

## Building Construction Business

# Strengthening Our Core Business for the Next Quantum Leap



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Strengthening the building construction business—Kajima's core business—is an urgent priority. Under our current medium-term business plan, we aim to become the industry leader in terms of technological edge and profitability by fiscal 2020.

The first two years of the mid-term business plan is named "Structural Improvement Phase" where each and every department and employee is expected to establish goals to attain at each segmented step to improve overall performance. In the near term, we will focus on performing a stellar role in ongoing construction projects to ensure that clients are satisfied beyond their expectations with our services and this, in turn, will lead to the better financial results. Looking further ahead, however, we will face many socioeconomic changes such as declining birthrate, aging population, matured society and abandoned stock of infrastructure. Therefore, it is imperative that we keep ourselves lean and nimble to cope with those changes.

### Envisioning the Future of the Building Construction Business

In the past, Kajima's building construction business developed advanced techniques for high-rise buildings and nuclear power plants, which society needed at the time, and those types of projects drove the Company's growth. In recent years, however, society's needs are more difficult to pin down due to their rapid diversification and increasing complexity, which left us a blurry image when focusing on target market. So I think we need to reconsider our strategy for identifying the needs of society in the first place.

Kajima has many outstanding technical experts who take the initiative in technology development, generating successes "from the bottom up," as it were. Yet steering the best future course sometimes requires a certain level of top-down strategic leadership. For example, our management is taking steps to look beyond the construction industry and explore opportunities to collaborate with other industries to broaden our outlook and acquire different views, so that we can bring more inspiring new ideas to Kajima. Likewise, aiming to provide a wider range of leading-edge services, we intend to work more closely with group companies on services spanning the entire lifecycle of buildings and other structures. Combining the Group's competitive advantages is sure to create new business and market opportunities.

### Facing Challenges Head On

As for the industry as a whole, the shortage of skilled workers is a major problem. As these workers grow older, their numbers are expected to decline by 1.3 million from the current 3.4 million over the next decade, unless they are replaced by new workers. Consequently, it is essential to attract and retain young people in these jobs, while also working to improve productivity at construction sites.

To attract and retain young workers, the structure of subcontracting needs to be streamlined to enable higher wages, all workers must be enrolled in social insurance programs, and working conditions, including use of paid leave, must be improved. To improve productivity, we must raise the efficiency of the ever-smaller onsite workforce by using prefabricated materials to reduce onsite work and promoting further mechanization and use of information technology. Less onsite work also means fewer accidents, and prefabrication helps to ensure more consistent quality.

Another important trend is building information modelling, a new technology for the industry. We expect this to drive helpful innovation in manufacturing systems. During the period of our medium-term business plan, we intend to apply this approach across our building construction operations to help improve conditions for skilled construction workers and raise productivity at sites.

### Leveraging Our Experience Internationally

I believe that what we learn from our international operations is crucial for enhancing Kajima's core businesses. Conversely, the Company's solid business platform in Japan is a vital support for what we do in other countries. Our experiences in dealing with various problems at overseas job sites helps make our business in Japan stronger, which, in turn, gives us a stronger platform for entering the global market and expanding our business internationally. In this synergistic way, we hope to generate good growth in Japan and abroad in an upward spiral.

I worked in North America and Southeast Asia for two decades. I was able to get a sense of North America's strict risk management, including standard requirements when working for the first time with clients and subcontractors or when undertaking projects in new areas. Those requirements are well described in the contract, and every single word of the contract is important. In Japan, likewise, we need to do more to incorporate risk management when drawing up contracts. During my time in Southeast Asia, I recognized that the biggest competitive edge of Japanese general contractors like Kajima was our ability to offer various alternative proposals at the bidding stage. We were able to incorporate technological advantages into our proposals and convince clients to consider not only the cost but the added value they could enjoy. This approach was quite welcomed and resulted in many contracts signed.

As we work to strengthen Kajima's building construction business over the first two years of restructuring, we will also be preparing for the times ahead. We intend to develop the company into an Engineering Contractor Group that can, whether in Japan or anywhere else in the world, sufficiently manage risks and win new contracts by demonstrating to clients the kind of tailored added value that only Kajima can offer.

### Kajima as an Engineering Contractor Group



**FY 2014 Performance**

In the fiscal year ended March 31, 2015, total revenues in the building construction business in Japan rose 13.2% to ¥780.8 billion, reflecting high contract awards in the previous fiscal year. Despite this, however, the segment recorded an operating loss of ¥23.4 billion, primarily due to poor profitability in certain projects.

New contract awards in the business totaled ¥742.5 billion on a non-consolidated basis, a decrease of ¥99.2 billion year on year. Among all private-sector projects, however, 66.5% of the contracts designated Kajima from the outset, indicating strong client trust. Kajima has been receiving large-scale orders for some time, and this is expected to continue in fiscal 2015. Keeping in mind total building construction capacity, the Company will strive to boost revenues and profits by pursuing projects that make the most of Kajima's competitive advantages and attract clients from more upstream sectors of the market.

Construction projects in Japan are now concentrated in the Tokyo Metropolitan area and the Tohoku region, and this is expected to continue for a number of years. To respond, the Company will flexibly assign employees from a company-wide perspective while bolstering its nation-wide network of subcontractors and construction workers to ensure market responsiveness. It will also step up efforts to make inroads in the

markets where the Kajima Group's competitive edge delivers the greatest advantage. Kajima's engineering business, for instance, has excellent prospects in the medical products market. In addition, the Company will collaborate with group companies to make the most of opportunities to secure construction work in a broad range of sectors from upstream to downstream.

When developing engineers in the building construction business, Kajima regards the first five years of their careers as a critical training period. Each year, they receive training to enhance expertise—both on-the-job training at construction sites and regularly held classroom training. The Company is also working to ensure that women can thrive as engineers, and regularly holds seminars where female engineers gather to discuss their jobs, consider career prospects, and plan for major life events.



**Major projects completed**

- Construction of a new hospital wing at Aichi Medical University
- Construction of the Sapporo Mitsui JP Building (Photo at right)

**Major projects in process**

- Construction of an office and hotel complex in the Kioi-cho Project (tentative name)
- Construction of buildings in the Kachidoki 5-Chome Redevelopment Project

**Major contracts awarded**

- Construction of buildings in the New Hibiya Project (tentative name)
- Construction of buildings in the Nihonbashi 2-Chome Redevelopment Project (in its C and D blocks)
- Construction of the XIV Yagawara Hotel (tentative name)



The Hakusan bullet train depot for the Hokuriku Shinkansen Line.

Himeji Castle, designated as a national treasure in Japan, held a grand reopening in March 2015 after five and a half years of restoration and repair work.

**TOPICS**

**Project**

**Building a New Market to Revive the Fisheries Industry in Disaster Areas**

**Ishinomaki District Wholesale Fish Market Construction Project**

Kajima is using the at-risk construction management method in its role as construction manager for a new fish market in the city of Ishinomaki in Miyagi Prefecture. Intended to speed up large-scale reconstruction of this disaster-affected area, the method integrates not only general construction work, but also coordinated management with projects nearby, an open book approach, pre-authorized selections of specialists, and inspections by clients and third-party organizations. Kajima's civil engineering business had already applied this method in a redevelopment project in the town of Onagawa in the same prefecture, but this is the method's Japan debut in such a large-scale municipal construction project.

Under construction is a wholesale fish market about 880 meters in length, with state-of-the-art facilities that comply with the Hazard Analysis & Critical

Control Points (HACCP) system. Parts of the building are already in use, and the rest will be completed soon. After selecting the designers and preparing necessary paperwork, Kajima put its experience and expertise to work to complete the east wing, main building, and part of the west wing by February 2015. The Company is working hard to complete the entire fish market, as the region hopes to accelerate recovery from the 2011 disasters.



The market has been expanded to 880 meters in length from the 650 meters planned prior to the earthquake.

**Person**

**Aiming to Become a Building Engineer**

**Mao Kawane**

**Construction Project Office for Mitsubishi Heavy Industries Komaki Minami Factory, Chubu Branch**

This year is my fourth at Kajima, and so far I have been involved in a major redevelopment PFI in an area near a train station and a commercial facility after I was transferred to my current branch. Now I am helping to manage the construction of a large factory.

At the factory construction site, I answer to the construction section manager, and I am in charge of the construction of the building frame. I have to think about how to get many construction workers to do their jobs efficiently, as well as carefully read design documents, confirm onsite

conditions, and communicate with everyone involved. Last year, when a wide-span steel truss beam was being erected, I handled the work according to plans made by the structural engineers. I got a fresh appreciation for how satisfying it is to complete a big job like that. All of us involved in the work had many discussions, and we drew on the experience of the construction workers, allowing us to finish a building that satisfied the client. I have experienced the excitement of this work, so I want to apply it and build on my skills to prepare even better construction management plans in the future.



After being certified as a first-class architect last year, Kawane has set her sights on becoming a reputable engineer.

**Group company**

**Training Diverse Human Resources to Build the Future of the Kajima Group**

**Kajima Kress Corporation**

Kajima Kress has been dispatching engineers to Kajima's workplaces and construction sites since 1987. More than 360 of its employees are now stationed at Kajima construction sites across Japan, supporting the preparation of construction plans, making calculations, digitizing documents, drafting plans spanning from the start of work to construction completion, and managing construction work. In fiscal 2014, Kajima Kress introduced a system enabling its top specialists to obtain job transfers directly to Kajima, greatly expanding career advancement opportunities for its employees.

To attract young, enthusiastic, and capable employees, Kajima Kress recruits at vocational high schools and technical colleges all over Japan.

It also has its veteran employees visit their alma mater to build relationships with teachers, students and their parents. Seeing employees as priceless assets, Kajima Kress is training its diverse human resources in specialized skills so they can lend new dynamism to Kajima's construction sites. The company is improving its employee training system to develop experts in construction management and planning, aiming to contribute to Kajima and all of its group companies. This has been the company's mission since it was founded, and everyone at Kajima Kress today is determined to keep pursuing it.



The team from Kajima Kress Corporation involved in a high-rise building project in Tokyo.