Strengthening Our Non-Financial Assets

Innovation for sustained growth.

The Kirin Group sees innovation as the key to sustained growth and seeks to generate innovation by strengthening its four fundamental organizational capabilities of "Consumer centric marketing expertise," "Technology creating trusted value," "ICT accelerating value creation," and "Diversity and inclusion, culture for innovation." Our recent efforts reconceptualizing our marketing expertise to raise the brand value of Honkirin is a prime example of how innovation leads to success.

Organizational capabilities that promote innovation

Consumer centric marketing expertise Technology creating trusted value

ICT accelerating value creation

Diversity and inclusion, culture for innovation

Honkirin and our marketing reform

Internal changes were key to successful marketing

The 2018 launch of *Honkirin* was a resounding success with initial year total shipments surpassing 300 million bottles. One of the primary factors that produced the immense sales volume was the internal reform Kirin Brewery carried out to become "the company that puts consumers first," as championed by Kirin Brewery President Fuse.

Katsuya Nagai Assistant Brand Manager of Honkirin Marketing Department Kirin Brewerv Mr. Nagai joined Kirin Brewery in 2005 as sales representative for supermarkets and other mass retailers. He then moved to the Marketing Department in 2011 to oversee brand management and product development for Nodogoshi Nama and Hyoketsu. Since October 2017, he has been involved in every aspect of Honkirin brand development from the initial production concept development stage.

Strategies to break out of a downward spiral

Kirin Brewery introduced more than 10 malt-type new genre brands in the past decade. However, the company struggled to attract sales for every brand. As its market share started to shrink, Kirin Brewery turned to short-term fixes by releasing derivative products with impromptu promotions and without thought for building up the brand. The company was also worried about releasing products that would compete against its own brands. In short, the company was not providing products that customers really wanted. As a result, it was not building the brand from a long-term perspective of being a brand that customers would view as having high value.

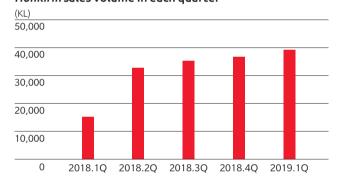
A focused marketing strategy to stop the contraction

One of the key reform strategies Kirin Brewery implemented to break out of this downward spiral was to focus its marketing on fewer products. Before the reforms, Kirin Brewery thought that decreasing its brand offerings would reduce its sales volume. However, it took a new tact of investing in a small, select number of brands, which it would then continue to invest in with a focus on developing and strengthening them for the long term. With this approach, rather than aiming to create a hit product now, the marketing department would advance strategies for the medium and long term and conduct Consumer-centric marketing to build a brand with a large customer following ten years in the future. The first brand Kirin Brewery applied this approach to was its flagship brand Kirin Ichiban that it relaunched in 2017.

The new strategy scores a success with Honkirin

The first step Kirin Brewery took in the development of Honkirin was to analyze its past products. The company applied what it learned to product development, the marketing plan, and every aspect of its Honkirin plan. Because Kirin Brewery had so many products in its portfolio, it had become difficult to get all departments aligned behind the one brand strategy. With *Honkirin*, however, the marketing and sales departments were communicating from the very early stages of the product development, and over time all of the departments came to understand the central role of the strategy and brand value. This enabled Kirin Brewery to effectively coordinate the sales promotions and activities it needed for success. Kirin Brewery was able to put in place the organizational structure for an all-encompassing marketing effort covering the full range of customer contact points. The result was instant and sustaining sales momentum.

Honkirin sales volume in each quarter





Turning its marketing into a strength

Katsuya Nagai, the Marketing Department assistant brand manager in charge of Honkirin, believes marketing is key to building competitiveness. "We are confident that we can use marketing to create a competitive edge." The Marketing Department combined Kirin's manufacturing technology and its approach to quality with new knowledge and expertise learned outside the company to form the new organizational structure for delivering high brand value to customers. Kirin Brewery will also use the latest information and communication technology to further deepen customer understanding.

Kirin Brewery's consumer centric marketing will be spread throughout the Group to strengthen the Group's organizational capabilities and create industry-leading innovation.

Using the latest ICT to create added value and further grow the leading brands

Kirin Brewery is aiming to generate further growth by maintaining and building the strong appeal of its leading brands while leveraging ICT to create further added value.

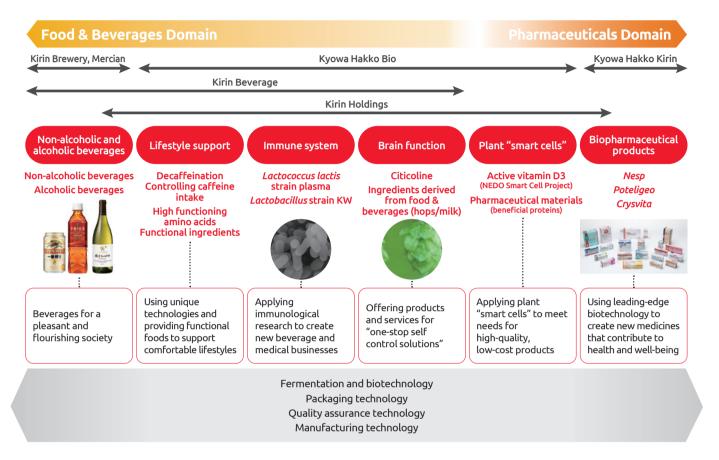
AI at our sales sites

Kirin Brewery is harnessing the latest technologies to further increase customer satisfaction. In 2018, the company introduced sales support tools using AI to maximize the effectiveness of sales sites and customer contact points. The new technology has the additional potential benefit of reducing man-hours needed for sales managers.

Digital marketing

Kirin Brewery will continue to deepen the marketing use of its insights into customer preferences gained through direct customer contact. The company will also use social networks, e-commerce channels, and data matching between its in-house sources and external databases to uncover latent customer needs.

R&D Strategy: Technology creating trusted value



We will consolidate Kirin Group technologies to form new businesses in the food & beverages domain, pharmaceuticals domain, and "bridging Pharmaceuticals and Food & Beverages" where we will create new value that contributes to solving social issues around the world.

The Kirin Group's operations spanning both food and pharmaceuticals ideally position it to create value and address social issues by combining its specialties in fermentation technology and biotechnology developed through our original beer business and the pharmaceutical and biochemical technologies acquired through our diversification strategy since 1980s. We are also building the new businesses bridging Pharmaceuticals and Food & Beverages to be a core part of the Kirin Group's portfolio. In this domain, we will combine our unique evidence-backed food ingredients and competitive technological capabilities with open innovation to make this new domain a sustaining pillar of the Kirin Group.

In the food & beverages domain, we will contribute to society by developing products with new value by advancing technology throughout the supply chain to improve product quality and business profitability.

In the pharmaceuticals domain, we aim to create new medical value by leveraging our leading biotechnologies and advancing R&D mainly in the four areas of nephrology, oncology, immunology/allergy, and the central nervous system.

The mission of the new businesses bridging Pharmaceuticals and Food & Beverages segment is to provide new value in the four areas of lifestyle support, immune system, brain function, and plant-based "smart cells." The new segment's consumer targets fall into the categories of individuals with specific needs and preventive healthcare. We will support specific needs by applying the high-function materials developed in our food & beverages business to address unmet medical needs. In preventive healthcare, we will apply the Kirin Group's proprietary expertise in the pharmaceuticals business to build a unique operation that meets specialized needs.

Pioneering smart cell culture technology using plant cells to meet needs in the medical field

Kirin's unique platform to produce beneficial substances

Platforms for manufacturing biopharmaceuticals mainly use microorganisms and animal cells. Animal cells are usually used to produce proteins with the complex structures of protein. However, the process requires high-precision environmental control of the technology and equipment. In recent years, simplified manufacturing equipment and production platforms using plants have been coming under the spotlight. The Kirin Group has extensive experience developing plantbased mass propagation technologies, and combining our expertise with the technologies of Kyowa Hakko Bio in microorganisms and Kyowa Hakko Kirin in animal cells gives us an unmatched global scale with capabilities across three functional substance cultivation platforms.

Kirin has amassed a wide variety of plant-related technologies since the 1980s. One of our biggest successes is the development of our unparalleled technology for mass propagation using liquid culture media from plant bodies from stems and sprouts to somatic embryos. Technology for mass propagation already existed, but it was mainly labor-intensive manual work. The techniques we developed using highly production-efficient liquid cultures that enabled commercial production of a wide range of plant species played a key role in the development of our agribio business.

In commercial manufacturing, cost is also important. Our unique research has led to the development of a lowcost bag-type culture vessel system that can take the place of expensive, large culture systems. We streamlined the mass propagation system to reduce both input and labor costs by using specially designed plastic bags for the culture vessels to make it lightweight and by designing it for simplicity so it can be operated by just a few people.

Kirin's development of this technology put the Group at the forefront of plant "smart cell" propagation technology using plant cells to produce functional substances. At the same time, the achievement of enabling sterile conditions for the propagation created an entry point for R&D directed at the medical field, which requires strict quality control.

Aiming to manufacture pharmaceutical ingredients from plant cells in 2027

Kirin joined the government-led New Energy and Industrial Technology Development Organization (NEDO). In 2016, NEDO launched a five-year plan to develop production techniques for highly functional biomaterials using smart cells of plants and other organisms. We are developing a propagation process using plant-based propagation technology that can efficiently mass-produce active-form vitamin D₃ used in drug treatments for osteoporosis and other diseases.

In 2018, we built the Plant Research Center on the grounds of our Fukuura Research Park to serve as a pilot facility with cleanroom specifications for demonstration of medical research reagents and production processes of ingredients for pharmaceuticals from plant cells. We are fine-tuning our technology for plant biology platforms and laying the groundwork to enter the pharmaceutical ingredient business.

Our development roadmap for these operations is to launch the medical research reagent business in 2021 and the veterinary medicine raw material business in 2024. We will then aim to enter the high value-added field of pharmaceutical ingredients in 2027.

2018 Plant Biotechnology Project launch (Plant Research Center)

2021 Reagent for medical research

2024 Materials for veterinary medicine

2027 Materials for pharmaceutical products

Human resources strategies: Diversity and inclusion, culture for innovation

To offer value to customers and communities, realizing innovations is essential. Diversity and inclusion, culture for innovation are necessary for the organizational capabilities that provide a basis for realizing such innovations. The Kirin

Group will continuously create value through innovations by bringing together employees who have diverse values and specialties, and are sympathetic to its corporate philosophy and strategies.

Realize innovations through the combination of diverse values, ways of thinking, skills and experience

Diversity Professionals Recruiting diverse employees Realize Attracting diverse employees Grooming individual innovations professionals Make the Group more open to diversity Review recruiting strategies Cultivate professionals through work and the expansion of Revise personnel systems individually driven training systems Reform workplace practices Manage employees so that they Corporate philosophy and vision can exercise and contribute their **Values** diverse expertise The basis for managing diverse human resources Promote Kirin Group Vision 2027 and new corporate philosophy Reform organizational culture

The Kirin Group's diversity

Diversity was included under the Group's shared values in Kirin Group Vision 2027. The Group is confident that diversity will be a driver of its efforts to create value in business domains spanning from food and beverages to pharmaceuticals, and to become a global leader in creating shared value. The Group hopes to generate new value and innovations by encouraging open dialogue while accepting internal differences like one's values, sensitivities, and experience, without regard for external characteristics such as gender, nationality, and whether one is abled or disabled. The Kirin Group is promoting changes to its diverse human resources by reviewing recruitment procedures and carrying out organizational reforms of workplace practices. By leveraging these changes, the Group will aim to realize innovations going forward.

The Kirin Group's professionals

Each member of the Kirin Group is committed to working in his or her respective workplace and position, refining individual skills, and pursuing very high standards of expertise in terms of becoming the best in one's occupation and industry. The Group believes that its businesses will be strengthened and a new future will be opened up by having employees voluntarily take on challenges while thinking outside the box. The source of that is the desire by each person to grow. By actively supporting and encouraging employees who maintain a desire to grow and aim higher, regardless of their age, career, or job, and by creating opportunities for them, the Kirin Group is developing human resources who can promote its business.

Two of the Group's initiatives for promoting diversity and professionalism

Helping employees understand challenges faced by working mothers and fathers The Kirin Group has a unique program in which employees who have no children work as if they actually do in order to experience how working mothers and fathers deal with time constraints and child-related emergencies. Through improved individual productivity, awareness of the workplace, and management by superiors, the initiative has helped create an organizational culture that continues to produce results.

Work-abroad program

This program allows young employees to work for a non-profit organization or company in an emerging country. The aim of the program is to develop human resources early on to support CSV management by having them make use of their talents and gain experience in initiatives aimed at solving social problems in emerging and other countries.

Enhancing individual professional capabilities with competency evaluations

Initiatives taken by Kirin Brewery's Marketing Department

Aiming to speed up the development of capabilities by improving the fairness and transparency of employee evaluations

In the Marketing Department, Kirin Brewery has been training personnel and working to create a sustainable system of human resource development in order to improve its organizational marketing capabilities. More recently, Kirin Brewery has been improving training to groom marketing leaders based on the goal of strengthening human resources in its MTBP. Above all, Kirin Brewery has been focusing on competency evaluations.

The most beneficial aspect of a competency evaluation is that it breaks down all of duties required of personnel at the level of specific actions, and clarifies how the performance of those duties is evaluated, thereby improving fairness and transparency. That allows Kirin Brewery to standardize coaching terminology and approaches for helping employees develop and achieve goals. Consequently, the performance indicators required for professional goals and evaluations are laid out clearly for employees, and they become more motivated in their work because they understand the specific goals they need to achieve. It also fosters a spirit of challenge in the workplace and speeds up the development of professional capabilities.

Selecting young employees with necessary competencies—even as a brand manager of flagship products

Another advantage of adopting a competency-based evaluation system is that it gives employees excellent opportunities regardless of their age when they acquire the necessary competencies. For example, the brand manager in charge of the renewed *Kirin Ichiban* and Honkirin brands is aged mid-30s. Such young personnel who have similar lifestyles as Kirin Brewery's customers carry out their duties seriously and with a sense of responsibility for the brand business they are in charge of. That has led to good results.

As another new development, employees are independently starting up exciting projects together. On their own initiative, they are developing the best marketing professionals for Kirin Brewery and improving the collective capabilities of the entire organization.

Employees know what is happening in their respective departments and understand the issues at hand. If they think an issue can be solved through their own professional expertise in marketing, brand business, management, or something else, they actively hold study sessions to share their knowledge and then go about trying to solve it. Kirin Brewery also has leaders who create teams of employees that are struggling, encourage and coach those employees to develop their skills, and lead efforts to solve problems.

By promptly putting the conditions in place for facilitating these kinds of activities, Kirin Brewery intends to continuously develop marketing professionals while helping achieve the performance targets set by the company.

Expanding similar systems group-wide based on the successes at Kirin Brewery

Having consistently achieved success at Kirin Brewery, the Kirin Group plans plan to have its competency management system adopted by the marketing departments of other companies in the Group in the future. By progressively adopting the system group-wide and putting it into practice, the Kirin Group intends intend to continue developing marketing leaders at each group company while meeting the expectations of stakeholders.

We will keep improving the capabilities of marketing personnel so that we can help achieve the Group's goals

By adopting clear indicators of competency, we have implemented a system for fairly and objectively evaluating each employee. As a result, we have fostered workplaces that can take on challenges and created a culture in which employees are highly aware of their work responsibilities. Moreover, marketing personnel have been steadily improving their capabilities. We will continue with these initiatives so that our highly skilled marketing personnel strengthen the company as a whole and help achieve the Kirin Group's goals.

Mitsuharu Yamagata

Senior executive officer and general manager of Marketing Department, Marketing Division, Kirin Brewery