IT Sector

Hitachi IR Day 2019

June 4, 2019

Keiichi Shiotsuka
Executive Vice President and Executive Officer
Head of Systems & Services Business
Head of the Social Innovation Business
Hitachi, Ltd.
Key Messages Today

1. The IT Sector Leads the Digital Business (Lumada Business) of All Hitachi Group

2. Strengthen Lumada Business and Accelerate its Global Expansion with Large-scale Investments

3. Expand Social Innovation Business through Construction of the Ecosystem (of Lumada)
Corporate Structure and Positioning of the IT Sector

**IT Sector Overview**

- **Mobility**
  - Dormer
  - Executive Vice President and Executive Officer

- **Smart Life**
  - Kojima
  - Executive Vice President and Executive Officer

- **Industry**
  - Aoki
  - Executive Vice President and Executive Officer

- **Energy**
  - Nishino
  - Executive Vice President and Executive Officer

**Services & Platforms BU**

- **Product Business**

|---------------------|-------------------|-----------------------------|-----------------------------|---------------|-----------------------------|------------------------|------------------|----------|

Revenues (FY2018 results) 2,121.6 billion yen
Number of domestic and foreign employees: approximately 76,000 people
Business locations in 47 countries / regions *

* Number of countries / regions of consolidated subsidiaries classified in IT sector (including Japan)
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1. Vision
2. Summary of 2018 Mid-term Management Plan
3. Targets of 2021 Mid-Term Management Plan
4. Growth Strategy
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1-1. IT Sector’s Mission

To lead all Hitachi’s business fields as an engine for growth of the Hitachi Group with Lumada business as the core and improve values of society and customer.
1-2. Vision

To meet customers’ expectations by leveraging digital technologies and become top-class solution provider in the global market that creates a sustainable society.

- **Revenues: 4 trillion yen**
- **Adjusted operating income ratio: 15%**

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**Graph:**
- **X-axis:** Revenues (trillion yen) (Logarithmic scale)
- **Y-axis:** Profit margin (%)

**Key Points:**
- **Results of FY2018**
- **Results of Hitachi IT Sector**

**Companies:**
- Cognizant
- Capgemini
- NTT DATA
- Accenture
- Siemens
- IBM
- GE (Industrial Segment)
- SAP
- Fujitsu
- NEC
- Hewlett Packard Enterprise

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1-3. Roadmap to the Target

Aiming 4 trillion yen revenues and 15% adjusted operating income ratio in gradual three steps

First step: Improvement of profitability

Second step: Expansion of revenues

Third step: Sustainable growth

FY2016 – FY2018

Generating cash required for growth investments

FY2019 – FY2021

Expanding sales in the growing global market

Achieving the world’s top-class revenues and profitability

FY2018

FY2021
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2-1. Summary of 2018 Mid-term Management Plan
[Former Information & Telecommunication Systems Segment]

First step: Improvement of profitability
To generate cash required for growth investments by steadily improving profitability

Adjusted operating income ratio (%)

- Termination of manufacturing semiconductors for the IT Business (FY2014)
- Acquisition of Pentaho
- Business integration of Hitachi, Ltd. and Hitachi Solutions
- Closure of Toyokawa Works
- Integration of Odawara Works into Kanagawa Works
- Closure of Totsuka Works
- Collaboration with IBM in mainframe hardware manufacturing
- Establishment of Hitachi Vantara
- Collaboration with UMC Electronics
- Transfer of shares of ALAXALA Networks

Lumada-related investments rose to 100 billion yen

Revenues (billion yen)

- Exiting/integration of businesses

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues</th>
<th>Operating cash flow</th>
<th>ROA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015</td>
<td>2,109.3</td>
<td>191.5</td>
<td>3.4%</td>
</tr>
<tr>
<td>FY2016</td>
<td>2,014.6</td>
<td>208.0</td>
<td>3.0%</td>
</tr>
<tr>
<td>FY2017</td>
<td>2,008.9</td>
<td>254.2</td>
<td>4.6%</td>
</tr>
<tr>
<td>FY2018</td>
<td>2,065.9</td>
<td>212.3</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

*1 Reorganization of SI businesses in social infrastructure, financial and government & public sectors
*2 Hitachi Global Digital Holdings
*3 Revenues from business exited or integrated in the former Information & Telecommunication Systems Segment
2-1. Summary of 2018 Mid-term Management Plan
[Former Information & Telecommunication Systems Segment]

Adjusted operating income ratio improved by 4.2 points

6.7%  →  10.9%
(FY2015)  (FY2018)

First step:
Improvement of profitability

- Withdrawal from and convergence of low-profit businesses with the revenues size of around 200 billion yen
- Strengthening of front function and manufacturing through reorganization of SI businesses in social infrastructure, financial and government & public sectors.
  (Business integration of Hitachi, Ltd. and Hitachi Solutions)
- Reduction of loss cost by thorough and enhanced project management
- Shifting from system development with customization to a service-type business
- Expansion of the digital solutions business using Lumada
- Productivity improvement using digital technologies and work-style reform
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3-1. Targets of 2021 Mid-Term Management Plan

[IT Sector]

Second step: Expansion of revenues

Accelerate global expansion of Lumada business with large-scale investments

Lumada revenues in other sectors

2.4 trillion yen**2

332.0

2,121.6

10.8%

Revenues (billion yen)

Adjusted operating income ratio (%)

Growth investments (3 years)

Total 1 trillion yen level

- Investments for business expansion (M&As)
  Cumulative total of 830.0 billion yen
- Investments in Lumada
  Cumulative total of 150.0 billion yen or slightly higher

3 trillion yen**2

400.0

2,600.0

13.0%

Revenues of Lumada business

(Company-wide Lumada revenues)

795.0 billion yen

(1,127.0 billion yen)

1,200.0 billion yen

(1,600.0 billion yen)

Overseas revenues

604.9 billion yen

1,100.0 billion yen

ROIC (Return on Invested Capital)

19.6%

15.0%

FY2018 (Results) *1

FY2021 (Target)

*1 Results for FY2018 reflect those of the business units regrouped as IT sector (Financial Institutions BU, Social Infrastructure Systems BU, Services & Platforms BU, Defense Systems BU)

*2 Simple sum of revenues of IT sector and other sectors' revenues of Lumada business

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4-1. What is Lumada?

An engine for creating new value through co-creation with customers and partners by utilizing data

Customers’ businesses

Co-creation with customers and partners

- Systems integration and operation / maintenance
  - Establish and provide solutions while simultaneously giving top priority to safety and reliability

- IoT Platform
  - Provide cutting-edge technologies including OSS and AI, and development / implementation environments

- Co-creation services for customers
  - Provide support for clarifying challenges and creating business opportunities

- Leverage proven customer cases*1 and solution cores*2

- Expertise on the type of businesses and operations

*1 Cases offering value to customers through collaborative creation and using data and analytics
*2 The essence of solutions (expertise on the type of businesses and operations, and others) that specify the customer cases
## 4-2. Lumada Business Model

Establish a business model for providing the value speedily to many customers as much as possible with minimal customization, to realize both the expansion of revenue and high profitability

### Success models of competitors (analysis by Hitachi)

#### Accenture
- Consulting capability to connect customer inquiry to the development of services
- Low-cost development of services using global delivery network
- Offering solutions for customers through combinations of stocked various services

#### IBM
- Acquisition of standard software products such as middleware which has high customer needs
- Sales expansion toward solid global customer bases (cross-sales)

### Results of FY2018 *1

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of employees</th>
<th>Revenues</th>
<th>Operating margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accenture</td>
<td>Approx. 460,000</td>
<td>4.4 trillion yen</td>
<td>14.8%</td>
</tr>
<tr>
<td>IBM</td>
<td>Approx. 350,000</td>
<td>8.8 trillion yen</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

#### Lumada Business Model of DX*2 market

#### Hitachi (IT Sector)
- Judgement capability to develop services using knowledge at worksites through OT x IT x Product
- Accumulation of customer cases and solution cores through co-creation with customers and sales expansion by ecosystem
- Deployment for SI and product business starting from Lumada

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of employees</th>
<th>Revenues</th>
<th>Adjusted operating income ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitachi (IT Sector)</td>
<td>Approx. 76,000</td>
<td>2.1 trillion yen</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

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*1 Exchange rate: 1 USD = 110 JPY  
*2 Digital Transformation
## 4-3. Efforts to Expand the Lumada Business

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulation and Applying of Customer Cases / Solution Cores</td>
<td>Expand co-creation with customers, create new customer cases / solution cores, and accelerate the expansion of Lumada business</td>
<td>4-4</td>
</tr>
<tr>
<td>Expansion of Lumada Utilization in Other Sectors</td>
<td>Lumada boosts the value of products and systems in other sectors and increases Hitachi's overall sales</td>
<td>4-5</td>
</tr>
<tr>
<td>Construction of Lumada Ecosystem</td>
<td>Create new value and build business opportunities by constructing an ecosystem with customers and partners</td>
<td>4-6</td>
</tr>
<tr>
<td>Enhancement of Digital Specialist / Human Capital</td>
<td>Develop and strengthen digital specialist / human capital responsible for co-creation with customers and product / service development</td>
<td>4-7</td>
</tr>
<tr>
<td>Strengthen Overseas Business Structure</td>
<td>Acquisition of overseas business resources (front, delivery functions) and new customer base through M&amp;A etc.</td>
<td>4-8</td>
</tr>
</tbody>
</table>
4-4. Accumulation and Applying of Customer Cases / Solution Cores

Management, sale, planning, design, procurement, production, logistics and maintenance services
4-4. Accumulation and Applying of Customer Cases / Solution Cores

**Customer Cases**
- Diagnosis of failure alerts
- Simulation of sales, profits and losses
- Analysis of information on fans registered as members
- Digitalization of expert skills
- Improvement of efficiency in cyber security monitoring operations
- Improvement of operation rates and diagnosis of failures
- Optimization of delivery
- Optimization of inventories

**Solution Cores**
- Analysis of the growth of Agricultural products
- Improvement of efficiency in cyber security monitoring operations
- Customer-centric marketing

**Over 650 Customer Cases** at the end of FY2018

**Solution Cores 70**
4-4. Accumulation and Applying of Customer Cases / Solution Cores

- **Smart Life**: Predictive diagnosis for medical equipment
- **Energy**: Predictive diagnosis for power plant
- **Industry**: Predictive diagnosis for machines and equipment

Over 650 Customer Cases

70 Solution Cores at the end of FY2018

Improvement of operation rates and diagnosis of failures

Optimization of delivery

Customer-centric marketing

Improvement of the accuracy of credit analysis at the end of FY2018

Improvement of efficiency in cyber security monitoring operations

Optimization of inventories

Analysis of the growth of Agricultural products

Digitalization of expert skills

Analysis of information on fans registered as members

Simulation of sales, profits and losses

Diagnosis of failure alerts

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Accelerate Lumada business activities by enriching customer cases and solution cores through collaborative creation with customers.
4-5. Expansion of Lumada Utilization in Other Sectors

Expand the business of Hitachi Group with the creation of new solutions by combination of the products and systems of the sectors and Lumada

**Mobility solutions × Lumada**
By analyzing the data from the sensors installed in railway stations and railway vehicles, optimizing the frequency of service according to the fluctuation of demand, thus improving the service efficiency

**Smart Life solutions × Lumada**
Analyzing the vast amount of sensor data from MRI units with our analytics technologies, detecting signs of failures and finding the causes of failures

**Industry solutions × Lumada**
Realizing the sophistication of maintenance services for industry machines such as compressors to expand recurring business

**Energy solutions × Lumada**
To prevent the performance decline of the power generation, the deterioration or abnormality of the photovoltaic panel is detected from the fluctuating daily data through highly accurate diagnosis

Revenues of Other Sector’s Lumada Business around 400 billion yen (FY2021 Target)
Constructing an ecosystem with customers and partners to expand Social Innovation Business

Revenues of all Hitachi’s Lumada Business around 1.6 trillion yen (FY2021 Target)

Lumada Ecosystem

Partner Uses Lumada

Development tools for supporting co-creation

Cloud infrastructure

OT / IT Products

Integration

Solution Cores 70

Customer Cases over 650

Manufacturing

Transportation

Wholesale / Retail

Maintenance

Management

Sales

Planning

Design

Procurement

Production

Logistics

Sensor management

Data collection

Preventive maintenance

quality prediction

Data model

Security
Enhancing the number of digital specialist / human capital that support Lumada to approximately 30,000 by FY2021, through development of specialist and enhancement of basic training.

**Design thinker**
Plays a leading role in the identification of essential challenges, development of solution ideas, consensus building and the evaluation of measures, among other initiatives

**Data scientist**
Utilizes data by taking full advantage of artificial intelligence and mathematical statistics, among other techniques

**Domain expert**
Facilitates/supports the on-site application of solutions by leveraging knowledge on OT and operations

**Security specialist**
Facilitates/supports everything from planning to operation in both the cyber and physical levels

**Acceleration of co-creation with customers**
Engineer, etc.
Design/implement/operation of digital technology-based systems

Redefining skill-related requirements and enhancement of training programs
- Establishment of Hitachi Academy Co., Ltd. (April 2019)
- Enhancement of internal qualification systems: Hitachi Certified IT Professional
- Place for mutual improvement: Launch of the Professional Community for Data Scientist, etc.
4-8. Strengthen Overseas Business Structure

Strengthen overseas business structure with a focus on North America and Asia and accelerate the expansion of Lumada businesses globally.

Overseas revenues (FY2021 Target)
1.1 trillion yen

Initiatives for global growth

- Sep. 2017: Established Hitachi Vantara
- Apr. 2018: Established Hitachi Global Digital Holdings
- Oct. 2018: Acquired REAN Cloud
- May 2019: Started collaboration with Virtusa in digital businesses
- Apr. 2019: Integrated five IT-related companies in China
- Jan. 2019: Established a joint venture with State Bank of India

Enhancement of the global business structure focused on the front and the delivery

- 23,000 people
- around 40,000 people

Lumada Business
Hitachi OT x IT x Products

Acquisition of business resources (Acquisitions and partnerships)
Front and delivery functions for each industry sector
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### FY2021 Target of IT Sector

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<tr>
<th>Revenues</th>
<th>Revenues of Lumada Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6 trillion yen</td>
<td>1.2 trillion yen</td>
</tr>
<tr>
<td>(including other sector’s Lumada business: 3 trillion yen)</td>
<td>(including other sector’s Lumada business: 1.6 trillion yen)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overseas revenues</th>
<th>ROIC</th>
<th>Adjusted operating income ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 trillion yen</td>
<td>15%</td>
<td>13%</td>
</tr>
</tbody>
</table>

#### Organization

**IT Sector**
- Financial Institutions BU
- Social Infrastructure Systems BU
- Defense Systems BU
- Hitachi Solutions
- Hitachi Systems
- Hitachi Consulting, etc.

**Front Business**

**Services & Platforms**
- Services & Platforms BU
- Hitachi Vantara, etc.

**Other Sectors**
- Mobility
- Smart Life
- Industry
- Energy
Accelerate Social Innovations by utilizing Lumada as the perspective of a digital-concentric business entity

Aim to become top-class solution provider in the global market

Contribute to the improvement of the quality of people’s lives and customers’ corporate values
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;
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel;
- 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 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 Social Innovation is
POWERING GOOD
## Transition of Operation Results (IT Sector)

<table>
<thead>
<tr>
<th></th>
<th>FY2018* (Result)</th>
<th>FY2018 (Result)</th>
<th>FY2019 (Forecast)</th>
<th>FY2021 (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>2,065.9 billion yen</td>
<td>2,121.6 billion yen</td>
<td>2,060.0 billion yen</td>
<td>2,600.0 billion yen</td>
</tr>
<tr>
<td>Overseas revenue ratio</td>
<td>29%</td>
<td>29%</td>
<td>31%</td>
<td>42%</td>
</tr>
<tr>
<td>Adjusted operating income</td>
<td>225.2 billion yen</td>
<td>230.1 billion yen</td>
<td>220.0 billion yen</td>
<td>338.0 billion yen</td>
</tr>
<tr>
<td>Adjusted operating income ratio</td>
<td>10.9%</td>
<td>10.8%</td>
<td>10.7%</td>
<td>13.0%</td>
</tr>
<tr>
<td>EBIT</td>
<td>210.9 billion yen</td>
<td>212.6 billion yen</td>
<td>210.0 billion yen</td>
<td>325.0 billion yen</td>
</tr>
<tr>
<td>EBIT ratio</td>
<td>10.2%</td>
<td>10.0%</td>
<td>10.2%</td>
<td>12.5%</td>
</tr>
<tr>
<td>ROIC</td>
<td>19.4%</td>
<td>19.6%</td>
<td>15.9%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

* Former Information and Communications System Segment
Fields of Business (IT Sector)

Front Business

Consulting

Financial systems
IT for banking, insurance and securities

Public systems
IT for public offices, municipalities and educational institutions

Systems for social infrastructure
IT for power generation/energy, transport and communication carriers

Defense systems*

IT functions commonly used for all companies
Application development, engineering, operation and maintenance, project management and quality assurance

Services & Platforms

- IoT platform
- Data analytics
- Storage
- AI
- Cloud service
- Control systems
- Security
- Software

* Defense systems is included in "others" on accounting