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● Editorial Policy
This report is published once a year for Daifuku’s stakeholders to understand its approach to and activities involving corporate social responsibility (CSR). In addition to examples of contributions by Daifuku toward solving social issues through the use of its advanced products and technology, this issue focuses on a dialogue with employees, as they exchange their own thoughts and opinions regarding CSR. The report was designed to reflect our brand message, “Always an Edge Ahead,” with the goal of giving readers a sense of what makes Daifuku unique.

● Information Disclosure Tools and Approaches
At Daifuku, we use different tools for different types of readers and objectives to ensure the information we disclose about our CSR and other corporate activities is conveyed to our various stakeholders in a way that is easily understood.

Report Scope
The report covers the activities of Daifuku Co., Ltd. and its consolidated affiliates (the Group companies)

Reported Period
April 2015 – March 2016
Note: Some content may fall outside the reported period.

Date Published
August 2016

Reference Guidelines
- United Nations Global Compact
- Global Reporting Initiatives (GRI) G4 Guidelines
  "Note: An index to GRI guideline content is available on our website."
- Environmental Reporting Guidelines (2012 version), Ministry of the Environment, Government of Japan

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Corporate History

The History of Business and CSR at Daifuku

Since its founding almost 80 years ago, Daifuku has offered customers solutions by providing innovative products and technology. Putting CSR into practice through our business, we will continue working with our stakeholders to benefit society.

Business and product milestones

CSR milestones

1937

Company name changes to Daifuku Machinery Works Co., Ltd.

1938

Daifuku Machinery Works Co., Ltd. founded

1953

Tokyo conveyor plays an active role in major repair of the Great Buddha Hall at Todai-ji, a National Treasure of Japan

1956

Develops the first Japan-made ten-pin bowling machine

1964

Rackbill system

1968

Waxmore 303

1970

Company name changes to Daifuku Co., Ltd.

1972

Clean Stocker

1978

TELEP System

1980

Tribute conveyor

1981

Cleanaway

1983

Electronic Control Division obtains Daifuku’s first ISO 9001 certification

1984

Company policy of lasts forever is adopted

1986

Cleanaway

1990

Digital Pick system

1994

Clean away

2004

E-DIP

2010

Cleanaway

2011

Daifuku forms Daifuku Eco-Products Certification Program established

2012

Shiga Works becomes world’s largest material handling and logistics production site

2016

Shiga Works

Development and business milestones

1937

Japan’s first grain and bulk unloading equipment

1938

Daifuku Machinery Works Co., Ltd. founded

1964

Establishes a ten-pin bowling alley

1970

Plans for construction of an industrial park

1977

Belt-type automated sorter

1999

Konami Works and Shiga Works obtain ISO 14001 certification

2002

Daifuku publishes its first Environmental Report

2004

Formulates Daifuku Environmental Vision 2020

2007

Daifuku Eco-Products Certification Program established

2014

SpDR (Spoked) Temporary parts storage and sorting system

2015

D-PAD

World’s first commercialization of a newly developed wireless charging system for forklifts

2013

Maihru-LHD

2014

Eye-navi

2015

Area Management System

2016

D-PAD

World’s first commercialization of a newly developed wireless charging system for forklifts

Since its founding almost 80 years ago, Daifuku has offered customers solutions by providing innovative products and technology. Putting CSR into practice through our business, we will continue working with our stakeholders to benefit society.
The increasing role of logistics in a changing society

As change in social environments and industrial structures occurs more rapidly, logistics systems play an increasingly significant role in society. The spread of the internet is driving the creation of new businesses, with e-commerce among the fastest-growing sectors and the business model that integrates the Internet and logistics, leading to a transformation in consumer behavior and lifestyles. This has resulted in an increased breakdown in units, going from pallet, to case, and to the individual piece, requiring both speed and accuracy. The key to responding to these needs is the use of robots and other advanced automation and streamlining technology. Daifuku provides solutions from a market-oriented perspective through close association with our customers.

The knowledge and experience we have gained in working with leading-edge customers in various industries finds many uses among companies taking on new businesses, and I sense the weight of our responsibility growing. Advancing the technological capabilities that support our business foundations is of particular importance. This goes beyond simply acquiring language skills, and we are striving to develop individuals who have the ability to communicate effectively and can work successfully with a diverse range of people of different cultures and attitudes.

Expanding pragmatic activities to instill CSR company-wide

For a company to continue growing requires not only the pursuit of profit, but sound management. A healthy mind and body are as important to the growth of a company as they are to a person, and CSR activities are necessary to measure how well a company maintains sound management practices. We hope to promote CSR activities unique to Daifuku by considering both our business attributes and social conditions to identify and give priority to initiatives involving issues of greatest importance.

A key word that comes to mind is "safety." For a business, safety, which involves its employees’ lives, should be the highest priority, and is essential in developing customer trust. At one time, Daifuku went a record 5,500 consecutive days injury- and accident-free. We will continue to clarify our commitment in this area as we work to spread our culture of safety around the globe.

Another important issue is "people." Human resource development is essential for sustained growth. For Daifuku, developing its global human resources is of particular importance. This goes beyond simply acquiring language skills, and we are striving to develop individuals who have the ability to communicate effectively and can work successfully with a diverse range of people of different cultures and attitudes.

Employees coming together to achieve sustained growth

In fiscal 2015, Daifuku set new records in orders received, net sales and income, marking our sixth consecutive year of increases. We are also making solid progress with our four-year business plan, Value Innovation 2017, which ends this fiscal year, with growth exceeding our initial targets. However, we must continue to focus on the task at hand as we work to build an even stronger foundation for our business.

Business expansion and the creation of a sound organization are two sides of the same coin. In May 2017, Daifuku will mark its 80th anniversary. Our employees are ready to cooperate in our CSR efforts so that we can respond to the expectations of our stakeholders and continue to achieve healthy, sustained growth.

Message from the President

Continuing to be a company that supports the future, responding to customer and social issues with advanced technology

Masaki Hojo
President and CEO
Daifuku Co., Ltd.
Implementation of CSR Action Plan
based on six initiatives to guide
our Corporate Policies Structure into practice

Daifuku’s CSR

Daifuku’s CSR is a comprehensive and long-term policy that concisely pulls together our views on CSR. It specifies six initiatives, and declares the implementation of our Corporate Policies Structure in corporate activities as we move forward with our stakeholders.

“ ‘A company that supports society and the future’

To achieve that goal, we are engaged in the following six initiatives.

- Provide high quality products and services
- Respect human dignity (human rights, labor practices, safety, health)
- Create good relations with communities
- Strengthen risk management
- Nurture relationships of trust with our suppliers
- Contribute to the environment through corporate activities

Six Initiatives

Material Aspects

- Maintain and improve product quality to safely meet market needs
- Create products that consumers can use with confidence
- Provide high quality products and services
- Make products safer and more environmentally friendly

Key Performance Indicators: A quantitative performance evaluation index that measures target achievement.

In accordance with the six initiatives, the CSR Action Plan defines medium-term targets with specific measures. Efforts tied to each of those initiatives were then assessed for their importance from the perspective of the Company and its stakeholders, and the 10 items deemed most important by both were specified as material aspects and given the highest priority. Progress with these materials aspects is tracked using KPIs. Details of the CSR Action Plan are available on our website: www.daifuku.com/sustainability/management/plan/

Brand Proposition

Value Innovator

Brand Message

Always an Edge Ahead

Daifuku by KPI

In accordance with the six initiatives, the CSR Action Plan defines medium-term targets with specific measures. Efforts tied to each of those initiatives were then assessed for their importance from the perspective of the Company and its stakeholders, and the 10 items deemed most important by both were specified as material aspects and given the highest priority. Progress with these materials aspects is tracked using KPIs.

Key CSR Action Plan targets and KPI results for fiscal 2015

Material Aspects

Maintain and improve product quality to safely meet market needs

- Employees who acquired Safety Assurance certification
- Target: 50 in the Daifuku Group
- Results: 69

Promote and strengthen information security measures

- Time information on security regulations reviewed, revised and publicized
- Target: Once
- Results: 1

Create good relations with communities

- Improvement proposals
- Target: 4,000
- Results: 3,623

Shareholders

- People who received training at the Anzen-Takan Dojo
- Target: 960
- Results: 1,188 people

Six Initiatives

- Key CSR Action Plan targets and KPI results for fiscal 2015
- Material Aspects
- Key Performance Indicators: A quantitative performance evaluation index that measures target achievement.
- Details of the CSR Action Plan are available on our website: www.daifuku.com/sustainability/management/plan/

Company Creed

Daily Arata

Management Philosophy

1. Provide the best solutions to benefit the global markets and the development of society.
2. Focus on healthy, growth-driven global management under a diverse and positive corporate culture.

Management Philosophy

- Brand Proposition
- Value Innovator
- Brand Message
- Always an Edge Ahead

Future initiatives

- Minimize (eliminate) workplace accidents
- Target: Severity rate 0.01
- Frequency rate 0.6
- Results: 0.09, 0.85

- Improvement proposals
- Target: Completed
- Results: 69

- Time information on security regulations reviewed, revised and publicized
- Target: Once
- Results: 1

- Improvement proposals
- Target: 4,000
- Results: 3,623

- People who received training at the Anzen-Takan Dojo
- Target: 960
- Results: 1,188 people

- Improving safety training for employees
- Target: Conduct conservation work four times a year or more
- Results: 4 times

- Certified Daifuku Eco-Products
- Target: 29 products
- Results: 2 products

- Conserve biodiversity
- Target: Conduct conservation work at Yui No Mori
- Results: 33,367

- Contribute to CO2-reduction
- Target: 41,165 t-CO2
- Results: 29

- Promote and strengthen information security measures
- Time information on security regulations reviewed, revised and publicized
- Target: Once
- Results: 1

- Ensure compliance with regulations
- Revision and publicizing
- Frequency rate
- Target: 0.6
- Frequency rate 0.6
- Results: 0.09, 0.85

- Ensure compliance with regulations
- Revision and publicizing
- Frequency rate
- Target: Twice
- Frequency rate
- Results: 0.09, 0.85

- Ensure compliance with regulations
- Revision and publicizing
- Frequency rate
- Target: Four times a year or more
- Frequency rate
- Results: 0.09, 0.85

- Promote and strengthen information security measures
- Time information on security regulations reviewed, revised and publicized
- Target: Twice
- Results: 2

- Promote and strengthen information security measures
- Time information on security regulations reviewed, revised and publicized
- Target: Twice
- Results: 2

- Health and safety training
- Target: Safety assurance certification
- Frequency rate
- Target: 2.0%
- Frequency rate
- Results: 1.88%

- Expand health and safety training
- Target: Double
- Results: 2

- Improve employment of persons with disabilities
- Target: 2.0%
- Results: 1.88%

- Contribute to CO2-reduction
- Target: 41,165 t-CO2
- Results: 29

- Maintain and improve product quality to safely meet market needs
- Employees who acquired Safety Assurance certification
- Target: 50 in the Daifuku Group
- Results: 69

- Promote and strengthen information security measures
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- Target: Once
- Results: 1

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- Improvement proposals
- Target: 4,000
- Results: 3,623

- People who received training at the Anzen-Takan Dojo
- Target: 960
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- Target: Double
- Results: 2

- Improve employment of persons with disabilities
- Target: 2.0%
- Results: 1.88%
A Company That Draws Out Employee Diversity to Enable Each Individual to Fulfill Their Potential

At Daifuku, non-Japan sales have reached 66% of net sales, and non-Japanese employees represent more than half of all personnel. Creating a workplace accepting of the growing diversity in personnel, in which all employees respect one another and are able to fulfill their potential, is an important aspect of the Company’s CSR. What kind of workplace environment is needed for us to continue to grow as a global company, and what should we expect of the employees? Four of our employees from different occupations, careers and nationalities came together to discuss, from their perspectives, Daifuku today and the issues it faces.

A “Switch” is important to transcending nationality and language

**Kawata:** I spent about six years assigned to our Group company in Thailand. One of the first difficulties I felt upon taking the position was getting used to differences in work styles and cultures. At first, I was constantly confused. Ms. Li, you’re from China, aren’t you? You must have felt the same way when you first joined Daifuku in Japan.

**Li:** Yes, often. It’s hard to put into words, but there’s just something different from the normal, everyday interactions. However, as the saying goes, “When in Rome, do as the Romans do,” so I’ve made a habit of asking senior staff around me whenever I don’t understand something. They’re all very nice about it, and I believe that Daifuku is a comfortable place for non-Japanese staff to work. How about you, Mr. Dang—you’re from Vietnam, right?

**Dang:** Certainly, it’s important to be aware of differences in how people work and in culture. You have to make a “cultural switch” when you go to another country. I think learning to control that switch really helps.

**Kawata:** A switch—that makes sense. There are many things we Japanese understand without having to be explicit, but it’s not the same outside Japan. I think we’ll increasingly be required to switch back and forth, without obsessing over what might be considered common sense in Japan.

**Kimoto:** When I was studying at a U.S. university, I had a class called Business Speech, where I did presentations in English in front of other people. I used to look at the audience’s faces and say whatever came into my head, but one time the presentation was more difficult, and I read from a manuscript I’d prepared. The feedback I got was that the audience didn’t understand what my message was. That taught me the importance of expressing myself in my own words, even if my English isn’t that great.

**Ichinose:** Recently, President Hojo often reminds us to speak out. He means that we should take the initiative in a conversation, and not hang back just because we don’t speak English well. That way, the person you’re talking to will adjust to your level, and that’s where real communication starts.

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**Participants**

Yoshihisa Ichinose
Corporate Officer, General Manager of CSR Division

Kouzou Kawata
Assistant Manager, Management Group, Production Control Department, APA Operations

From Osaka. Joined the Company in 1992. Has worked in a wide range of operations, from systems for automobile production lines, to assembly, procurement and production control. Spent six years working in Thailand, and has extensive experience working in the U.S., Mexico, and other countries.

Chisato Kimoto
Assistant Manager, Consulting Group, System Planning Department, FA&D&A Operations

From Tokyo. Joined the Company in 1997. After working in simulation software sales, now in charge of consulting work using CG technology. Creates 3D images of customer systems to provide effective proposals.

Li Xue
Global Business Administration Department, Finance and Accounting Division

From Sichuan Province, China. Joined the Company in 2006. Worked at Hitachi Kan, and took childcare leave in 2011. After returning to work, assigned to her current department. Provides risk training for operations of and transactions by affiliates outside Japan.

Dang Dang Khoa
Engineering Group, International Division FA&D&A Operations

From Ho Chi Minh, Vietnam. Joined the Company in 2014. Provides proposals for efficient, thought out system plans and designs to meet customer needs.

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**Employees outside Japan**

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio of employees at non-Japanese affiliates and branch offices to all employees of the Group companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>26.4%</td>
</tr>
<tr>
<td>2010</td>
<td>41.0%</td>
</tr>
<tr>
<td>2015</td>
<td>59.1%</td>
</tr>
</tbody>
</table>

(Note) Ratio of employees at non-Japanese affiliates and branch offices to all employees of the Group companies.
Changing the concept of “Made in Japan” to consider the Daifuku Group a single global team

Dang: Nearly 70% of Daifuku’s sales come from outside Japan. Rather than just having Japanese staff go to other countries, we need to create a framework for staff outside Japan to play a more active role.

One way to do that would be personal exchanges between Group companies worldwide. Affiliate staff from Singapore could work at Group companies in India or Thailand, and vice versa.

Kawata: Staff would sometimes travel to India to assist our Group company. There’s no need to be overly fixated on Japan because the headquarters is here. In terms of accepting greater diversity, I think it’s important that, wherever we work, the environment is there to allow us to build experience and our careers.

Ichinose: That means being able to move not just between Japan and other countries, but between other countries besides Japan. I believe that’s going to be an issue for Daifuku.

Despite how much we’ve expanded globally, the way Daifuku conducts its business and the mindset of its employees are still rooted in Japan. That is why we introduced our Global Business Trainee program and our Global Leadership Training. As Mr. Dang noted, only by encouraging employee exchanges among our Group companies around the world and recognizing that together we all make Daifuku can we truly call ourselves a global company.

Efforts needed to allow everyone to play an active role in the company

Kimoto: I looked this up after I’d been asked to participate in this dialogue, but apparently Daifuku has a very low attrition rate among its female employees. And personally, I feel the Company is a comfortable place for female staff.

At the same time, because there are still few female staff overall, I sometimes see room for improvement. I occasionally visit our production sites and I’m always handed a man’s uniform. I’m sure they have uniforms for women, so that’s one area I want to improve. It may seem like a minor issue, but this is the kind of thing that can help change people’s awareness. How about you, Ms. Li?

Li: Yes, and not just me; there are many other working mothers around me. This was true for me as well, but support in the workplace is strong, making the workplace a good place to work. So I think Daifuku has made a lot of progress in that regard.

Ichinose: As Ms. Kimoto pointed out, creating workplaces where female staff can have an active role can have an impact on how we handle the workplace. At the same time, I think we’ve also improved our maternity and childcare leave systems. Didn’t you make use of both, Ms. Li?

Li: I did, but I think the company needs to continue improving it.

Kimoto: I joined the Company in 2014, and three women among the 50 or so new hires. In Vietnam, men and women work together equally, so I never noticed the difference in numbers.

Dang: To develop oneself in Daifuku, it’s important that we all make Daifuku can truly call ourselves a global company.

Changes in Female Manager Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>Female Manager Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>24</td>
</tr>
<tr>
<td>2012</td>
<td>28</td>
</tr>
<tr>
<td>2013</td>
<td>32</td>
</tr>
<tr>
<td>2014</td>
<td>34</td>
</tr>
<tr>
<td>2015</td>
<td>42</td>
</tr>
</tbody>
</table>

(Note) Within Japan: Includes assistant managers

Creating a workplace that recognizes employee individuality and draws out their full potential

Kimoto: I’m dealing with newly-hired female staff recently. I feel they are both success driven and highly motivated.

Kawata: I see. That means that those of us welcoming them into the Company need to be prepared to handle that kind of drive. I think this will require a company-wide change in attitudes, starting with the managers who will supervise these staff.

Kawata: Like Ms. Kimoto, while I was familiar with the term CSR, I never gave it much thought. Listening to everyone’s opinions today made me more aware of a lot of issues, so this has been a valuable opportunity. I was also glad to hear directly from everyone about their experiences in their own workplaces.

Ichinose: To conclude, I’d like to ask what each of you thought of today’s dialogue.

Kawata: In the normal course of our work, we don’t have many opportunities to think about CSR, so it was a great experience to talk with everyone about such a relatable topic. I think Daifuku has a lot of progress in developing an environment that supports an active role for women, and I hope they will continue to increase those efforts.

Ichinose: The Company also recognizes that issue, and we’ve incorporated it into our management training programs. Putting in place programs and working environments that recognize each employee’s individuality—regardless of gender, nationality, religion and so on—while maximizing their performance is a theme Daifuku must continue to focus on.

Ichinose: To conclude, I’d like to ask what each of you thought of today’s dialogue.

Kawata: In the normal course of our work, we don’t have many opportunities to think about CSR, so it was a great experience to talk with everyone about such a relatable topic. I think Daifuku has a lot of progress in developing an environment that supports an active role for women, and I hope they will continue to increase those efforts.

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Resolving Social Issues with Advanced Technology

A Range of Technology That Supports the Pharmaceutical Value Chain

Daifuku technology in production and distribution centers that ensure stable supply even in emergencies and in high-precision dispensing at pharmacies.

Solutions using Daifuku’s technological capabilities contribute widely to the medicinal drug value chain, from production and distribution to dispensing at pharmacies.

Because their products directly involve health and human life, maintaining a stable supply is one area of critical importance to drug-related companies, not only in normal times but during disasters as well.

Issues for achieving a stable supply vary from customer to customer. Daifuku responds to these diverse needs through leading-edge technology, whether for seismic isolation systems for production and distribution sites, automation via robots, deployment of IT or to address environmental concerns.

In addition, as Japan moves away from a policy of hospital-centered care and shifts toward home care and community-based medicine, pharmacies will take on an important role as the direct suppliers of prescription drugs to patients. Daifuku’s image recognition and weight inspection technologies are used to help prevent dispensing errors.

### Case 01. Nissin Pharmaceutical Co., Ltd.

Nissin Pharmaceutical Co., Ltd.’s Araya Plant (Tendo, Yamagata Prefecture), which handles generic drugs and contract manufacturing of pharmaceuticals, is the company’s most advanced manufacturing site. As the market for generic drugs continues to grow, Nissin has installed the latest production equipment in an effort to boost production capacity, and has also deployed a quakeproof unit load automated storage and retrieval system (AS/RS) for raw materials and products. This upgraded their supply system by significantly reducing shaking during an earthquake by 75%, which prevents stored items from falling, and enabling an uninterrupted supply of products even during a disaster.

**Reduced 75%**

### Case 02. Toho Pharmaceutical Co., Ltd.

Toho Pharmaceutical Co., Ltd. is involved in the pharmaceutical wholesale business. At the company’s large-scale distribution center, TBC Saitama (Kuki, Saitama Prefecture), Toho Pharmaceutical faced two major issues: a labor shortage resulting from a shrinking, aging population, and a need to further improve shipping accuracy. TBC Saitama decided to build a cutting-edge distribution center utilizing robot technology; robots were deployed to automate 100% of case picking and 65% of piece picking. By also integrating their computer system with each of their automated warehouses, they were able to reduce personnel by half compared to distribution centers of the same size and double productivity, while offering traceability and other high-quality distribution services.

**Shipping accuracy “seven nines”** (best in the industry)

### Case 03. Heart Pharmacy

Heart Pharmacy (Kizugawa, Kyoto Prefecture) has deployed the audit prescription checking system, which uses image recognition and weight inspection technology. It compares the drugs picked by the pharmacist with prescription data to instantly audit drug type and quantity. Prior to installation, the pharmacy risked mistaking one drug for another in the dispensing process, or other pharmacist errors; with a double-check system that combines human and machine verification, they are now able to prevent such errors. The system can also maintain a log, making it easier to quickly respond to questions from patients.

**Reduced 99.99999%**

**About 900 units**

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**A constant effort to evolve to contribute to stable supply**

Masami Iwai
Manager, System Planning Group, System Planning Department, FA&DA Operations

I was responsible for project management for TBC Saitama, from initial system proposal to full operation. The project was unprecedented in terms of distribution automation, requiring robots capable of handling thousands of products of varying shapes and sizes. However, thanks to a flexible approach to system development and solid technology to make that possible—in short, Daifuku’s comprehensive strengths—we were able to meet the customer’s requirements. Using the new technology and expertise we gained through this project, we will continue to pursue even greater contributions to a safe, stable supply of pharmaceuticals.
Resolving Social Issues with Advanced Technology

Smart Mobility

D-PAD, the Future of Wireless Battery Charging

A Breakthrough for the Future of Mobility

Recently, much attention has been given to smart mobility, electric vehicles (EV) and other technologies seen as the next generation of transportation infrastructure. At the same time, there is also a greater focus on the question of how cleanly and efficiently electricity can be supplied. Wireless charging technology is attracting particularly heavy interest.

As the name implies, this technology requires no connection to a conventional power cable, charging devices wirelessly. Already commercialized for use in some household digital appliances, issues remained in adapting the technology for high-power charging. Daifuku’s D-PAD represents a breakthrough in wireless charging technology, opening up new possibilities for the industrial sector.

Innovation Born of 20 Years of Accrued Technology

D-PAD was developed based on Daifuku’s non-contact power supply technology known as HID, for High Efficiency Inductive Power Distribution, in which the Company has a track record of more than 20 years. In 1993, Daifuku developed the world’s first electrified monorail system using a non-contact power supply. Since then, Daifuku’s non-contact power supply transport systems have been delivered to the automobile, semiconductors, flat-panel display and many other sectors, and have won both acclaim and an overwhelming market share, particularly in the automobile, semiconductor, flat-panel display and many other sectors, and have won both acclaim and an overwhelming market share, particularly in the semiconductor field, making the technology a global standard.

The difference between power “supply” with HID and power “charging” with D-PAD is that the former supplies power while the equipment is running, while the latter charges the battery at a fixed spot. Development of D-PAD began in 2012, an attempt to respond to numerous customer requests for highly efficient large-current power transmission, coupled with a compact, lightweight design. Daifuku signed a technical and licensing agreement with the University of Auckland in New Zealand for D-PAD, similar to the agreement already in place with the University for HID technology. Following D-PAD’s first commercial application in automated guided vehicles (AGV) in 2014, in February 2016, Daifuku worked with Komatsu Forklift Japan Ltd. to develop the world’s first commercial wireless battery charging system for electric forklifts (patent pending).

A Game Changer in Mobility, With Applications Across a Broad Range of Fields

Systems using D-PAD wireless battery charging technology employ a transmission cart to wirelessly charge the forklift. Although charging time is equivalent to that of traditional plug-in systems, the D-PAD is more convenient since it eliminates plugging in a cable. It also reduces malfunctions caused by poor connections as well as the risk of electric shock.

D-PAD is not only capable of high-power transmission, but is unique for the unit’s compact size. It can also transmit power at a distance of up to seven centimeters, making it possible to embed the transmission unit in the floor and otherwise offering greater flexibility in facility design. This technology has the potential to significantly change the future of mobility in the industrial sector.

Moving forward, we will work to expand applications for mobile carts and other factory equipment, while also exploring possible uses in other fields such as mobility scooters and household equipment.

The D-PAD system is expected to reach beyond industrial vehicles and find uses in a wide variety of fields and applications.

From industrial vehicles, to more familiar applications

As the units become even more compact, potential will emerge for application in cars for seniors, electric wheelchairs and electric bicycles and motorcycles.

Expansion into the housing sector

The system can be used not just for digital appliances, but for other household equipment requiring greater electric power. The addition of waterproofing can offer safe use in toilets, bathrooms and other areas of the home with plumbing.

We have had inquiries from customers not only in manufacturing, but across a diverse range of industries. Once D-PAD’s benefits becomes more widely known, we think we will find application across an even broader range of fields. D-PAD is also the first Daifuku product designed as an unit type. In the future, as well, we believe it is a truly breakthrough product.

Yoshio Doi
Manager
WPT Group, Power Device Department
SA Operations

Fumio Funahashi
Manager
Sales Management Group, Power Device Department
SA Operations
**Case 01**

**Products Certified in Fiscal 2015**

**S/R Machine** (Model: R-L10)

Model change from the original S/R machine for unit load AS/RS. Equipped with a highly efficient motor and a reduced number of parts, contributing to energy savings and resource conservation.

<table>
<thead>
<tr>
<th>Energy savings</th>
<th>7.6% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait-hours</td>
<td></td>
</tr>
<tr>
<td>Assessment conditions (specifications)</td>
<td></td>
</tr>
<tr>
<td>Horizontal speed</td>
<td>160 m/min</td>
</tr>
<tr>
<td>Vertical speed</td>
<td>15 (30) m/min</td>
</tr>
<tr>
<td>Clearance height</td>
<td>1.8 m</td>
</tr>
<tr>
<td>Transfer equipment</td>
<td>Fork type</td>
</tr>
<tr>
<td>Horizontal distance</td>
<td>50 m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource conservation</th>
<th>2.7% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main unit weight</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource conservation</th>
<th>10.1% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of parts</td>
<td></td>
</tr>
</tbody>
</table>

(Kunihiro Tsukamoto, S/R Machine Section, AS/RS Group Design Department, PADA Operations)

**Case 02**

**Products Certified in Fiscal 2015**

**Bolt-Up Rack (new cross-section)** (Model: DC10G)

Enhancing the cross-section performance of the rack components enabled a switch from welded construction to assembled construction. This contributed to energy and resource conservation, and reductions in CO₂.

<table>
<thead>
<tr>
<th>Energy savings</th>
<th>32.2% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy consumption during manufacture</td>
<td></td>
</tr>
<tr>
<td>Rack weight</td>
<td>10.7% reduction</td>
</tr>
<tr>
<td>CO₂ reduction</td>
<td>61.7% reduction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment conditions (specifications)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 10 times x 25 bays, 16 times = 3,500 pallets</td>
</tr>
<tr>
<td>+ Mean: 15.6 x 920mm (assembled) = 15.6 x 920mm (assembled)</td>
</tr>
<tr>
<td>+ Number of transport trucks: 75 (assembled) + 26 (assembled)</td>
</tr>
</tbody>
</table>

(Yasushi Sugimura, Assistant Manager, Structural Design Group Design Department, PADA Operations)

**Developing eco-friendly products and services that meet our standards and making them widely available to society**

Environmental problems, such as climate change, are an issue for the international community. In 2012, Daifuku began an Eco-Products Certification system, with the goal of contributing to our customers’ efforts to reduce their environmental impact by providing environmentally friendly products and services. The system targets both the Group’s current products in and outside Japan, and all products developed going forward. It assesses their environmental performance in terms of energy savings, resource conservation and pollution prevention, and products that meet our standards are certified as Daifuku Eco-Products. In fiscal 2015, eight products were added.

To achieve more advanced environmentally friendly design, we introduced environmental impact assessments using Life Cycle Assessment (LCA).

**Steadily expanding Eco-Products**

Under Daifuku’s Environmental Vision 2020, we have established a KPI of having more than 63 products certified as Eco-Products by fiscal 2020. In fiscal 2015, we successfully reached our fiscal year goal with a total of 29 certified products. We will continue to expand that number by providing more of these products and services to our customers.
Daifuku CSR activities around the world

With eight companies in Japan and 49 elsewhere around the world, Daifuku has a total of 57 consolidated affiliates, and employees in each location implement a variety of CSR activities.

As a global company with up to 66% of non-Japan sales to net sales, we are working to instill "Daifuku CSR" in our group companies worldwide.

### Germany

**Joint exhibit of solutions for airports by five Group companies**

BBS Group Limited (New Zealand), Jervis B. Webb Company (U.S.), Daifuku Logan Ltd. (U.K.), Elite Line Services, Inc., Logan Teleflex, Inc., all five Group companies working on systems for airports, jointly exhibited at Passenger Terminal EXPO 2016, one of the world’s largest aviation-related exhibitions held in Cologne, Germany March 15 to 17, 2016.

The companies displayed models of the BAGgate automated baggage check-in system, the Mobile Inspection Table, which uses an automatic guided cart (AGC), and the Automated Baggage Tray System for baggage transport. Using videos and pamphlets, the visitors were shown a wide range of airport systems for airports, jointly exhibited at Passenger Terminal EXPO 2016, one of the world’s largest aviation-related exhibitions held in Cologne, Germany March 15 to 17, 2016.

### Asia

**First Daifuku China Group Safety Conference held**

On March 8, 2016, Daifuku (China) Co., Ltd., Daifuku (China) Manufacturing Co., Ltd. and Daifuku (China) Automation Co., Ltd. got together to hold the first Daifuku China Group Safety Conference at Daifuku (China). It was attended by about 30 people, including the heads of the three companies, divisional managers from factories installation units, and members of a Safety Council made up of subcontractors. The Group companies reviewed their safety slogans, number of work accidents and the efforts of each company in fiscal 2015, and reported on targets and plans for safety activities in fiscal 2016. Subcontractors also shared their own on-site safety management activities and exchanged opinions to increase awareness towards achieving an accident-free workplace.

### Americas

**Nine personnel from seven countries participate in Global Leadership Training**

During November 24 to December 2, 2015 at the Shiga Works, Daifuku held its Global Leadership Training, a program intended to enhance the skills of executive candidates from subsidiaries outside Japan. The program included nine participants from the U.S., Taiwan, Thailand, Indonesia, South Korea, China and India. The training included a lecture by President Hojo on the Group’s management philosophies, basic management policies and business strategies, as well as the Group’s investor relations, the role of global leadership, human resource development, safety, information security, intellectual property, business continuity planning and communicating with other cultures were also covered. Group work included sharing opinions and ideas on issues in global business, as the participants worked to deepen their knowledge and insight as leaders.

### United States

**Safety Activities Recognized by Alaska Airlines**

An employee of the Daifuku Group’s Elite Line Services, Inc. (ELS) stationed at the Anchorage International Airport in Alaska was awarded the 2015 Safe Operations Award and Recognition (SOAR) by Alaska Airlines.

The award recognizes outstanding achievement by employees of Alaska Airlines and its subcontractors in contributing to a culture of safety based on the airline’s “Ready, SAFE, Go!” safety slogan. This marks the first SOAR award for an ELS employee.

The employee was highly commended for his approach to preventive maintenance on dollies used to transport containers, including always removing burrs that occur with wear and considering the safety of workers around them.

**Daifuku’s global production sites**

Daifuku America

Daifuku Korea

Clean Factomation (South Korea)

Daifuku (U.S.)

Vynright (U.S.)

Jervis B. Webb Canada

Daifuku (China) Automation

Daifuku (China) Manufacturing

Daifuku (China) Cleanroom Automation

Daifuku (South Korea)

Daifuku (Suzhou) Cleanroom

Daifuku Singapore

Daifuku Thailand

Daifuku Logan (U.K.)

Daifuku North America Holding Company

Daifuku China

Daifuku (China) Manufacturing Co., Ltd. and Daifuku (China) Automation Co., Ltd.

China Group Safety Conference held

As a member of a global company, I take responsibility for my work. By enhancing communications within the Group, I hope we can all continue to grow and evolve.

Gregory Robinson

Service Manager, s/f A Division

Daifuku North America Holding Company

**As voice**

Gregory Robinson

As a member of a global company, I take responsibility for my work. By enhancing communications within the Group, I hope we can all continue to grow and evolve.

**Members wrote their names on a safety banner, reconfirming their determination towards achieving an accident-free workplace.**
Keisuke Takegahara
General Manager
Research Department
Development Bank of Japan Inc.


The CSR Report 2016 narrows the focus that assumes a segregation between the report and the company’s website, which provides more detailed information disclosure. As noted in the Editorial Policy, the content focuses on two main subjects that relate directly to your corporate philosophy: Contributing to solving social issues through products and technology, and instilling CSR in your employees. Sharing this focus consistently across the report has, I believe, resulted in a format that makes readers strongly aware of the integration of CSR and business.

Notable to that integration are two sections, your Corporate History and the Message from the President. Presenting quantitative data on the company’s growth trajectory, supplemented with qualitative information from both the business and product and the CSR sides, and then attempting to unify them was, I think, an excellent idea. The Message from the President clearly lays out Daifuku’s mission to use advanced automation and efficiency technologies, deepening both to solve social issues, as well as the importance of CSR activities once you have fulfilled that mission and attained sustained growth, and that leaves a strong sense of cohesive thinking.

The report also effectively conveys your two main subjects by using examples from pharmaceutical distribution and smart mobility to effectively demonstrate, through data, the creation of value outside the company, and by including a dialogue between employees of diverse backgrounds, something unique to global companies.

You have also followed up on the issue of materiality from the previous report. While your stance of proactively disclosing those KPIs you failed to achieve is most appreciated, it may be easier for your readers to understand if you reevaluate how you present materiality in light of how you have narrowed your subject matter and strengthened its integration with the business discussion.

That bold refocusing has been effective in terms of advancing the integration of CSR and business. However, the question, “is it truly a complete picture of the company”, remains. What I would like to see at this point, as your report evolves and now heads toward a new stage, is a stronger stakeholder perspective that continues from the previous report. The employee dialogue is a part of that, but I think even there, there are elements that could reflect materiality. Also, due to the nature of your business, you contribute significantly to the creation of value on the customer side not just through your products, but through maintenance and other services as well. In addition, the company has a wide range of non-financial strengths, from your unparalleled standards for sound management, to your environmental preservation efforts drawing out specific site characteristics. Using outside viewpoints is both necessary and effective in identifying those strengths. As you have already begun moving forward organizationally by establishing a dedicated department to oversee CSR activities, I look forward to seeing you raise the bar even higher.

Yoshihisa Ichinose
Corporate Officer
General Manager of CSR Division

I am most grateful that Mr. Takegahara has continued to provide us with his opinions over the four years since the start of our Four-Year Business Plan in 2013.

In preparing the CSR Report 2016, we structured it around the themes of solving social issues through products and technology, and instilling CSR in our stakeholders, primarily our employees, and worked to create a communication tool that would connect Daifuku and its stakeholders. Mr. Takegahara recognized that the report fulfills the function of effectively conveying our business and CSR, the two main subjects of the report.

Going forward, we will establish measures for reevaluating our CSR Action Plan, particularly material aspects, and by also reconfiguring our KPIs, will work to enhance the PDCA cycle behind our CSR activities. We will also expand the extent to which we disclose non-financial elements, incorporating outside viewpoints, as we continue our sustained effort to ensure we are providing a complete picture of Daifuku.