

Message from the Officer—Technology, Intellectual Property, and DX



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Senior Corporate Executive Officer
Assistant to the President
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Transformation (DX) Strategy

We will leverage our technology and drive transformation to continue creating new value.

Using our world-leading technology to deliver solutions to social issues

The Kawasaki Group, under the slogan “Trustworthy Solutions for the Future,” is addressing global social issues, with the Group rallying behind hydrogen-related businesses as a core focus for energy transition.

We began developing hydrogen technologies in 2009, recognizing its potential as a next-generation energy source. While hydrogen first drew attention in Japan for its role in energy security, we greatly accelerated technological development as global interest grew and the push toward carbon neutrality provided strong momentum. Kawasaki was among the first to start building a hydrogen supply chain for production, transportation, storage, and utilization, and the Group has continued to be a leader in the field. We advanced to the demonstration phase for our operating technology in 2020 and are now making the final preparations to start commercial operations as early as 2030. We are also developing hydrogen technologies for the mobility field, including for motorcycles and four-wheelers, ships, aircraft, and railway cars.

The hydrogen-related business is a symbol of the technological value of our operations and is positioned as a growth driver for our global business.

Fusing technologies to innovate social solutions for a flourishing future

Our exploration of new long-term business directions has led us to take on new challenges in food security as well as issues stemming from declining birth rates, aging populations, and shrinking labor forces.

Food security is a critical issue in Japan due to the country’s low level of food self-sufficiency. In 2021, we looked at the fisheries sector and started exploring ways to use our technologies to make a unique contribution. This was far beyond our normal business domain, and the engineer who conceived the project was repeatedly asked what Kawasaki could contribute, to which he responded that it could innovate technologies no other firms could. Using long-developed water treatment and fluid control technologies, we created the MINATOMAE semi-enclosed ocean surface aquaculture system. This highly advanced system achieves the highest fish breeding density in Japan, improves fish quality, and supports sustainable aquaculture. We envision the technologies being a foundation for joint operations with fisheries that can be developed into a Group operation.

Japan is also facing an urgent demographic challenge, as a declining birthrate and aging population are causing labor shortages that could severely impact

socio-economic activity. In response, we are developing social robots that work alongside people to support daily activities, with a focus on medical and nursing care applications. These robots will monitor and interact verbally with patients, while systems of multiple integrated robots are being designed to maintain and improve the quality of nursing care services, reduce the burden on staff, and create comfortable working environments. We are also adding AI to our robot technologies with the aim of developing robots that support activities across all areas of society.

Our development of future-oriented technologies emphasizes both top-down policies and bottom-up initiatives guided by employee input. In October 2025, we established an Innovation Center within the Corporate Technology Division, where discussion meetings on specific themes allow employees to share their ideas and perspectives. We believe this integrated approach and hands-on involvement enhance employee engagement and foster the creation of innovative technologies.

Steadily advancing technological development to fulfill Group Vision 2030

While exploring for new ways to create future value, we are also refining our existing technologies to exploit their deeper potential. The initiatives we are pursuing under Group Vision 2030 are now beginning to yield tangible results.

For example, the technologies we are developing to assist in achieving a carbon neutral society have led to the creation of natural gas turbines that will help in the transition period to becoming a hydrogen society. The turbines accommodate mixed fuel sources so the user can begin using all natural gas then move to a hybrid gas and hydrogen fuel, and ultimately all hydrogen to meet their volume requirements and the needs of their customers. We are also developing CCUS (Carbon dioxide Capture, Utilization, and Storage) technology for commercialization. In collaboration with energy companies, we are conducting practical demonstrations to apply this technology to factory exhaust gases and atmospheric emissions. The core carbon separation and recovery technology used in this process has long been successfully employed in submarines, space stations, and other closed environments.

Another core area we are advancing is autonomous robots and mobility systems that ensure safe and efficient movement of people and goods. The *hinotori*™ Surgical Robot System exemplifies the easy and intuitive operation that the Kawasaki Group’s advanced, high-precision control technologies deliver. We are currently collaborating with a partner to integrate these and our mobility technologies with their AI systems. We see strong potential not only in healthcare and nursing care settings but also in broader applications, such as robot porter systems for

apartment complexes, where robots will become active, familiar elements of everyday life.

Co-creation and collaboration to create value and contribute to society

There is a limit to what we can achieve alone in delivering a continuous flow of new value. In today’s rapidly changing world, co-creation has become increasingly essential, and we are actively engaged in numerous co-creation initiatives in the three focus areas defined in Group Vision 2030. To reinforce these efforts, in November 2024 we created CO-CREATION PARK - KAWARUBA as a social innovation co-creation hub, bringing together diverse people, technologies, and partners with shared aspirations to generate ideas and practical means for real-world social implementation.

In addition, creating new markets through co-creation requires an intellectual property strategy that balances open (standardized) and closed (intellectual property) technologies. While actively sharing a wide range of knowledge and technologies, we also carefully manage and protect the expertise to maintain competitiveness and ensure long-term earnings growth. This shift in mindset has altered our approach to technology development. Rather than focusing solely on presenting completed products, we now engage in continuous dialogue with users from the early stages and incorporate their input to guide the development processes and direction.

Co-creation with external partners is a driving force behind the creation of new businesses and a valuable opportunity for our employees to learn and expand their perspectives. Exposure to diverse viewpoints and expertise fosters personal growth and energizes the entire organization. We are open to embracing a wide range of knowledge and technologies, and aim to integrate our strengths with those of our partners.

My role is to identify markets, potential users, and shifts in their trends, and to formulate clear strategies and chart direction while carefully exploring new innovations and exploiting our existing technologies. We are committed to contributing to society by delivering new value, now and in the future.

Technology, Intellectual Property, and DX Strategies

Process Innovation Throughout the Value Chain to Achieve High-Quality and Efficient Manufacturing

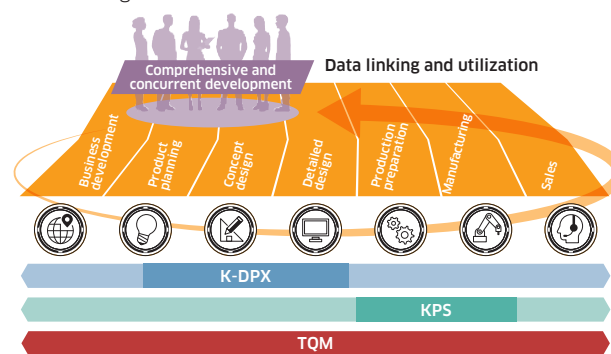
Based on our mission of Total Quality Management (TQM), Kawasaki is implementing process innovation throughout the entire value chain, targeting the series of business processes from product planning to service provision. Through this initiative, we aim to create systems that can respond flexibly and quickly to both societal changes and diversifying needs and to build a robust business foundation that can continuously provide value.

In development and design in particular, Kawasaki is standardizing and enhancing business operations through an internal initiative known as Kawasaki Design Process Transformation (K-DPX). We are systematically leveraging the wealth of knowledge and experience that we have accumulated within the Company to prevent errors in the design stage and actively introducing digital engineering to improve the efficiency and quality of design operations.

In addition, we are developing a data integration platform that connects the entire value chain and conducting “comprehensive and concurrent development” activities to meticulously create products and services that precisely capture the needs of society and customers from the initial stages of development. Through comprehensive

implementation of these measures and Kawasaki Production System (KPS) activities intended to thoroughly eliminate waste, we are preventing reworking that is likely to occur during design and manufacturing processes and achieving high-quality and efficient manufacturing.

Process innovation throughout the entire value chain leads to improvement in product and service quality as well as enhanced operational quality and efficiency and contributes to the development of an organizational character that is resilient to changes in the management environment.



Comments from a project staff member

Since around 2015, we have been conducting the visualization and verbalization of knowledge and experience that previously was difficult to share as tacit knowledge with the objective of achieving the succession of technology and improvement in design quality. Later, we expanded this into a cross-functional program across all design departments in the Group in the form of K-DPX activities and evolved this into business innovation activities, such as standardization through the formulation of development and design guidelines and sophistication of development and design processes through data coordination and utilization throughout the entire value chain, contributing to strengthening the foundations of product development.

In the future, we will enhance product development even further by using advanced digital technologies and AI and contribute to improving the QCD (quality, cost, delivery) of the Company's products through TQM, KPS, and linked process engineering activities.



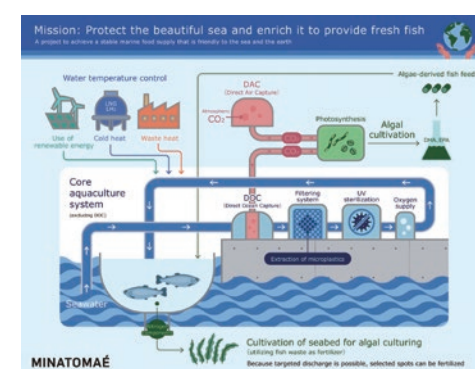
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MINATOMAE Brings Together Technical Capabilities Across Specialized Fields

To solve food problems, Kawasaki brought together its technological capabilities and developed a sustainable aquaculture system. We utilize water treatment technologies related to filtration and sterilization created through plant development as well as fluid control expertise acquired through the development of marine vessels, marine machinery, and railcars. We adopted a semi-closed containment aquaculture technology framework that is less susceptible to external factors, such as red tide, pathogens, and water temperature changes, enabling aquaculture in port and coastal areas near consumer markets and distribution centers, thereby enabling the provision of food safety, security, and delicious products to consumers. We received support from Maruha Nichiro Corporation regarding fish cultivation and distribution and conducted a trout

salmon cultivation trial in the sea near the Port of Kobe (by Kawasaki's Kobe Works) from January to April 2025.

Conceptual Diagram of the MINATOMAE System



DX Activities Achieve Work with Joy–Kawasaki

As a part of Kawasaki DX, which is being promoted with the objectives of reforming our business models and achieving process innovation, in early fiscal 2024 we formulated the DX Vision, which expresses how employees can demonstrate high productivity and creativity.

We defined “Joy@Kawasaki” as its purpose and aim to achieve “Work with Joy–Kawasaki,” a status where all employees feel that their work is rewarding, through the use of digital technologies.

We are taking action with “bringing focus and generosity to all employees through the power of digital technology and achieving growth and transformation” as the mission of the DX Strategy Division to promote DX in three areas–Reformation, Optimization, and Innovation—as organized in the diagram below.



Comments from a project staff member

We are actively using AI in various areas of internal operations based on the DX Vision. In addition to introducing AI to routine work such as preparing meeting minutes, the use of AI has been expanded to work that requires specialized skills such as marketing. The objective is to increase operational efficiency and create generosity through cooperation between humans and AI, thereby achieving “Work with Joy–Kawasaki.”

We are also preparing a curriculum that uses my business experience at other company with the aims of enhancing IT literacy and developing DX promotion human resources. The curriculum incorporates content to further accelerate the utilization of AI, and we seek to create an environment for improving operational efficiency and creating new business, contributing even more to the Company's growth.

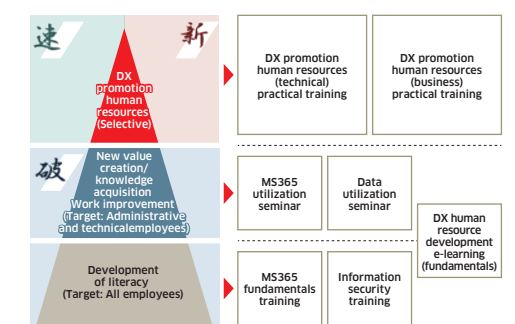


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While completely transforming the IT environment, we are focusing our efforts on developing DX human resources. We first conduct IT literacy training and seek to enable all employees to fully utilize the IT environment including AI. We conducted courses including Microsoft 365 fundamentals training and information security training, and more than 10,000 administrative and technical employees in Japan have completed training.

We are also taking action to accelerate human resource development by offering a DX Human Resource Development e-Learning (Fundamentals) course with a target of having 4,000 employees participate in fiscal 2025. In addition, we are advancing the selective training concept for developing advanced DX human resources and will conduct courses in the second half of fiscal 2025.

Measures for developing DX human resources



Seeking to Create Markets Through Multifaceted Rule-Making Activities

Kawasaki is developing technologies and conducting intellectual property activities to ensure its technological superiority in hydrogen supply chain related equipment and is collaborating with various industry organizations and other parties to revise international rules, create international standards, and amend domestic laws and regulations with the objective of creating markets.

For example, the International Organization for Standardization (ISO) issued a standard specifying safety requirements, inspection and testing procedures, and other matters proposed by a body in which the Company participates regarding loading arms, a type of equipment

that is used to transfer necessary hydrogen to ships at cargo handling bases. We also participate in discussions on measures for promoting the widespread adoption of hydrogen, such as demand creation and deregulation, through the organized activities of the Japan Hydrogen Association and other public-private collaborative bodies.

Kawasaki has been recognized for these activities and was selected as a “company actively participating in multi-faceted rule-making” in the survey on attitudes regarding corporate activities for solving social issues conducted by the Ministry of Economy, Trade and Industry.