

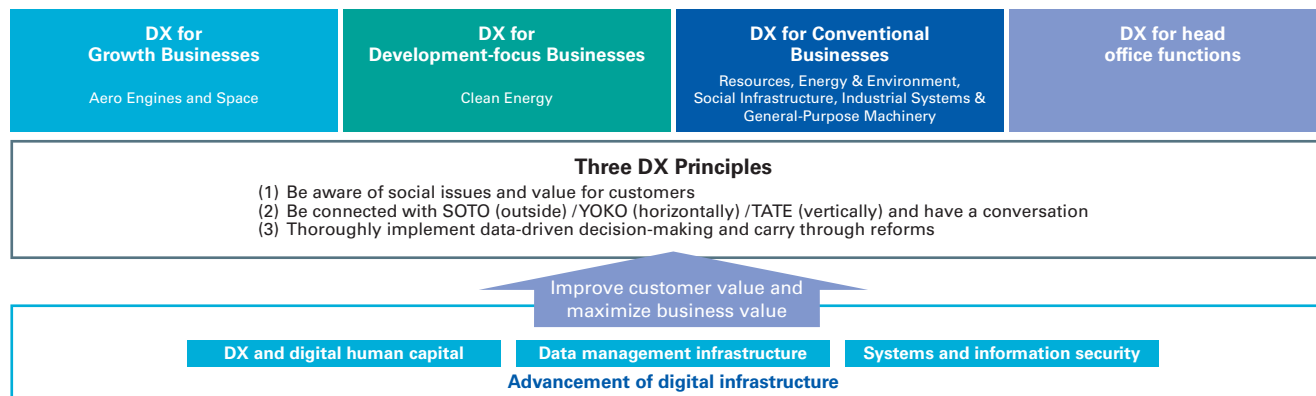
DX Strategy

We will drive sustainable growth through the advancement of digital infrastructure and decisive reallocation of management resources.

Importance of digital technologies in creating value chains— Transforming our business processes

In line with the “business transformation to achieve strong sustainable growth” outlined in the “Group Management Policies 2023,” we are undertaking reforms across our Growth, Development-focus, and Conventional Businesses by reassessing production efficiency and business structures, as well as optimizing inventories to improve cash generation. In support of this transformation across the IHI Group and to achieve greater efficiency, we are working to establish optimized systems as the Group. To do so, it is necessary to revise legacy business methods and simplify rules.

To realize these objectives, we are promoting “advancement of digital infrastructure.” Legacy systems have been developed over many years to digitize individual tasks, leading to duplicated functions and other complexities that hinder the full application of modern digital technologies. Looking ahead five years, our aim is to establish a unified infrastructure system designed as it ought to be, building a digitally integrated foundation optimized for effective data utilization. Achieving this goal requires ensuring both robust information security and the availability of data in a format that is easily usable. To that end, we are undertaking a comprehensive initiative to establish a data management infrastructure. As an essential effort in this area, we have also set



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“developing/strengthening of DX and digital human capital” as a key milestone.

The Three DX Principles (“Be aware of social issues and value for customers”; “Be connected with SOTO (outside) / YOKO (horizontally) / TATE (vertically) and have a conversation”; and “Thoroughly implement data-driven decision-making and carry through reforms”), which were formulated in fiscal 2022, are important guidelines for achieving transformation. Resolving social issues is not something a single company can achieve on its own; such outcomes can only come from collaboration with diverse organizations, each contributing expertise in pursuit of shared goals. To play our part, we must apply our strengths to also enhance our own value. We will establish a digital infrastructure to convert and share our long-accumulated manufacturing industry knowledge as data, thereby enabling smoother business transformation.

Digital strategy deployment in Growth, Development-focus, and Conventional businesses—Transformation of unique business processes and products

Growth Businesses

Within our Growth Businesses, we have established the Transformation Center to lead fundamental reform of production efficiency and business structures. This center

DX Strategy

seeks to achieve world-class production performance through maximum utilization of digital technology and is promoting four integrated initiatives: business structure reforms (including comprehensive ERP* upgrading), development process reforms (via model-based systems engineering), carbon neutrality (by reducing CO₂ emissions), and production efficiency reforms (aimed at achieving zero-defect quality). Efforts to reduce inventories as part of the production efficiency initiative have already delivered several billion yen in improvements, with tangible results beginning to emerge.

* Enterprise resource planning

Development-focus Businesses

In the Development-focus Businesses, we are working to increase the value of the entire ammonia value chain. Within this, to increase the value and applicability of green ammonia, we are collaborating with external partners to build a platform that visualizes CO₂ emissions from production to usage by leveraging blockchain technology.

Conventional Businesses

In our Conventional Businesses, we are reforming our work processes using digital technologies to leverage and evolve the lifecycle businesses (LCBs). These efforts aim to bring greater customer success and expedite delivery timelines, thereby resolving customer challenges throughout the product lifecycle.

One such initiative involves developing technologies and products to address issues such as flooding. By gathering and analyzing data on weather, river levels, and water gate operation records, the project seeks to

automate gate operations that previously depended on human experience and intuition, thereby mitigating flood risk and streamlining water usage for agriculture.

In parallel, as part of our LCB initiatives for various power plant types, we are developing systems to detect anomalies by collecting and analyzing operational data. By shifting from manual to digital management of power generation facilities, we aim to secure safe and stable operations.

Proactive use of generative AI

To support these transformations, we are actively introducing generative AI, including large language models (LLMs), while implementing safeguards against risks such as information leaks. In June 2023, ChatGPT was made available to IHI Group employees. Use of generative AI in drafting and summarizing documents is spreading across the Group and is estimated to be delivering efficiencies equivalent to over 270 full-time employees.

Going forward, we plan to further apply internal data to enable comprehensive use of generative AI in reforming work processes such as engineering chains. Our roadmap for expanding the use of LLMs consists of three steps: use of public LLMs for business tasks, integration with internal data, and the development of LLM systems tailored to individual business areas.

The future of our digital strategy

As we approach the final year of the “Group Management Policies 2023” and look ahead to our next management policies, the IHI Group will continue to promote initiatives that digitally accelerate transformation toward the creation of value chains.

In support of these efforts, we must cultivate human capital who understand digital transformation, lead transformation initiatives, and use digital technology to foster new value. To do this, it is essential that we cultivate DX human capital (in the Management Field) and digital human capital (in the Professional Field). Through measures such as educational programs for senior management candidates, data scientist training, AI contests, and DX leadership activities, we will develop DX promotion leaders and human capital with specialized skills, while also providing DX literacy education for all employees to build a system that enables the entire organization to adapt to digital transformation.

Through these efforts, we aim to build a sustainable business model to solve social issues and contribute to the future as a leader in value creation for the next generation.

DX and digital human capital in the IHI Group

