Hitachi Smart Transformation Project

March 27, 2012

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Senior Vice President and Executive Officer
Chief Transformation Officer (CTrO)
Hitachi, Ltd.
Hitachi Smart Transformation Project

Contents

1. Background to Start of Project
2. Project Outline
3. Examples of Activities
Hitachi Smart Transformation Project

1. Background to Start of Project
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3. Examples of Activities
1-1 Project Background

Contribute to the development of sustainable social infrastructure

Accelerate Social Innovation Business

- Global
- Fusion
- Environment

- Leverage Hitachi’s strengths to promote a global growth strategy
- Focus business resources on the Social Innovation Business
- Strengthen the business structure to stabilize profitability

Shift from competition focused on the Japanese market to emphasis on true global competition

- Establish an earnings platform for competing effectively with leading global corporations
- Shift to a cost structure that allows Hitachi to compete effectively with companies from emerging markets
1-2 Benchmarking Global Competitors

Unit: %; Figures in parentheses represent indexed figures with Hitachi equal to 100.

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<thead>
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<tbody>
<tr>
<td>Cost of sales</td>
<td>(100) 74.8</td>
<td>(102) 76.5</td>
<td>(96) 72.0</td>
<td>(87) 65.2</td>
<td>(94) 70.0</td>
<td>(93) 69.8</td>
<td>(72) 53.9</td>
<td>(89) 66.4</td>
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<td>Selling, general and</td>
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<td></td>
<td></td>
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<tr>
<td>administrative expenses</td>
<td>(100) 16.2</td>
<td>(91) 14.7</td>
<td>(108) 17.5</td>
<td>(96) 15.6</td>
<td>(86) 14.0</td>
<td>(90) 14.6</td>
<td>(135) 21.9</td>
<td>(105) 17.0</td>
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<tr>
<td>R&amp;D expenditures</td>
<td>(100) 4.2</td>
<td>(119) 5.0</td>
<td>(100) 4.2</td>
<td>(112) 4.7</td>
<td>(126) 5.3</td>
<td>(81) 3.4</td>
<td>(143) 6.0</td>
<td>(140) 5.9</td>
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<tr>
<td>Operating income</td>
<td>(100) 4.8</td>
<td>(79) 3.8</td>
<td>(133) 6.4</td>
<td>(302) 14.5</td>
<td>(263) 12.6</td>
<td>(246) 11.8</td>
<td>(410) 19.7</td>
<td>(233) 11.2</td>
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Reform the cost structure across the entire Hitachi Group
Developing a global growth strategy for the Social Innovation Business

- High cost structure dependent on domestic resources
- Inefficiencies and redundancies of resources due to multiple businesses, large organizations, and optimization at the individual company level
- Excessive focus on doing things internally

Hitachi Smart Transformation Project launched
Hitachi Smart Transformation Project

1. Background to Start of Project
2. Project Outline
3. Examples of Activities
2-1 Scope of Project

Three cost areas:
- Production cost
- Direct materials cost
- Indirect cost (Operating expenses, Administrative operations)

All costs

All organizations:
- 5 business groups
- 40 business entities
- Approx. 900 companies

All areas:
- Japan
- China
- Asia
- India
- Americas
- Europe

Scope of Project:
- 40 business entities
- 5 business groups
- Approx. 900 companies

Global business strategy
IT strategy
Human capital strategy

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2-2 Project Structure and External Coordination

**Hitachi Group Corporate**

- Project owner: President
- Leader: CTrO*
- Steering Committee (Corporate officers: 9 individuals)
- Smart Transformation Office (Cross-Functional Organization: 11 individuals)
- Theme-based Projects

**In-house companies, Hitachi Group companies**

- President
- Officer in charge of project
- Cross-functional team

**Regional supervising companies** (China, Asia, India, U.S., Europe)

**Communication at each level**

**In-house companies, Hitachi Group companies**

- Overseas group companies
- Domestic group companies

**Coordinate external resources that will provide insight and support**

- Implement benchmarking
  Global competitors, innovative companies in different business sectors

- Independent consulting
  All administrative operations, finance and accounting processes, procurement processes, etc.

*CTrO: Chief Transformation Officer*
2-3 Three Cost Areas and Initiatives

- **Production**
  - Globalization of the total value chain
  - Centralization of common processes globally

- **Direct materials**
  - Enhance global procurement capabilities and expand global procurement sites
  - Strengthen engineered sourcing

- **Indirect**
  - Centralize the Group's common operating expenses in specialized departments
  - Centralize and standardize administrative operations
  - Promote shared services globally

Total cost: approx. ¥9 trillion
### Corporate Functions and Roles of In-House Companies and Hitachi Group Companies

#### Hitachi Group Corporate

- Establish KPIs for entire Group
- Establish global benchmarks
- Centralize common processes
- Support global productivity reforms
- Develop global procurement infrastructure
- Cultivate common suppliers overseas
- Promote pool purchasing
- Centralize the Group's common operating expenses through specialized departments
- Centralize and standardize common operations
- Promote shared services globally

#### In-house companies, Hitachi Group companies

- Formulate and promote global growth strategy
- Benchmarking by individual company
- Globalization of total value chain
- Expand production at optimal sites globally
- Review internal and external production
- Strengthen engineered sourcing
- Refine cost planning for each machinery model
- Expand global procurement of specialized purchased items
- Instill corporate policies at in-house companies and Hitachi Group companies
- Review Group company structure

<table>
<thead>
<tr>
<th>Strategy costs</th>
<th>Production costs</th>
<th>Direct materials costs</th>
<th>Indirect costs</th>
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</thead>
<tbody>
<tr>
<td></td>
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2-4

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2-5 Project Period and Targeted Cost Savings

Achieve a total cost reduction of 5%

2011
2012
2013
2014
2015~

Production costs
Direct materials costs
Indirect costs

2012 Mid-term Management Plan
(Steadily reap the benefits of short-term initiatives)

• Formulate concept
• Preparation
• Benchmarks

To the next mid-term management plan
(Implement full-scale transformation)

2012 Mid-term Management Plan
(Steadily reap the benefits of short-term initiatives)

To the next mid-term management plan
(Implement full-scale transformation)
Hitachi Smart Transformation Project

1. Background to Start of Project
2. Project Outline
3. Examples of Activities
Overseas business models

- Export model
- Local production model
  - "Locally produced, locally consumed" model; "Optimal site-selection" model

Total value chain

<table>
<thead>
<tr>
<th>Product planning</th>
<th>Product development</th>
<th>Approval</th>
<th>Procurement</th>
<th>Production</th>
<th>Sales</th>
</tr>
</thead>
</table>

Japan-led

Locally-led

Expand locally-led leadership of operations going forward

Globalization of total value chain

Steps for Future Reform

- Cost planning with respect to "optimal cost" through global benchmarking
- Globalization of design
- Establish global procurement engineering center
- Develop low-cost production lines targeting emerging markets
Integrate assembly and procurement of parts and materials for small and medium-lot printed circuit boards used by individual businesses.

Centralize value chain, maintain technologies (Production equipment/production technology/assembly design/procurement).

Establish EMS for small and medium-lot production.
Expansion in scope and scale

- Upgrade and expand procurement sites
- Transfer functions to China and Asia
- Cultivate and strengthen ties with local suppliers overseas
- Increase overseas procurement personnel

Benefits of this project

- Establish a cross-functional project through participation by R&D departments and MONOZIKURI strategy departments
- Establish an engineering procurement center

Past cost savings: approx. ¥200 billion

Targeted benefits

3-3 Direct Materials Cost Reforms (1) Fundamentally Enhance Procurement Capabilities

Enhancement of functions

Enhancement of functions by incorporating insights of global corporations

Continuous cost reduction activities

Traditional procurement capabilities

Global procurement

Engineered sourcing

Fundamentally Enhance Procurement Capabilities
Created new post of Chief Executive Officer for Asia Pacific (April 2012)
- Transfer China/Asian region procurement functions to local operations

Hold supplier meetings in 12 cities worldwide
- Meetings completed in 5 cities since October 2011 (Shanghai, Seoul, Taipei, Bucharest, Warsaw)
- Attended by approximately 20 Hitachi Group companies and 100 suppliers

Transfer head-office procurement functions to Asia
- Singapore, Hong Kong, Dalian
3-5 Direct Materials Costs (3) Upgrade and Expand Global Procurement Sites

Upgraded and expanded corporate procurement sites: from 15 cities to 25 cities (end of the first half of FY 2012)

Increase allocation of engineering personnel

Establish new procurement sites in emerging markets

- Poland (Warsaw)
- Rumania (Bucharest)
- Turkey (Istanbul)
- Russia (Moscow)
- Brazil (Sao Paulo)
- Mexico (Mexico City)
- Philippines (Manila)
- Indonesia (Jakarta)
- South Africa (Johannesburg)
- China (Hefei)

Existing procurement sites
New procurement sites
Total 200 individuals
Hitachi Group Corporate

“Less engineering” to mitigate the risk of high resource prices

Launch cross-Group, cross-functional project

Allocate engineering resources from the Research & Development Group, MONOZUKURI Strategy Division and VEC Promotion Department

- Develop rare earth-free motors
- Standardize component specifications among different business sectors (Cast metal, die casting, pressed items, molds, sintered items)

In-house companies, Hitachi Group companies

Upgrade and expand the engineering buyer system
3-7 Indirect Costs (1) Reform In-direct Costs by Demonstrating the Group’s Collective Capabilities

**Target areas**
- Operating expenses
- Administrative operations

**Details**
- Centralize the Group's common operating expenses in specialized departments
  - Make 100% visible
  - Centralize contracts
  - Centralize specialized departments

- Centralize and standardize common operations
  - Fully centralize
  - Standardize
  - Operation in low-cost regions

- Review Group corporate functions
- Review the structure of approx. 900 Group companies

**Main Projects**
- Cost reduction projects by cost item
- Launch of specialized departments by cost item
- Reform of individual operations
- Promote global shared services
- Establish infrastructure in emerging markets in advance
- Reform of intra-Group transactions

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3-8 Indirect Costs (2) Expand centralization target areas of Group's common operating expenses

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
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<tbody>
<tr>
<td>2003-2009</td>
<td>From December</td>
<td>Smart Transformation Project From April 2011</td>
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<tr>
<td>Target regions</td>
<td>2009</td>
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<tr>
<td>Japan</td>
<td>Japan and certain overseas sites</td>
<td>Entire Group, including overseas</td>
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<tr>
<td>Target amount</td>
<td>¥200 billion</td>
<td>¥600 billion</td>
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<tr>
<td>Promoted activities</td>
<td>• Commence pool purchasing</td>
<td>• Make all cost items visible</td>
</tr>
</tbody>
</table>

Newly established “Integrated Logistics Center” (October, 2011)

Central management at “Group Asset Center”

- Logistics costs
- Leasing costs
- Machinery and building repair costs
- Energy costs
- Business travel expenses
- Software outsourcing expenses
- Sundry and supplies
- General outsourcing expenses

Promoted activities:
- Commence pool purchasing
- Make all cost items visible
- Fully centralize through specialized departments

Target amounts:
- ¥200 billion
- ¥600 billion
- ¥1,000 billion

Target regions:
- Japan
- Japan and certain overseas sites
- Entire Group, including overseas

From December 2009

Step 1

2003-2009

Promoted activities:
- Commence pool purchasing

Target amount:
- ¥200 billion

From April 2011

Step 2

Smart Transformation Project

2009

Promoted activities:
- Make all cost items visible

Target amount:
- ¥600 billion

Step 3

Central management at “Group Asset Center”

Promoted activities:
- Fully centralize through specialized departments

Target amount:
- ¥1,000 billion

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### Logistics Costs

Establish Integrated Logistics Center

- Integrate activities with and utilize the expertise of Hitachi Transport System, Ltd.
- Integrate management of separate logistics for each company
- Maximize the use of the Group’s scale (International tendering, centralized packaging materials, etc.)

### Asset and leasing costs

Centralize and centrally manage at Group Asset Center

- Co-locate Group companies’ offices, optimize the floor space used per person
- Integrated management of dormitories and housing, reduce vacancies through shared Group-wide use
Two efficiency-raising measures for administrative operations

**Operational reform**

- Group centralization and establishment of global shared services (Includes shifting operations offshore)
  - Establish at an early stage based on examples (Began in fiscal 2012, successive expansion projecting completion in 2015)
  - Finance & accounting, human capital, general affairs, procurement, IT, trade-related operations, sales administration

**Review of operation quality**

- Review and standardize over-emphasis on operations quality
  - Internal costs resulting from such factors as continuation of past traditions, excessive service, and optimization at the individual company level

- Review business structure and business units
  - Additional costs arising from the structure of Hitachi Group companies
Opened Global IT Center in the U.S. to provide IT support to 560 companies globally (April, 2011)

Current global IT services

- Independent services provided by six regional headquarters

Cannot address global needs due to weak inter-regional coordination

Planned Model

- Standardize the services provided by the six regional headquarters
  - Establish an IT platform swiftly and efficiently

Hitachi Private Cloud

Standard global IT service
Network, e-mail, service desk, etc.

Europe

China

India

Asia

Japan

Americas

Emerging markets

Public Cloud

Improve efficiency and reduce administrative costs across entire Group
3-12 Conclusion

Transform to a cost structure that can prevail globally

Shift the focus of technologies to creating high-quality products at low cost
END

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HITACHI
Inspire the Next