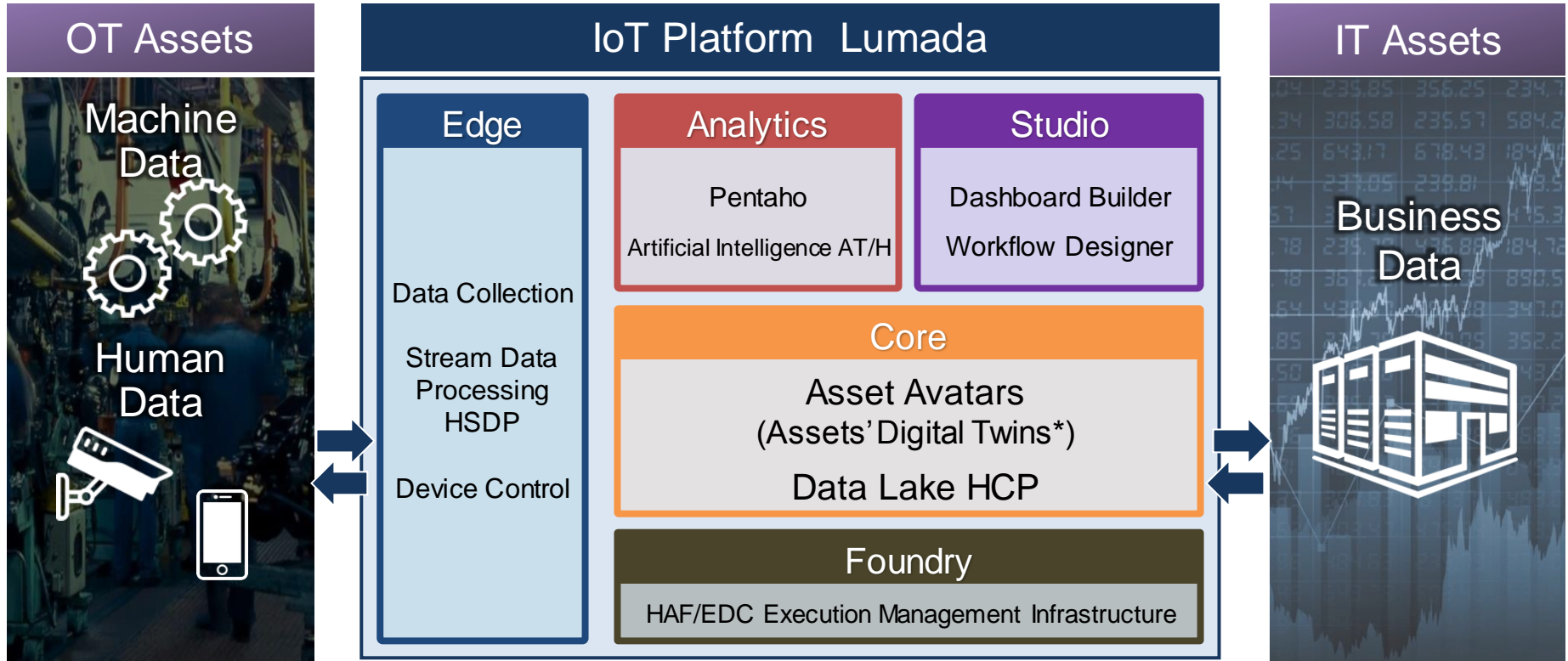
Collaborative Creation (Open)



1-3. IoT Platform Lumada

Collect digital data generated from wide range of assets possessed by customers, and support solutions for business issues through emerging digital technologies such as artificial intelligence

Open Intelligent Composable Secure



* Digital twin is a concept that uses digital information about a product to build a duplicate(twin) in a virtual space. The concept has been proposed by NASA for its next generation aircraft development.

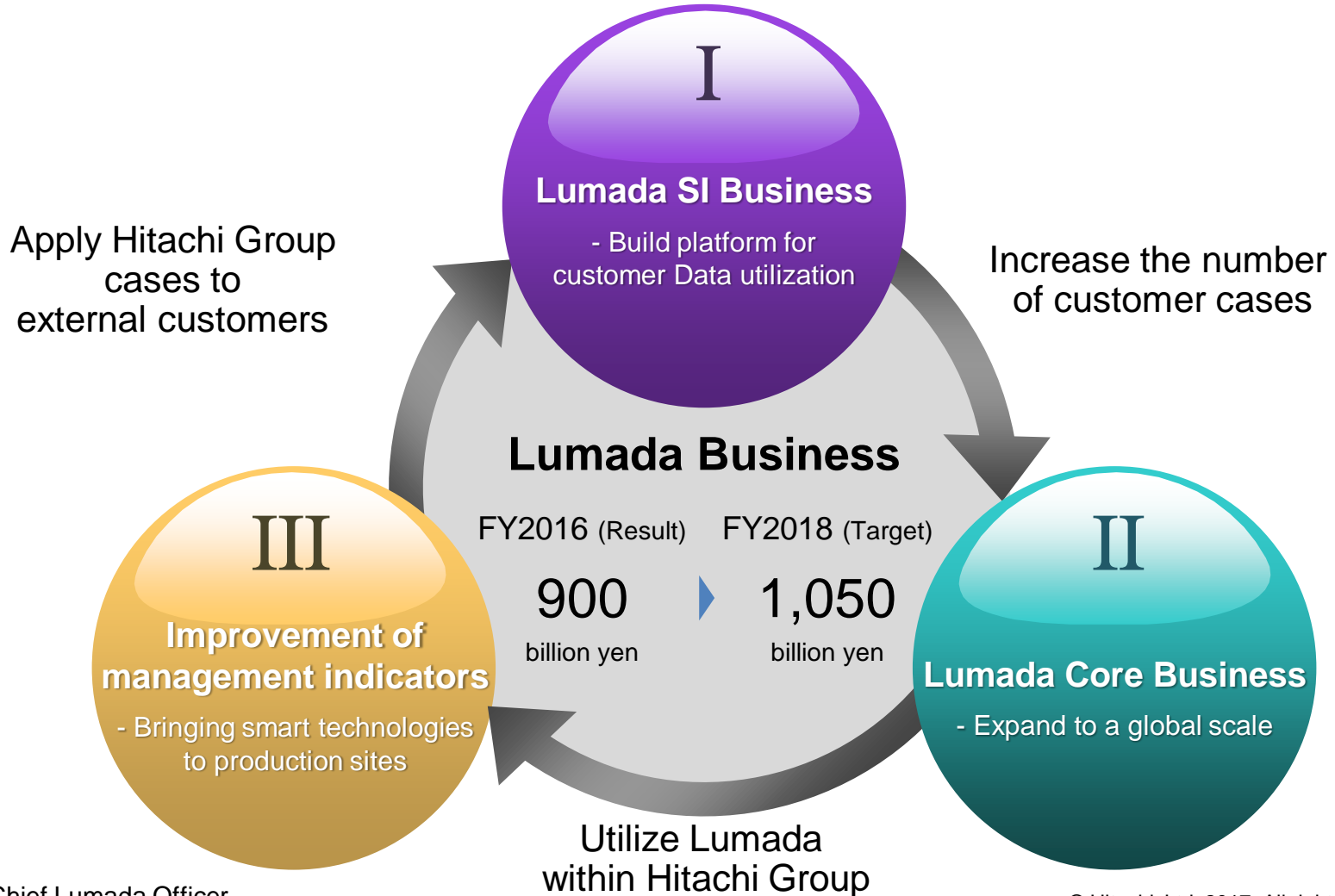
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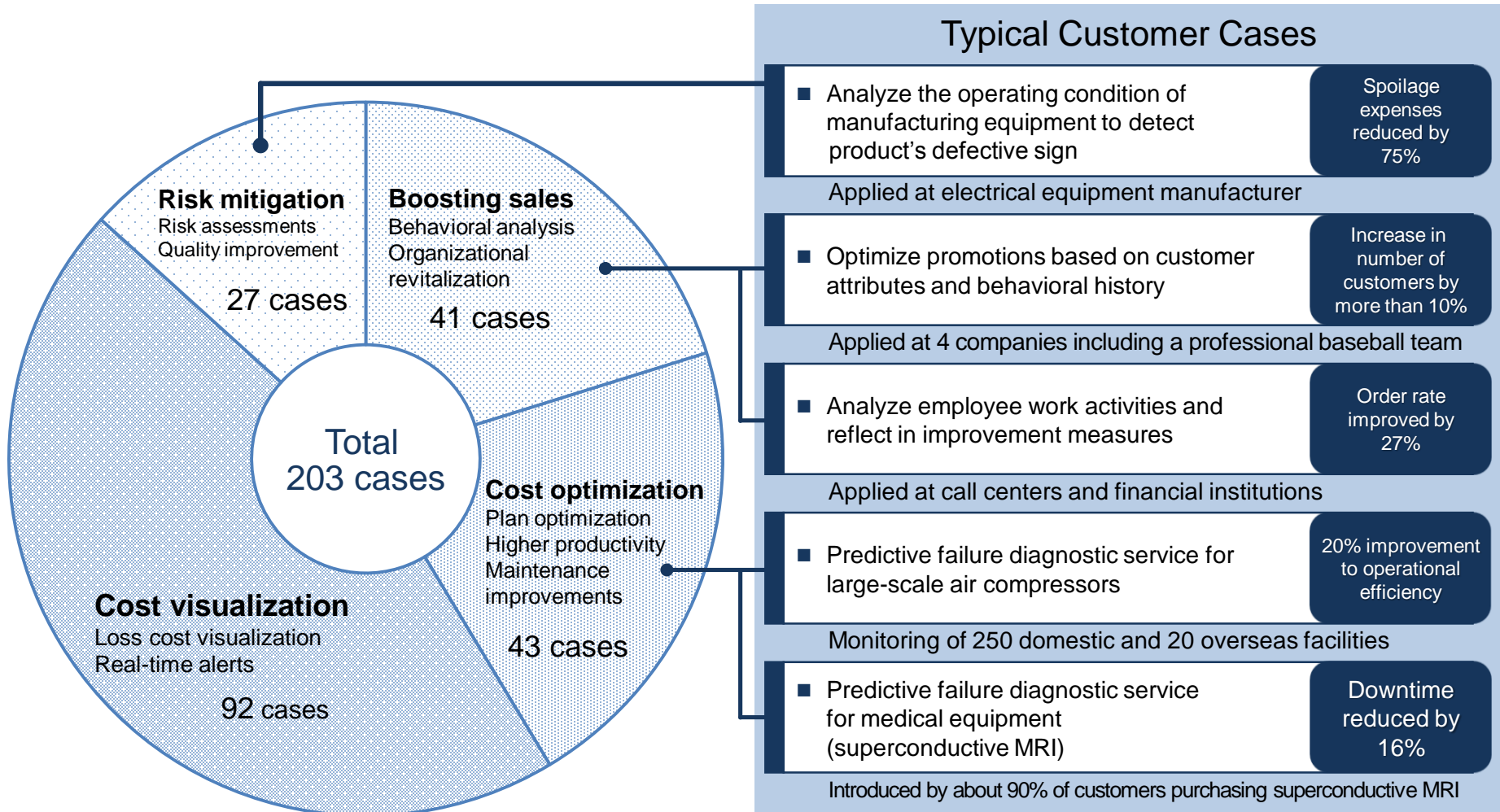
2-1. Lumada Business Growth Model

Under leadership of CLOs, build up a range of customer cases and accelerate business growth through the interaction of the three monetization models



2-2. Increase the number of customer cases

Collected and published the 203 customer cases focused on the industrial sector such as smart factories, and promote collaborative creation with front-facing customers



2-3. Lumada SI Business Strategy

Focus on bids for data-sharing system as the basis of data utilization, with aims to accelerate deployment of the Lumada Core Business.

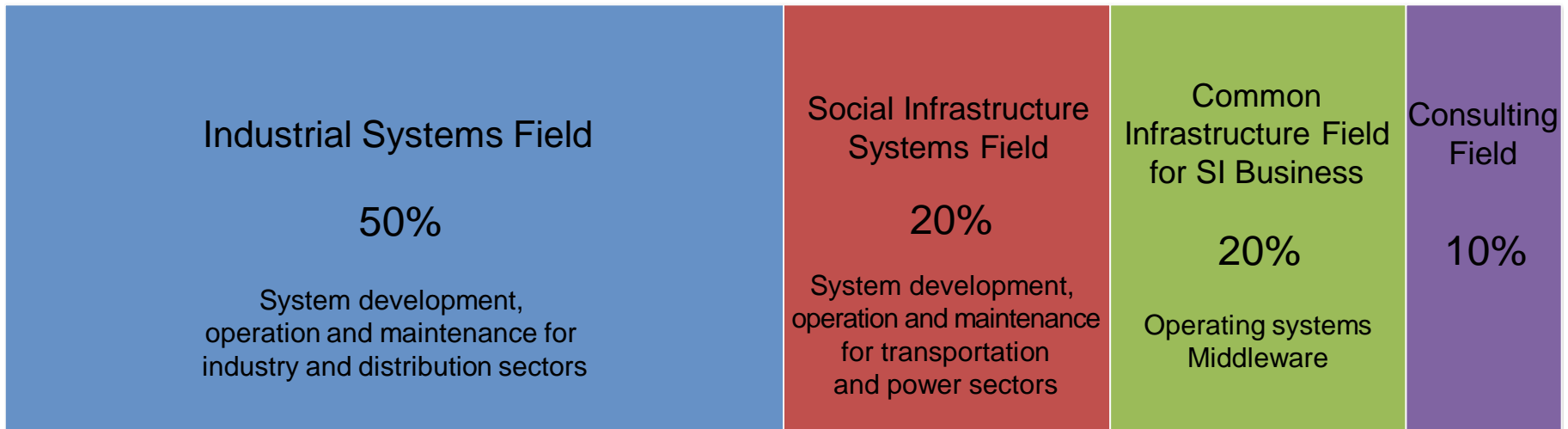
Revenue

FY2016 (Result)
780 billion yen

FY2017 (Forecast)
760 billion yen

FY2018 (Target)
760 billion yen

Lumada SI Business Breakdown by System Field (Estimated)



2-4. Lumada Core Business Strategy (1)

Accelerate creation of digital solutions
through front-led collaborative creation with customers

Revenue

FY2016 (Result)

120 billion yen



FY2017 (Forecast)

190 billion yen



FY2018 (Target)

290 billion yen

Policy 1

Enhance Global Front (Americas, EMEA, China, APAC)

- Type 1: Focus on solutions to promote the efficiency for customer's asset management by digital technologies
- Type 2: Promote IoT solutions centered on Hitachi's products through collaborative creation with customers

Policy 2

Platform Sales

- FY2016: Expanded big data-related orders for enterprise customers (50% year-on-year increase)
- Utilize the global customer base to accelerate the investment recovery of Lumada development

Policy 3

Strengthen Human Resources in the IoT Field

- FY2016: Hired world-class talents including Chief Architect Rob Tiffany*
- Position Silicon Valley as the hub of research and development, and develop distinctive technologies in conjunction with Insights Laboratory

*Selected as an IoT top talented person in the major IoT media and communities such as Inc Magazines, Dataconomy and IoT Central.

Promote regionally-led collaborative creation with customers and deploy digital solutions to various industries and business categories

Example of water quality maintenance solution deployment (Hitachi Consulting)

Collect and manage data from water-related assets with IoT, reducing water quality maintenance costs by visualization.

Collaborative
Creation with
Customers

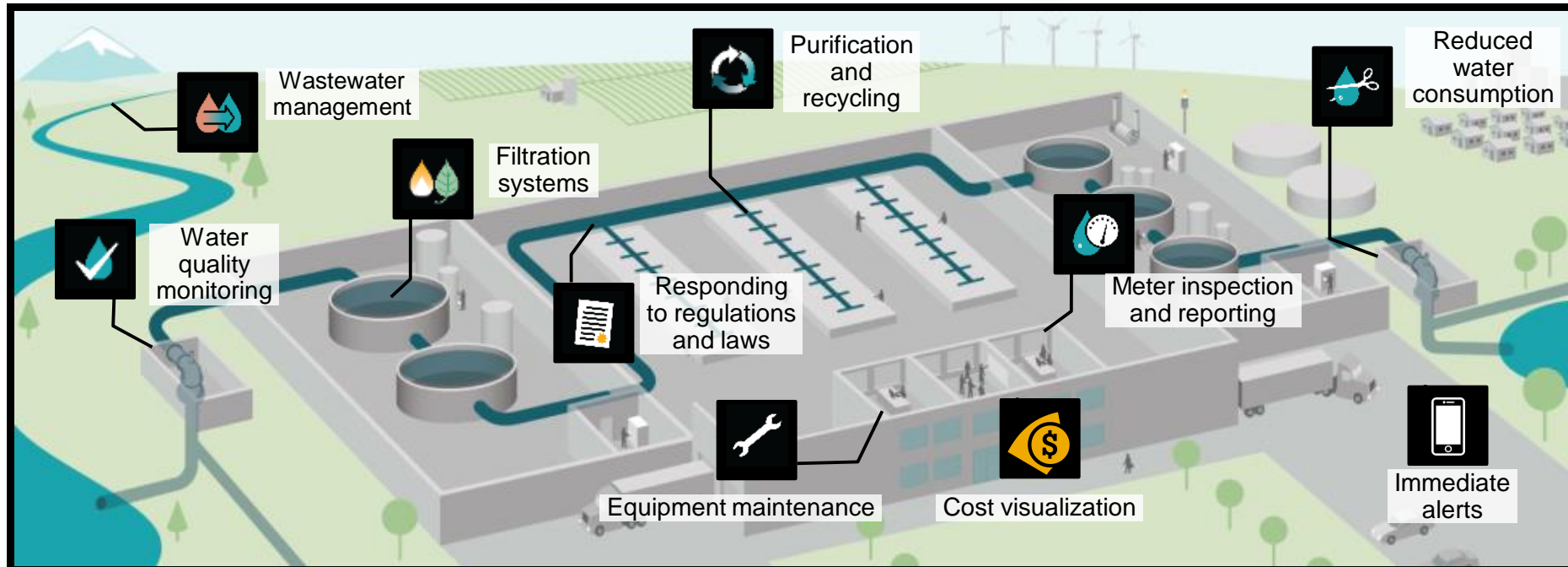
Major customer from the
beverage industry
(PoC)

Site
Deployment

Results from PoC rolled
out across 10 projects in 3
countries

Expand
Range of
Business
Categories

Received 5 orders including from
water supply utility, food-related
business and paper-making
company



Accelerate the investment recovery of Lumada development by the sales of Hitachi Data Systems' Data Lakes HCP and Pentaho's analytics software "Pentaho"

Revenue*	FY2016 (Result)	FY2017 (Forecast)	FY2018 (Target)
	17 billion yen	27 billion yen	35 billion yen

* Number including Lumada Core Business HCP: Hitachi Content Platform

Example of Analytics Software "Pentaho"

UK's department for collection of taxes : Her Majesty's Revenue and Customs(HMRC)

Challenges	<ul style="list-style-type: none"> Reduce operational costs in line with fiscal plans
Expected Outcomes	<ul style="list-style-type: none"> Improved efficiency of report creation tasks from big data Improved quality of inquiry handling

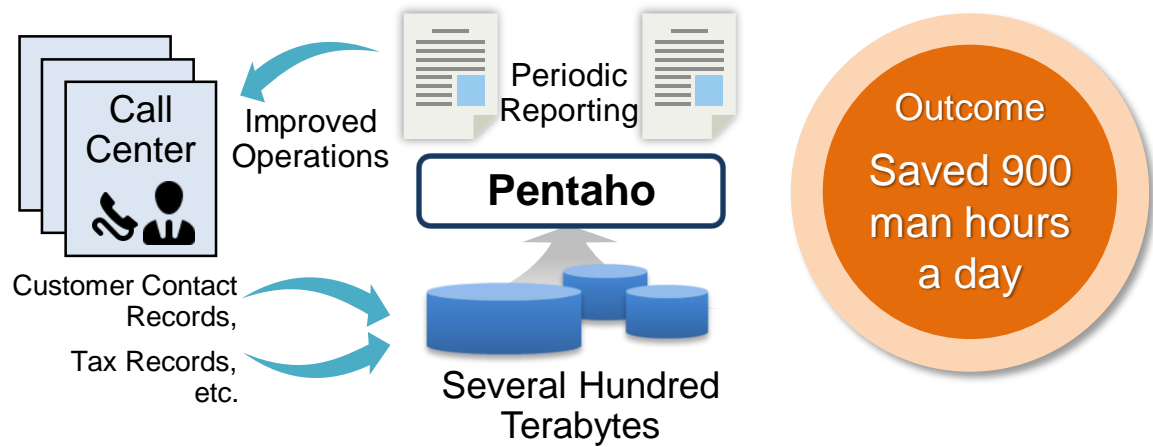
Overview of HMRC

Duties:

- Assessment & collection of national taxes
- Collection of national health insurance fees, etc.

Operation:

- Hold the world's biggest class call center(22 places)
- Respond 60 million inquiries per year



2-7. Improvement of Management Indicators (1)

Contribute to improve management indicators by promoting digital technology utilization in a part of Hitachi Smart Transformation Project run since FY2015, and through the visualization and optimization of business processes

CCC

FY2014 (Result)

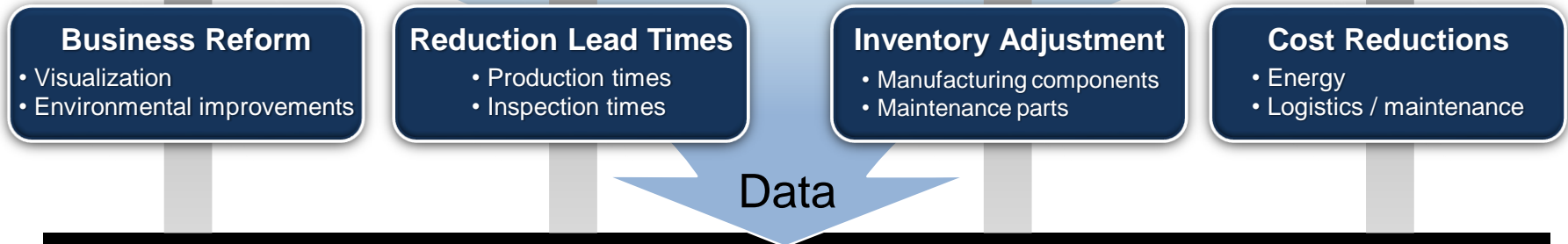
81.8 days

FY2016 (Result)

72.2 days

FY2018 (Target)

70 days

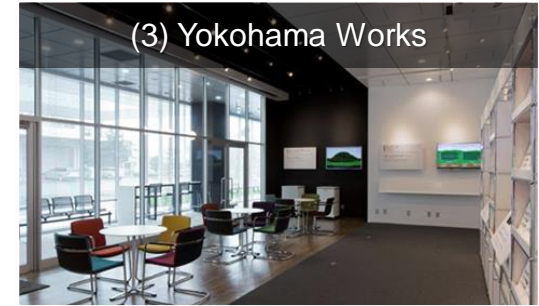


Utilization of Lumada-based Workplace for Hitachi Group

Hitachi, Hitachi Chemical, Hitachi Metals, Hitachi Systems, Hitachi Solutions East Japan, Hitachi-Omron Terminal Solutions, Hitachi Information & Telecommunication Engineering, Hitachi Plant Services, Other 15 companies

2-8. Improving Management Indicators (2): Bringing Smart Technologies to Production Sites

Implemented value verification using actual data at Hitachi Group production plants and built up around 30 customer cases to be sequentially rolled out internally and externally



(1)
Shorten production
process lead times

Visualize progress from design to manufacturing process and
take appropriate measures

Lead-time: reduced by 50% (representative product)

(2)
Speed up
inventory checks

Prompt detection of excess inventory indication
based on BOM list, etc.

Inventory Checks: 2 months (previous) → shortened to 30 minutes

(3)
Optimization for comfort,
environmental performance

Maintain workplace environment in optimal condition
by utilizing sensor data and employees' feedback
Air conditioning power consumption: reduced by 5% (compared with previous usage)

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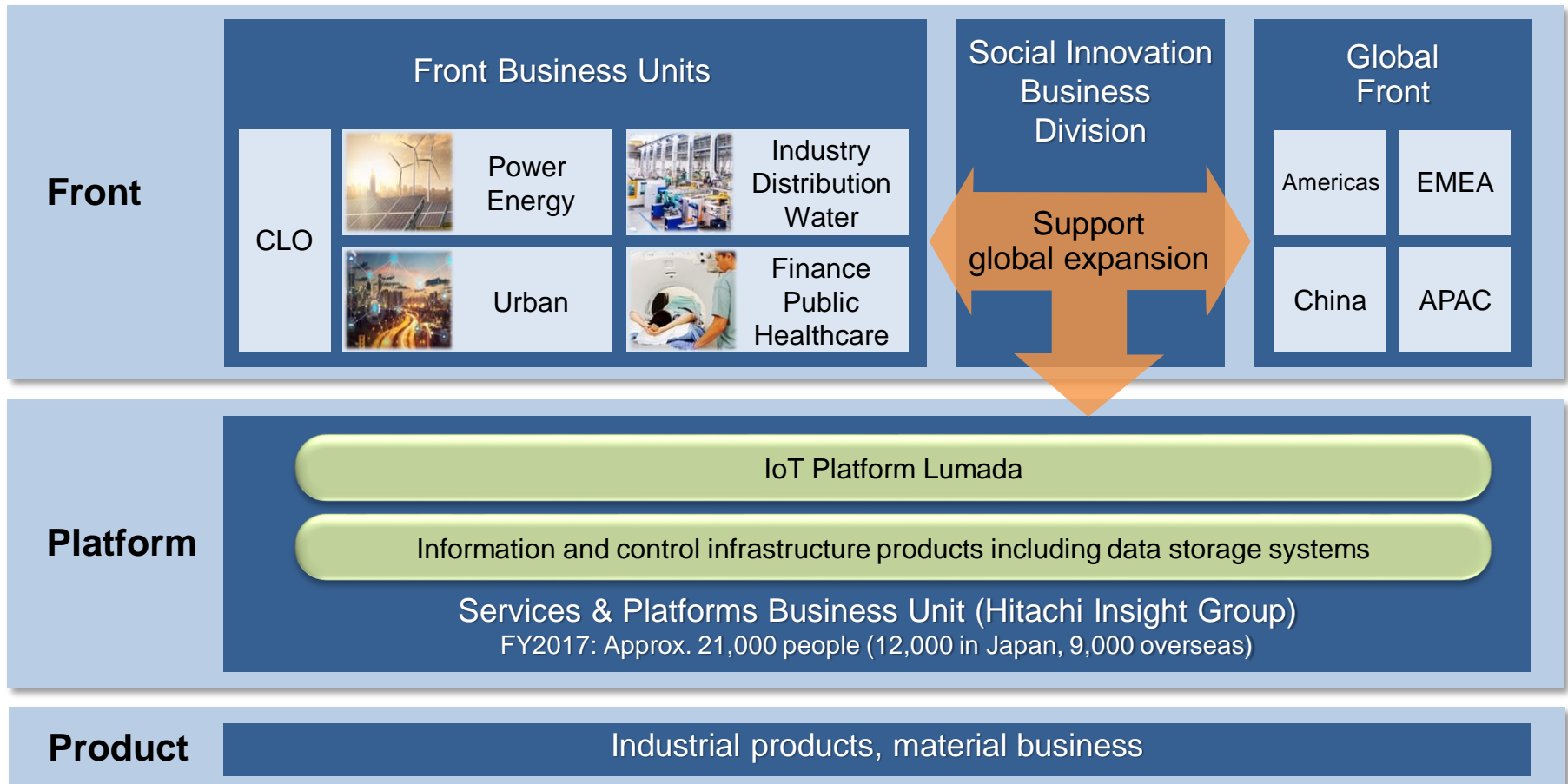
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3-1. Business Promotion Framework

As the global platform division, the Services & Platforms Business Unit (Hitachi Insight Group) supports the growth of social innovation businesses in collaboration with front units

Customers



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4-1. Summary

Through the Lumada Business, Hitachi aims to generate over one trillion yen in revenue for FY2018 by working on Lumada SI Business, Lumada Core Business and Hitachi Group utilization together

Billions of yen

	FY2016 (Results)	FY2017 (Forecast)	FY2018 (Target)
Lumada Core Business	120	190	290
Lumada SI Business	780	760	760
Lumada Business	900	950	1,050

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, particularly against the U.S. dollar and the euro;
- 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 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 ability to attract and retain skilled personnel;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property rights;
- 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.

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