Automotive Systems Business Strategy

Hitachi IR Day 2016

June 1, 2016

Hideaki Seki

President & CEO
Hitachi Automotive Systems, Ltd.
Automotive Systems Business Strategy

[Contents]

1. Business Overview
2. Market Trends
3. Growth Strategy
4. Summary
1-1. Business Concept

Implement growth strategy based on the development of intelligent cars in the fields of Environment, Safety, and Information.

- **Environment**
  - Application of electronics and integrated control

- **Safety**
  - Component Sophistication and Systemization

- **Growth**
  - Supporting the commercialization of autonomous driving and connected cars
  - Utilization of IT and R&D
  - Development of Intelligent Cars
  - Information

Accelerate the growth of the Automotive Systems Business through cooperation between Hitachi Group companies.
1-2. Business Structure

Aiming to expand the systems business by establishing the “Safety & Information Systems Division” in FY2016

Integrate Hitachi’s broad range of technologies to develop and propose advanced safety driving systems.

- Autonomous driving systems
- Automatic parking systems
- Over the Air (OTA) software updates platform, etc.

FY2015 Business Structure

**Drive Control Systems Div.**
- Electrically driven intelligent brakes
- Semi-active suspensions
- Hydrogen dispensers

**Powertrain & Electronic Control Systems Div.**
- Motors
- Inverters
- Engine control units
- Stereo cameras
- ADAS ECUs

**Car Information Systems** (Clarion)
- Telematics communication units
- Voice recognition navigation systems (MAX776W)
- SurroundEye (cameras to monitor surroundings)

**Aftermarket Division/Others**
- Suspensions for aftermarket
- Brake pads for aftermarket
- Lithium-ion batteries
- Electric power steering
- Pistons
- Variable valves

**FY2015 Consolidated Revenues** ¥1,001.1 billion

ADAS: Advanced Driver Assistance System, ECU: Electronic Control Unit

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## 1-3. Summary of FY2015 Mid-term Management Plan

<table>
<thead>
<tr>
<th></th>
<th>FY2015 Result</th>
<th>Previous Forecast&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Difference</th>
<th>(Reference) 2015 Mid-Term Management Plan Initial Target&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>1,001.1 billion yen</td>
<td>1,000 billion yen</td>
<td>+1.1 billion yen</td>
<td>1,000 billion yen</td>
</tr>
<tr>
<td>Adjusted Operating Income Ratio</td>
<td>6.2%</td>
<td>6.8%</td>
<td>(0.6)%</td>
<td>6.8%</td>
</tr>
<tr>
<td>EBIT Ratio</td>
<td>5.4%</td>
<td>7.0%</td>
<td>(1.6)%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

### Summary

- **Revenues** Achieved initial target under the 2015 Mid-term Management Plan, in line with the previous forecast.

- **Adjusted Operating Income, EBIT Ratio** Lower than previously forecast, reflecting decreased sales of products with a high profit margin due to the slowdown of the Chinese market.

### Improvement Measures for 2018 Mid-term Management Plan

1. Promote autonomous management by strengthening the functions of overseas regional headquarters
   => Respond to changing market conditions

2. Strengthen core business and expand mainstay business especially electronically controlled products
   => High profit structure

---

<sup>*</sup>1 As of June 11, 2015  
<sup>*</sup>2 As of June 13, 2013  
Figures after restatement based on IFRS  
EBIT: Earnings before Interests and Taxes
1-4. Business Performance Trends

**Overseas revenue ratio for global customer bases**

Target achieved:
- FY2015 (Result): 60%
- FY2016 (Forecast): 61%
- FY2018 (Target): 63%

Adjusted Operating Income/EBIT (Billion yen)
- FY2015 (Result): ¥1,001.1
- FY2016 (Forecast): ¥1,000
- FY2018 (Target): ¥1,100

Automotive market growth rate:
- FY2015 (Result): +3.2% VS +2.7%
- FY2018 (Target): (CAGR: FY15-18)

- Powertrain & Electronic Control Systems
- Engine & Chassis
- Drive Control Systems
- Car Information Systems (Clarion)
- Others

- Revenues
- Adjusted Operating Income [Ratio]
- EBIT [Ratio]

* Previous forecasts (as of June 11, 2015) Revenues: ¥1,200 billions, Adjusted operating income: ¥88 billions, EBIT: ¥ 90 billions
CAGR: Compound Annual Growth Rate

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In FY2015, factors such as the slower growth of the Chinese market put the brakes on emerging markets.

CAGR will be +2.7% heading toward FY2018. =>Hitachi’s growth rate will be +3.2%, exceeding the automotive market growth rate.

In FY2020, production will exceed 100 million units, and the growth of emerging markets will drive global growth, accounting for almost 60% of total production.

Heading toward FY2020, the share of electric vehicles such as HEV and EV will expand to almost 10%.

Gasoline vehicles will still have a 70% share.

Source: IHS Automotive survey data
2-2. Trends in Environmental and Safety Regulations

[Environmental Field]
Environmental regulations are becoming tighter globally, in both developed and emerging markets.

- Pressure to meet regulatory requirements both in terms of the global environment (global warming countermeasures) and the urban environment (prevention of damage to health) is increasing.

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂ emission regulations</th>
<th>Emission regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>130g/km</td>
<td>EURO5</td>
</tr>
<tr>
<td>2015</td>
<td>95g/km</td>
<td>EURO6</td>
</tr>
<tr>
<td>2020</td>
<td>68~78g/km</td>
<td>EURO7</td>
</tr>
</tbody>
</table>

[Information & Safety Field]
Preparations are underway for the spread of connected cars and ADAS/AD.

- Technological development in the information and safety field aimed at the realization of autonomous driving is accelerating.

<table>
<thead>
<tr>
<th>Year</th>
<th>Safety evaluation</th>
<th>Level of automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Collision warning and avoidance</td>
<td>ADAS</td>
</tr>
<tr>
<td>2015</td>
<td>Pedestrian collision avoidance</td>
<td>Autonomous driving</td>
</tr>
<tr>
<td>2020</td>
<td>Night time pedestrian collision avoidance</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AD: Autonomous Driving

NOx: Nitrogen Oxide. PM: Particulate Matter
CO₂: Carbon Dioxide, CH₄: Methane, BC: Black Carbon
2-3. Global Position Analysis

Top 10 global parts suppliers by revenue
Electronics products*¹ share (FY2014 result)

Change in electronics products share of vehicle components market
(in yen terms)

The share of electronics products will be growing for electronically controlled and electrically driven products for eco-friendly cars and more sophisticated autonomous driving features => 40% increase (in yen terms)

Increase potential for business expansion in the medium and long term by increasing electronics products*¹ share to world-leading level

*¹ Electronics products: Electronically controlled and electric drive products such as electronically controlled units and hybrid systems
*² Calculated by Hitachi based on FOURIN Global Automotive Parts Yearbook 2015, and FISCO report.
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3-1. Growth Strategy

Execute 3 core strategies to achieve a robust management foundation and firm growth.

- **Product Strategy**: Expand environment and safety businesses and provide Hitachi Group collaborative solutions.
- **Customer Strategy**: Execute strategy of customer diversity.
- **Regional Strategy**: Strengthen functions of overseas regional headquarters.
### 3-2. [Product Strategy] Securing Fundamental Business

Securing mainstay products which account for a large share of revenues to ensure achievement of the 2018 Mid-Term Management Plan

<table>
<thead>
<tr>
<th>Div.</th>
<th>Field</th>
<th>Mainstay products</th>
<th>Share of Division revenues*3</th>
<th>Business promotion measures</th>
<th>Revenue growth 2015 ➔ 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Div.*1</td>
<td>Environment</td>
<td>ECU・ATCU</td>
<td>Approx. 40%</td>
<td>Expand compact standard ECU models for light vehicles</td>
<td>+ 35%</td>
</tr>
<tr>
<td>EN Div.*2</td>
<td>Safety</td>
<td>Ignition coils</td>
<td></td>
<td>Expand sales globally through optimal production strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drive Control Systems Div.</td>
<td>Variable valves</td>
<td>Approx. 50%</td>
<td>Expand sales of highly functional VTC</td>
<td>+ 30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steering</td>
<td></td>
<td>Step up activities to expand sales to global customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suspension systems</td>
<td>Approx. 80%</td>
<td>Promote global sales expansion</td>
<td>+ 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brakes</td>
<td></td>
<td>Expand sales of four wheel brake calipers for compact cars</td>
<td></td>
</tr>
</tbody>
</table>

*1 Powertrain & Electronic Control Systems Division  *2 Engineering & Chassis Division  
ATCU: Automatic Transmission Control Unit, VTC: Valve Timing Control

*3 Total of the mainstay products shown.

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# 3-3. [Product Strategy] Expanding Mainstay Business

Expand the electronically controlled and electrically driven products business and promote systemization in this high growth market

More efficient internal combustion engines, electrically driven products, enhanced safety performance

## Products for sales expansion

<table>
<thead>
<tr>
<th>Div.</th>
<th>Products for sales expansion</th>
<th>Business expansion measures</th>
<th>Revenue expansion plan 2015 ➔ 2018</th>
<th>Systemization through vertical integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Div.</td>
<td>Inverters</td>
<td>Expand global orders received as HEV system</td>
<td>+170%</td>
<td>Integrated control system</td>
</tr>
<tr>
<td></td>
<td>Motors</td>
<td>Expand global orders received as HEV system</td>
<td>+190%</td>
<td>Improve sophistication of electrically controlled components</td>
</tr>
<tr>
<td>EN Div.</td>
<td>Stereo cameras</td>
<td>Expand adoption as an ADAS system</td>
<td>+20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electric power steering</td>
<td>Expand sales of high-maneuverability and high performance EPS</td>
<td>+120%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electronically controlled brakes</td>
<td>Expand sales of vacuum-less brake system</td>
<td>+100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electric VTC</td>
<td>Promote sales expansion of low-priced VTCs</td>
<td>+70%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electric brakes</td>
<td>Strengthen linkage of functions with electrically driven products</td>
<td>+40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electronically controlled suspension</td>
<td>Seek differentiation on performance and price</td>
<td>+20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lithium-ion batteries, controllers</td>
<td>Expand sales of high-output compact packs to the expanding 48V market</td>
<td>+40%</td>
<td></td>
</tr>
</tbody>
</table>

**EPS:** Electric Power Steering

Accelerate system development to achieve early commercialization of autonomous driving

-- Aiming for 10% share of information and safety market, predicted to be worth over 3 trillion yen by 2020 --

**Macro Environment**
- Collision safety/Passenger protection
- Strengthening of pedestrian protection
- Autonomous driving in a limited area
- Autonomous driving on public roads
- Meeting needs of the elderly and reducing environmental impact

**Technology provided by Hitachi**
- Automatic emergency braking
- Automated steering
- Smart Mobility (cars that won’t cause traffic accidents)
- Security (hacking prevention key/authentication management, etc.)
- Cloud services
- Automated parking, Cloud linkage (Dynamic map, OTA)
- Smart Mobility (Reduction of social loss)

**Convenience**
- Engine start & stop
- Preview ISS Sailing
- ACC*Coordinated ISS

**Automated driving**
- Level 1: Standalone ADAS
- Level 2: Combination of systems (Nissan, Public roads, Express-ways: Toyota, Honda, FHI, BMW, Daimler *1)
- Level 3: Enhancement of system reliability (Ford)
- Level 4: Fully autonomous driving

*1: 5 companies are planning commercialization in 2020

**Source:** Releases of each company and Patent Office’s “Patent application technical trends survey”

**ACC:** Adaptive Cruise Control, **ISS:** Intelligent Start-Stop

**FHI:** Fuji Heavy Industries

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3-5. [Product Strategy] Achieve Growth Through Hitachi Group Collaborative Solutions

Provide high quality “one stop” solutions in the autonomous driving systems field

Hitachi

(1) Data center
(2) Differential data update system
(3) Secure communication system

(1) Data center
(2) Differential data update system
(3) Secure communication system

Clarion

(4) IVI system
(5) SurroundEye cameras
(6) Telematics communication unit

(4) IVI system
(5) SurroundEye cameras
(6) Telematics communication unit

Hitachi Automotive Systems

(7) Stereo cameras
(8) 24GHz millimeter-wave radar
(9) Map positioning unit
(10) C2X
(11) Central gateway
(12) Autonomous driving ECU
(13) Engine control unit
(14) Electric power steering
(15) Electronically controlled brake

(7) Stereo cameras
(8) 24GHz millimeter-wave radar
(9) Map positioning unit
(10) C2X
(11) Central gateway
(12) Autonomous driving ECU
(13) Engine control unit
(14) Electric power steering
(15) Electronically controlled brake

Hitachi Automotive Systems Group

(16) Rack screws
(17) Aluminum die cast
(18) Motor + ECU

(16) Rack screws
(17) Aluminum die cast
(18) Motor + ECU

Strengthen cooperation within Hitachi Group

Build and propose advanced safety driving systems

Established Safety & Information Systems Division (April 1, 2016)

Provide one-stop solutions to meet technical requirements of autonomous driving

(e.g.) Over the Air(OTA) software update solution

Improve system capability and ensure reliability of quality

(e.g.) In-house manufacturing of components for electric power steering

IVI: In-vehicle Infotainment, C2X: Car to X

Achieve growth through Hitachi Group Collaborative Solutions
Accelerate the commercialization of systems with high cost effectiveness and performance in order to popularize autonomous driving systems.

### Main system components
(Expressway corresponding to level 2)

<table>
<thead>
<tr>
<th></th>
<th>Hitachi Automotive Systems</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognition</strong></td>
<td>Sensing technology</td>
<td>Cost competitiveness :△</td>
</tr>
<tr>
<td></td>
<td>Cost competitiveness :○</td>
<td>Rider (Multiple),</td>
</tr>
<tr>
<td></td>
<td>Stereo camera, monocular camera (4),</td>
<td>Monocular camera (several dozen),</td>
</tr>
<tr>
<td></td>
<td>Millimeter wave radar (4)</td>
<td>High precision GPS</td>
</tr>
<tr>
<td><strong>Judgment</strong></td>
<td>Autonomous driving ECU technology</td>
<td>Mass-produced prototypes:</td>
</tr>
<tr>
<td></td>
<td>Mass-produced prototypes:</td>
<td>Development stage: △</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>Electronically controlled actuator</td>
<td>High speed reaction:△</td>
</tr>
</tbody>
</table>

### Overview of demonstration experiment

- **[Place]** Hitachinaka Road, Ibaraki Prefecture (Hitachinaka IC～Hitachi Seaside Park IC)
- **[Dates]** February 22 – 26, 2016
- **[Details]** Lane keeping, following leading vehicle and changing lanes through autonomous driving
### 3-7. [Customer Strategy]
**Execute Strategy of Customer Diversity**

<table>
<thead>
<tr>
<th>Revenues composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 (Result)*3</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Other Japanese</td>
</tr>
<tr>
<td>Carmakers*1</td>
</tr>
<tr>
<td>Top 10</td>
</tr>
<tr>
<td>Global Carmakers*2</td>
</tr>
<tr>
<td>Renault-Nissan</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Strengths**

- **Expand accounts with revenues exceeding 100 billion yen**
  - Leverage GAM and GAT operations and global footprint to support customers developing business worldwide.
  - Increase number of global sales personnel to achieve cooperation between regions and anticipate customer needs (up 10%).

**Strengthen capability to propose solutions that meet customer needs**

- Propose a wide range of products and systems through cross-sales.
- Integrated control systems, security technologies, etc.

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*1 Fuji Heavy Industries, Mazda Motor, Mitsubishi Motors, Daihatsu Motor and Commercial vehicles (Isuzu Motors, Mitsubishi Fuso Truck and Bus, Hino Motors, and UD Trucks)

*2 Toyota, Volkswagen/Audi, GM, Ford, Hyundai Motor, Honda, PSA, Peugeot Citroën, Suzuki, Fiat Chrysler (except Renault-Nissan)

*3 Customer ratios are actual estimates.

GAM: Global Account Manager, GAT: Global Account Team
Increase revenues in business with Ford through cross-sales (FY2008⇒FY2018: Revenues increased 3 fold to exceed 100 billion yen)

Won orders for electronically controlled and electronically driven products
- Motors, inverters, and battery cells for HEVs
- Semi-active suspension systems
- Electric power steering

Received Ford’s “World Excellence Award” (May 2015)
- In recognition of business cooperation

Expansion in sales of advanced technologies and systems through anticipation of customer needs

Currently supplying products
- Airflow sensors
- Valve timing control
- Water pumps
- Balancers
- Shock absorbers
- Brake master cylinders

Expansion of electronically-controlled products
- Expanded sales of advanced technologies
3-9. [Regional Strategy] Strengthen Regional Headquarters Functions

Reform global operations, strengthening foundations by shifting from quantity to quality

Spin off operations to form independent companies → Expand global footprint → Achieve group governance and autonomy of overseas regions (regional headquarters and overseas bases)

<table>
<thead>
<tr>
<th>Aims</th>
<th>Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Globalize operations</td>
<td>• Hire global talent as presidents of regional headquarters (Americas, Europe, Asia)</td>
</tr>
<tr>
<td>(2) Speed up decision-making</td>
<td>• Adopt executive officer system</td>
</tr>
<tr>
<td>(3) Separate business execution and supervisory functions</td>
<td>-&gt; Appoint presidents of regional headquarters as executive officers</td>
</tr>
<tr>
<td></td>
<td>• Outside directors (former executives of U.S. companies)</td>
</tr>
<tr>
<td></td>
<td>• Implement measures to develop and strengthen locally recruited managers</td>
</tr>
<tr>
<td></td>
<td>(Accept in related departments in Japan for training in design, sales and production)</td>
</tr>
<tr>
<td></td>
<td>• Actively appoint local staff to managerial positions</td>
</tr>
</tbody>
</table>

<Ratio of local staff in managerial positions>

- **Now**: 67%
- 2020: 90%
3-10. [Regional Strategy]
Initiatives for Two Major Markets

**Americas**

- Indicates indices based on FY2010 revenues. (Based on USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues 100</th>
<th>Revenues 197</th>
<th>Revenues 210</th>
<th>Revenues 220</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>197</td>
<td>210</td>
<td>220 (CAGR:15-18)</td>
</tr>
<tr>
<td>2015</td>
<td>+3.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Strengthen local technology centers to improve service for customers in the Americas.
- Strengthen intraregional control and governance through integration of Mexican subsidiaries.

**China**

- Indicates indices based on FY2010 revenues. (Based on CNY)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues 100</th>
<th>Revenues 148</th>
<th>Revenues 180</th>
<th>Revenues 230</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>148</td>
<td>180</td>
<td>230 (CAGR:15-18)</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>+15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Achieve growth outpacing overall market growth heading towards 2018.
- Establish 15th manufacturing company in China to meet the needs of auto makers that are expanding bases in inland China (April 2016).

Hitachi Automotive Systems Mexico, S.A. de C.V. (Integrated 2 Mexican subsidiaries in October 2015)

Hitachi Automotive Systems (Chongqing) Ltd. (Scheduled to start mass production in 2018)

New company in Chongqing signing ceremony
3-11. Global Investment and R&D

Make transition from “expansion” phase to “reap phase” and strengthen development capability by generating cash

Global investment amounts *1

<table>
<thead>
<tr>
<th>Expansion phase</th>
<th>Reap phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2011-2013 Accumulated (Result)</td>
<td>200 billion yen</td>
</tr>
<tr>
<td>FY2014-2016 Accumulated (Forecast)</td>
<td>240 billion yen</td>
</tr>
<tr>
<td>FY2017-2019 Accumulated (Target)</td>
<td>230 billion yen</td>
</tr>
</tbody>
</table>

*1 New business investment, jigs and tools, purchase of intangible fixed assets and tangible assets and software to be leased, financing
*2 Previous forecast amount (as of June 11, 2015): 280 billion yen

Established Silicon Valley office (April 2016)

- Strengthen the development of new products in the autonomous driving and connected car domain.

Strengthen software development

- Leverage R&D capability of the Hitachi Group.
- Establish automotive software division at Hitachi Group software companies.
- Employ around 200 software developers in China. (Clarion’s IVI, camera development, etc.)

Utilize open innovation

- Strengthen industry-university-government collaboration in the safety & information field.

<table>
<thead>
<tr>
<th>Key partners</th>
<th>Details of collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford University</td>
<td>Autonomous driving</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>Autonomous driving, C2X</td>
</tr>
<tr>
<td>RWTH Aachen University</td>
<td>ADAS</td>
</tr>
<tr>
<td>Keio University</td>
<td>AD system architecture</td>
</tr>
<tr>
<td>Ibaraki University</td>
<td>Surrounding environment recognition technology</td>
</tr>
</tbody>
</table>

Measures to strengthen global R&D

Strengthen technological development focusing on priority fields such as ADAS and autonomous driving

- Strengthen software development
  - Established Silicon Valley office (April 2016)
  - Leverage R&D capability of the Hitachi Group.
  - Establish automotive software division at Hitachi Group software companies.
  - Employ around 200 software developers in China. (Clarion’s IVI, camera development, etc.)

Utilize open innovation

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</tr>
<tr>
<td>University of Michigan</td>
<td>Autonomous driving, C2X</td>
</tr>
<tr>
<td>RWTH Aachen University</td>
<td>ADAS</td>
</tr>
<tr>
<td>Keio University</td>
<td>AD system architecture</td>
</tr>
<tr>
<td>Ibaraki University</td>
<td>Surrounding environment recognition technology</td>
</tr>
</tbody>
</table>
3-12. Harness the IoT to Strengthen Manufacturing

Promote high efficiency and high quality manufacturing by using the IoT to connect production lines in five key regions with customers and vendors.

Gathering of global production line information


● Predictive maintenance
● Responding to fluctuations in supply and demand
● Ensuring quality and traceability
● Labor-saving
### Cost Structure Reform and Cash Generation

**Execute growth strategy through structural reform and continuous innovation**

#### Promotion details

**Cost structure reform**
- Strengthen global quality assurance capability
  - Establishment of Suppliers Quality Management Department (April 2016)
  - Sophistication of quality assurance technologies
- Execute global operation reforms
  - Make regional headquarters independent and increase efficiency of operations
  - Continue Global Production Innovation
- Strengthen cost and investment management by product
  - Establishment of Cost Planning Department in each business division (April 2016)

**Cash generation**
- Establish strategies in safety and information area
  - Establish a “Safety & Information Systems Div.”, focus resources on this field and increase cooperation with the Hitachi Group
- Strengthen electronically controlled and electrically driven products
  - Expand sales of electronically controlled and electrically driven products and subsystems
- Expand sales to global customers through cross-sales

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#### Improve CCC, Operating CF and ROA

<table>
<thead>
<tr>
<th></th>
<th>FY2015 (Result)</th>
<th>FY2016 (Forecast)</th>
<th>FY2018 (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>42.1 days</td>
<td>40.8 days</td>
<td>40.6 days</td>
</tr>
<tr>
<td>Operating CF</td>
<td>89.4 billion yen</td>
<td>76.7 billion yen</td>
<td>105.0 billion yen</td>
</tr>
<tr>
<td>ROA</td>
<td>4.9%</td>
<td>4.3%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

#### Improvements in Gross Profit Margin and SG&A Margin

- **Improvements**
  - SG&A Margin
  - Gross Profit Margin

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*CCC: Cash Conversion Cycle, Operating CF: Operating Cash Flow, ROA: Return on Asset*
Automotive Systems Business Strategy

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1. Business Overview
2. Market Trends
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4. Summary

**FY2018 Targets**

- Revenues 1.1 trillion yen (Increase of 10% compared to FY2015)
- Adjusted operating income [EBIT] ratio 7.0%[6.9%] (Improvement of 0.8% [1.5%] compared to FY2015)
- ROA 5.3% (Improvement of 1.0% compared to FY2015)
- Operating CF [ratio] 105 billion yen [9.5%] (Increase of 20.2 billion yen [1.0%] compared to FY2015)

Implement growth strategy based on the development of intelligent cars in the fields of Environment, Safety and Information
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, including, without limitation, the information, electronics, automotive, construction and financial sectors;
- 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;
- 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;
- 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 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;
- 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;
- 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;
- uncertainty as to the success of cost reduction measures;
- 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 alliances upon which Hitachi depends, some of which Hitachi may not control, with other corporations in the design and development of certain key products;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property rights, particularly those related to electronics and data processing technologies;
- 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 potential for significant losses on Hitachi’s investments in equity-method associates and joint ventures;
- 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;
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its significant employee benefit-related costs; and
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel.

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