

## The Hakuodo DY Group's Technology Strategy



By combining creativity and advanced technology, we create value for society, companies, and *sei-katsu-sha*.

Motohiro Ando

Director & Senior Corporate Officer  
CTO

### Aiming for the Hakuodo DY Group to Become Known as a Company That Excels at Technology

The Group's scope of business extends beyond traditional advertising and marketing to encompass the provision of solutions to overall business challenges and even social

issues as a management partner to our clients. This expansion is driven by the digitalization of everyday life. In advertising and marketing, we have been quick to develop and implement technologies that securely link and utilize *sei-katsu-sha* data that we have accumulated over the years, as well as our clients' customer and sales data, and data related to media and marketing. We are actively implementing our

core Advertising as a Service (AaaS) offering, which has earned industry recognition for its cutting-edge nature. Furthermore, digital technology plays a significant role in addressing our clients' business challenges and societal issues. We are committed to developing and delivering unique solutions that combine creativity and technology, based on our distinctive strength in *Sei-katsu-sha* Insight.

As chief technology officer (CTO), my goal is for the Hakuodo DY Group to be recognized as a company that excels in technology not only in the advertising industry but throughout society. We aim to enhance the Group's technological capabilities and establish a top-class presence as a partner for our clients' businesses, just as we do in the advertising and marketing domains.

### A Groupwide Focus on Generative AI

The Group is actively focused on initiatives related to the emerging field of generative artificial intelligence (AI). We have dedicated Groupwide efforts to leverage AI and other technologies to pursue efficiencies and develop innovative research, products, and solutions that captivate the hearts of *sei-katsu-sha*. Our cross-functional research and development team at Creative technology lab beat, which was established in 2022, plays a central role in this endeavor. In advertising production, we have developed and are using on-site a platform that facilitates digital creative planning, generation, and evaluation. In addition, we are working to develop AI products that support creative workflow processes in areas such as branding, web design, video production, and customer relationship management (CRM), and we are planning support solutions using large language models (LLMs).

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Whereas conventional AI uses existing data to recognize, identify, classify, and predict, the distinguishing feature of generative AI is its ability to learn patterns from data and essentially create something out of nothing. The utilization of generative AI serves two main purposes: streamlining business operations, and enhancing and expanding services. In the second area, enhancing and expanding services, in particular, our unique strength of *Sei-katsu-sha* Insight is pivotal. The concept behind our efforts to promote the development and utilization of generative AI is that technology will stimulate people to exhibit creativity in entirely new ways. In other words, we believe generative AI will spawn the “co-creation of technology and human creativity.”

### Actively Engaging in Alliances with External Organizations

In addition to our own developments in the rapidly changing technological domains of Web3, non-fungible tokens (NFTs), cross reality (XR), and the metaverse, we are actively engaged in alliances with startup companies and research institutions with advanced technologies.

#### ▶ The Web3 Domain

Web3, which is gaining attention as the next generation of the internet, has evolved into a world where users themselves manage and share data using blockchain and other decentralized technologies. The vision of HAKUHODO KEY3 INC. is to “create a globally renowned Web3 service originating in Japan.” In addition to planning and operating Web3 hackathons, the company provides wappa, a data wallet service

for companies, and the KEY3 STUDIO service, which serves as a hub for large companies and Web3-related startups.



#### ▶ The NFT Domain

NFTs are digitally created, unique, and non-fungible data built on blockchain technology that proves the data's originality and scarcity. Since 2022, the MIRAI Business Division has offered PLAY THE PLAY, an NFT content issuance platform designed to enhance fan engagement with professional sports. The platform transforms video footage owned by sports organizations and broadcasting stations into NFTs. Through this platform, we provide fans with high scarcity items such as merchandise and trading cards.

#### ▶ The XR and Metaverse Domains

In the XR and metaverse domains, technology utilization and social implementation experiments are underway to expand real-world experiences and design experiences that connect virtual and physical spaces. HAKUHODO Technologies Inc. is working to realize a unique avatar service platform concept. The platform will enable users to







generate 3D avatars of themselves and create character-based avatars that express their own values and worldviews, and make the provision of services using multiple avatars possible. As an advanced example of utilizing 3D avatars, the Hakuholdo Group generates 3D avatars for employees as part of their regular health examinations. These avatars can then serve as personal trainers, helping to visualize a desired body shape and providing guidance on exercises and improvements to support each employee's health.

Meanwhile, D.A.Consortium Inc. has established ARROVA Inc., a media company specializing in the metaverse domain. ARROVA envisions game platforms and such XR categories as augmented and virtual reality as a new media domain: immersive media. ARROVA will develop media products and provide advertising services that utilize 3D spaces. ARROVA already has a robust track record placing advertisements in the spaces it has developed and sold. The company also offers consulting on service and content development involving XR technology and the metaverse domain.



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ARROVA Business Overview

Consulting Planning	Service/Content Development	Advertising Product Development	Sales of Advertising Products	Tie-up Collaborations	Branded Content Production	Secondary Distribution
						
Strategic planning for operators/advertisers in the gaming/XR domain	Design, development and support of services/content using games/XR	Development and installation of ad spaces in game spaces using plug-in tools  Development of advertising products using games/XR	Sales of performance-based advertising products that can be distributed across multiple game spaces	Provision of collaborations with major games with over 1 million monthly active users	Creation and operation of original branded games on large platforms such as Fortnite and Animal Crossing: New Horizons  Creation of AR-based interactive and operable advertising content	Planning of e-Sports tournaments, providing packaged products linked to TV, etc.

Differentiating Ourselves with Privacy Technology

The Hakuholdo DY Group is a technology leader in the area of privacy technology. *Sei-katsu-sha's* attitudes to privacy are changing while regulations and requirements surrounding privacy protection are growing more stringent, such as with Japan's Act on the Protection of Personal Information and regulations on third-party cookies. The use of first-party data has become an important theme in corporate marketing activities, but using such data involves the handling of personal information, which carries risks. Companies need data fusion technologies that process such data in ways that

ensure compliance and prevent the identification of individuals, and combine and utilize it. The Group has many years of experience in the development, improvement, and implementation of technologies for the secure utilization of data. We take pride in these initiatives, which we believe are top-class in the marketing industry. The Group has also earned a solid reputation for technologies and knowledge that elevate marketing by combining sales, customer, and other data of the client with our own extensive data on *sei-katsu-sha* attitudes and behavior, as well as media and market data. This allows us to differentiate ourselves from other companies.

The Group has accumulated data integration technologies that balance privacy protection and *sei-katsu-sha*

convenience, to allow for the appropriate utilization of data. These technologies have generated more than 10 patents to date. To enhance secure computation technology, we have partnered with Acompany Co., Ltd., a pioneer in the field. We are also conducting industry-wide technological research with platform operators, data holders and others to study what constitutes optimal consent for *sei-katsu-sha*. We will continue moving forward with technological developments centered on creating value for *sei-katsu-sha*.

Pursuing Technologies That Create Value Between Companies and *Sei-katsu-sha*

When developing and utilizing advanced technology, in addition to creating services and solutions that are technology-driven and convenient, we seek to create new value that is shared between businesses and *sei-katsu-sha* through the appropriate utilization of technology. We do not see technology merely as something for individuals to use for their own convenience. Humans have the ability to awaken and evolve new capabilities through the technologies they create. This relationship between people and technology is long-standing, and society and technology have a reciprocal nature. As a company that embraces *Sei-katsu-sha* Insight as a policy, we are committed to advancing cutting-edge technologies that harness human creativity. Our aim is to make Hakuholdo DY a unique technology brand in the global market.