

# Strengthening management underpinnings

## Strengthening management underpinnings

We are transforming and repositioning ourselves from office automation equipment manufacturing to becoming a digital services company. The mass production and consumption era necessitated efficient manufacturing while retaining consistently high quality.

In today's more information-intensive world, decisions are on smaller scales, and business moves faster.

For example, it used to be important for employees to perform specific roles along the value chain. In the years ahead, workers would ideally take the initiative to identify and resolve issues. The skills needed in the new world of work differ from those required traditionally. A steady evolution in human capital is therefore important.

To support this evolution, we are (A) providing training and hiring digital professionals, in addition to (B) adopting a Ricoh-style job-based personnel structure in Japan that gives employees greater autonomy. We are also (C) upgrading about 70% of enterprise systems.

## Significance of robust digital services company infrastructure

Steadily transform human capital through a robust management infrastructure to become a digital services company

| Office equipment manufacturer work approach   |   | Digital services company work approach  |
|---|---|---|
| Deliver world-class products and services developed in-house                          | Bolstering<br>management<br>infrastructure<br>to transform<br>human capital | Create and deliver value to customers as directly as possible                         |
| People perform assigned roles along the value chain                                   |   | Leverage teamwork in which workers take the initiative to identify and resolve issues |
| Employees trained as needed for their positions and fields                            |   | Provide opportunities for growth so people realize their potential                    |
| Systems optimized for relevant regions and fields combined with those needed globally |   | Give workers open access to information and data                                      |

- (A) Cultivate and acquire digital professionals
- (B) Encourage employee initiative by adopting a Ricoh-style job-based personnel structure
- (C) Upgrade around 70% of internal systems by migrating enterprise systems to the cloud Other plans and implementation include visualizing employee skills, building a business database, internally adopting digital processes, and upskilling employees

## Strategies to foster self-motivated employees and help them succeed

Transformation from an office automation manufacturer to a digital services company requires a change in mindset and skills. Accordingly, it is vital to encourage adherence to the Ricoh Way, which champions customer-centricity and innovation and empowers employees to upskill. In Japan, we deployed a Ricoh-style job-based personnel system in April 2022 to encourage self-starters who have refined their capabilities to pursue new challenges. We are also visualizing the requirements and skill levels of the digital experts we need to become a digital services company, and are developing and attracting such people.

## Workstyle at a digital services company

The notions of disrupting the status quo and applying digital tools in work are the twin foundations for leveraging digital technology to increase creativity and thereby foster autonomy. Remote work became the norm amid the pandemic. Having people manage their own work performances in this environment was the first step toward their autonomy. We are focusing on team productivity and creating new norms of communicating, conducting business, and becoming more productive.

The roles of supervisors must accordingly focus away from administration and controls to helping employees take the initiative to think and act.

## Message from the Chief Human Resources Officer



One of our biggest strengths is the direct connection between how our people work and our services to customers. Our HR mission is to create and maintain work environments where employees can pursue digital innovations and find fulfillment from work for themselves and our customers. This

environment comprises three elements—people, corporate culture, and systems and frameworks—all of which relate closely to human resources policies. Consistently and reliably implementing policies for each of those elements will accelerate our transformation into a digital services company. We will need to shift from manufacturing-oriented training to cultivating digital professionals who can create new businesses. The corporate culture must change from a pyramidstyle organization based on unification and control of decision-making to an externally focused culture that champions diversity and self-motivation. That is because it is vital to respond swiftly to dramatic market changes. We transitioned our personnel system from emphasizing functional classifications and experience to a job-based setup that puts the right people in the right positions. We have adopted a hybrid work model. We are continuing to change and evolve our human resources approach.

Embracing the challenges of change offers new opportunities for us to build a far more robust organization and leadership and better execute our corporate strategies.

Our corporate goal is to help customers achieve fulfillment through work. Such satisfaction comes from unleashing creativity. Our digital services liberate people from tedious tasks and empower them to be creative. The keys to inventiveness

and generating new value are work environments that enable diversity to flourish and corporate cultures that allow everyone to unhesitatingly express their ideas.

## Ricoh-style job-based personnel system

We adopted this system in Japan in April 2022 to enable employees to enhance their skills to keep pace with constantly changing market needs in providing digital services and encourage particularly talented employees to shine. Some Japan-based Group companies plan to also roll out such a system by April 2023.

This is called "Ricoh-style" because it augments conventional job-based setups with flexible company-requested personnel transfers and fosters personnel development inhouse over the medium to long term.

The goals of this system are: first is to flexibly place the

right people in the right positions based on ability and motivation, and second is to offer performance-based remuneration. The third is to provide career paths for employees based on expertise, regardless of their job position.

After clarifying the positions needed to reach organizational objectives, we assign the most suitable people to them. We evaluate and promote them according to their ability to undertake challenges and the extent to which they contribute to the organization. By clarifying the roles and responsibilities of the positions, employees can consider their career and take selfmotivated action to acquire the necessary skills and abilities.

## Strengthening our digital professional workforce

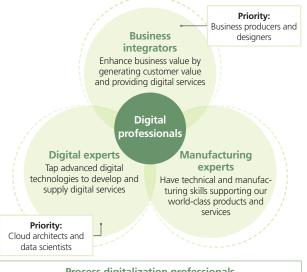
We define digital professionals as those who can use digital technology and data to create and accelerate our digital services. Digital professionals include business integrators and digital and manufacturing experts. We particularly aim to strengthen the digital proficiency of business producers and designers, cloud architects, and data scientists.

By continuing to upskill people to become digital professionals, all employees will be able to identify issues and stay close to customers, providing optimal solutions that draw on our unique technological capabilities. We established the Ricoh Digital Academy in April 2022 as a training platform.

We initiated process digitalization in fiscal 2018 to resolve issues discovered by analyzing our business practices. The Ricoh Digital Academy is rolling out process digitalization training to all Group employees.

#### Our digital professionals

Harness digital technology and data to create and accelerate our digital services



**Process digitalization professionals** 

Fully understand business processes and draw on the analysis of facts and data to spearhead optimal problem solving

## **Customer success-centric digital strategies**

We create a specialized structure to propel and implement digital strategies and optimize groupwide synergies.

Message from the Chief Digital Innovation Officer

Ricoh is becoming a digital services company that transforms how people work by focusing on customer success as we stay close to customers. We will use digital technology and data to provide a co-creation platform, which generates value by connecting RICOH Smart Integration (RSI) and customers. RSI connects workplaces, supports workers' creativity, produces new value, and fulfills our commitment to driving sustainability.

## Digital strategy direction

We are striving to attain our vision of Fulfillment through Work by pursuing a digital strategy to automate routine tasks, so people can focus on more creative work.

We must accordingly keep transforming our business processes and have established five key elements for accelerating our transformation.

The Ricoh Digital Academy reinforces digital professional development groupwide to support that transformation. We are creating the environment to maximize the value of our people.

In addition, we are moving forward with cloud migration, data infrastructure construction, and utilization, including updating legacy systems.

As well as strengthening this infrastructure, we are transforming back-office tasks at production and development sites by leveraging robotic process automation and artificial intelligence



technologies based on our operational excellence strategy • to streamline operations and enhance productivity.

We are bolstering existing businesses and generating new customer value by focusing on success for our customers. We will use a co-creation platform to produce solutions using digital technology and data, covering everything from issue discovery to resolution.

The Ministry of Economy, Trade and Industry, and the Tokyo Stock Exchange recognized our efforts in this regard by selecting us as one of the Digital Transformation Stocks 2022. We will keep progressing with our digital strategy.

Five key elements for accelerating transformation

4 Internal process transformation

Optimize workflows and establish new work practices that tap digital technology

- (1) Innovate processes based on data usage and business visualization (2) Develop business savvy digital human resources through in-house implementations with business tasks and who use digital technology
- 1 Corporate culture and human resources
- Transform Group employee mindsets and corporate culture and cultivate digital professionals
- (1) Maximize value of human resources through Ricoh Digital Academy
- (2) Increase design thinking and agility uptake
- 2 Digital infrastructure

Integrate and develop common infrastructure for IT, RSI, and AI and information and communications technology to materialize a co-creation platform

- (1) Upgrade Group IT infrastructure
- (2) Strengthen and employ RSI platform for digital services in each business
- (3) Reinforce information security

5 Customer value creation

Generate customer value by using digital technology and data

- (1) Reorganize value creation process and foster its usage while amassing success stories
  (2) Develop and implement mechanisms to
- accelerate co-creation
- 3 Data utilization

Help customers succeed by maximizing data usage

- (1) Prepare common master data and build data usage environments
- (2) Amass and use data by adopting digital office and frontlines processes

- For more information, refer to the following pages:
- Operational excellence strategy for implementing process digitalization in-house P. 31
   Digital Transformation Stocks 2022 P. 92

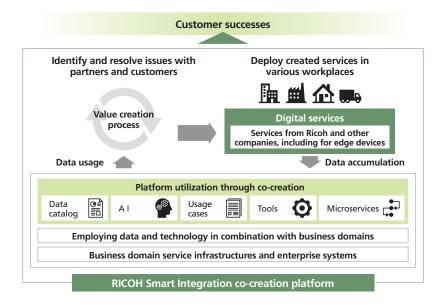
## Ricoh's co-creation platform RICOH Smart Integration

We have set a goal for digital services to account for 60% of sales by fiscal 2025, by providing digital services that identify and resolve workplace issues at offices, frontlines and society. RSI will play a pivotal role in reaching that target by enabling us to use digital technology and data to create new value with customers and partners.

To date, we have primarily used RSI to connect MFPs and applications and digitize paper. Thus, we can link with customers' mission-critical systems and service infrastructures

to help reduce manual tasks by automating document handling workflows.

We will extend our office value proposition to frontlines and society and co-create with partners and customers. RICOH BUSINESS INNOVATION LOUNGE Tokyo is a place where Ricoh Group's digital services and customers' insights and ideas are fused to create new value. Customers from the private and public sectors use this venue, expanding our partnerships and providing more co-creation opportunities.



We resolve issues by remaining close to our customers, combining edge devices and services that draw on the strengths of our partners and Ricoh. We accelerate our value creation process cycle by using RICOH Smart Integration to maintain and enhance our data catalog, artificial intelligence, usage cases, tools, and microservices.

Through trial and error, we create more digital services, producing service menus that we deploy in customer workplaces.

By reusing data that RSI accumulates, we will build a circular data ecosystem that gives it more value and promotes data utilization.

## Artificial Intelligence: focus on technology enhancement

Artificial intelligence is one of the priority technologies we identified to resolve customer workplace issues. We established a specialist unit in 2017 to train experts in this field and develop offerings such as AI for Business. This service uses proprietary natural language processing AI to support business operations.

We also deployed AI at toner plants to automate processes and improve quality, leading to higher employee satisfaction.

The pandemic made it hard for our real estate customers to serve their clients face-to-face and for construction sector customers to go to work sites. We set about creating customer value by combining images captured using our RICOH THETA 360° camera with our proprietary image correction, video generation, automatic computer graphics placement, and other AI functions so that customers could tour properties or check construction progress online.

We analyze and employ secondary usage of their data collected through this effort, leading to customer success.

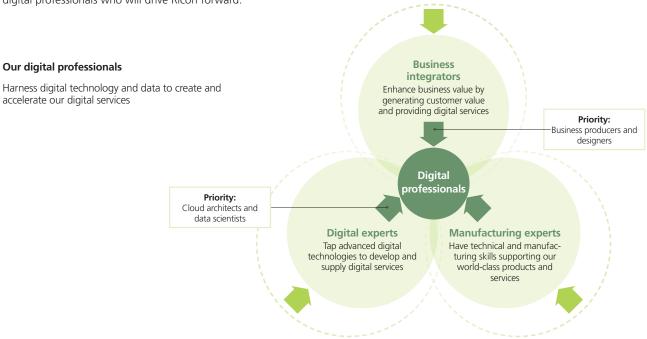
## Developing digital professionals to support transformation

Ricoh's transformation into a digital services company will depend on employees keeping up the effort to acquire knowledge. It will also be essential for us to draw on a human capital management approach that continues creating work environments that maximize the value of our people.

The Ricoh Digital Academy helps employees draw on their strengths and experiences and improve their skills to become digital professionals who will drive Ricoh forward.

To date, most employees have simply taken managementdirected training courses.

The academy enables these people to take the initiative to refine their skills that will help identify and resolve specific customer issues.



## Ricoh digital academy

We are empowering employees to upskill and enhance their digital knowledge.

| Proficiency level                    | Eligibility                 | Goals  |  |
|--------------------------------------|-----------------------------|--|--|
| Enhancing Professional<br>Competence | Selected employees          | Further develop employees with digital expertise to create digital services                        |  |
| Digital Knowledge                    | Optional for all employees  | Offer wide variety of courses for all employees to acquire digital technology skills and use data. |  |
| Digital Literacy                     | Mandatory for all employees | Encourage employees to undertake continuous learning   |  |

## Instilling and practicing design thinking and agile methods

It is vital to instill and practice design thinking and agile approaches to join with customers in exploring issues, identifying what is valuable for them, and helping them succeed. We will foster a corporate culture in which all employees can leverage design thinking to identify and swiftly address customer needs. The Ricoh Digital Academy offers a range of training programs and workshops for that purpose.

We launched the Design Thinking and Agility for All community to help employees who have studied at the Ricoh Digital Academy apply their knowledge in the frontlines. The

community is open to anyone at any skill level. It conducts regular workshops and events. Many participants share their issues with each other, solve them one by one, thus improving their productivity and cementing connections with colleagues.

We disseminate examples of our successful and unsuccessful initiatives, both internally and externally, employees understand the benefits of design thinking and agility for their work and personal growth and encourages interested outsiders to join our community.

## Strengthening IT infrastructures to support a digital services company

We will upgrade around 70% of our enterprise systems, migrating some to the cloud, to ensure IT mobility and optimize costs. We are pursuing data-driven management, including building a shared global database management infrastructure.

#### Direction of core systems renewal

#### Cloud migration led by global Headquarters (laaS)

- Migrate 180 enterprise systems, or 54%, to the cloud
- Establish dedicated organization to operate hybrid cloud/ on-premise environment

#### Business innovation through collaboration of business units and global Headquarters IT (SaaS/PaaS)

Renew legacy systems running last 10 years or longer to cloud package (by the end of 2026)

- Overseas: Shifting existing on-premises ERPs to cloud package
- Japan: Forming policies to integrate towards company structure

#### **Data-driven management initiatives**

#### **Build shared global database**

• Build data lake and warehouse infrastructure for global, real-time collaboration

#### Standardize and automate handling master data

- Globally standardize product and customer data masters
- Automate product launch process

## Organize information for ROIC management

• Eight financial key performance indicators linked to measures

#### Centralize and leverage customer data for growth

• Implement artificial intelligence-based recommendation functions

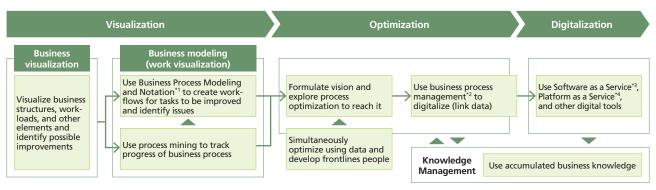
## Operational excellence strategy for implementing process digitalization in-house

Process optimization and digital technology are essential for operational excellence. We are deploying this process of digital transformation in-house.

## Implementing process digital transformation in-house

We formulated a policy of transforming entire processes, not just parts of them, to attain operational excellence. We defined a template for more routine and efficient process digitalization and effectively visualize and optimize operations and processes using digital technology. We are cultivating people who can lead these activities.

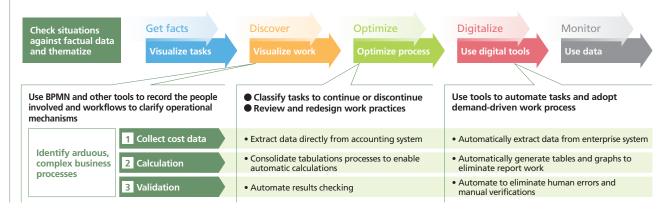
We will manage business processes by enhancing our models, standardizing processes, and building our knowledge base.



- \*1 Business Process Modeling and Notation conforms with ISO 19510, an international standard.
- \*2 Business process management identifies and constantly improves the processes companies use to do business.
- \*3 Software as a Service is a model for supplying software through the cloud.
- \*4 Platform as a Service is a model for supplying servers, operating systems, and middleware needed for applications to run on the cloud.

## Case study | Improving expense calculations process

An area targeted for back-office improvement was expense calculations. There were multiple conflicting procedures with various staff responsible for different areas. Calculating expenses required manually-intensive collecting, integrating, and processing data from each site. We reviewed each process and established an optimal flow, enabling us to create an optimal system so that actual expenses could be reported to each department accurately and timely with much less effort.



## Technology and intellectual property strategies that create new customer value

We allocate around ¥100 billion yearly to R&D to build tomorrow's businesses. In becoming a digital services company, we will focus on developing technologies to create digital services and unique edge device technologies that underpin those services.

## **Technology development efforts**

In fiscal 2021, we adopted a business unit structure to consolidate and employ resources according to customer and product categories. We accordingly have changed our R&D structure to one in which each business unit oversees everything from medium- to long-term research through prevailing current product development, design, and production.

The role of Group headquarters is to provide digital services that enable customers to employ new work practices. We established the Advanced Technology Center and the Digital Strategy Department. The Advanced Technology Center focuses on human digital twin and industrial digital printing systems technologies.

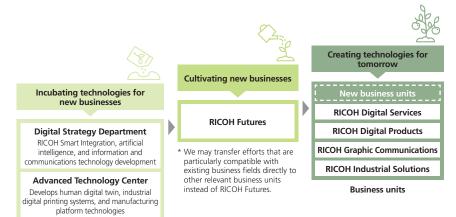
Human digital twin technology captures and converts emotions and other data in addition to the five senses, and uses recognition and AI technologies to systematize actions and thoughts. By linking this digital twin setup to workflows, we seek to maximize worker creativity.

Industrial digital printing systems use inkjets to form a variety of functional materials, such as metallic and ceramic materials and even cells. This technology digitalizes manufacturing while enabling production processes that eliminate waste, conserve energy, or otherwise help resolve social issues.

> The Digital Strategy Department conducts R&D on AI and information and communication technologies that support our RICOH Smart Integration co-creation platform and digital infrastructure technologies for work.

We have strengthened our development structure by tasking RICOH Futures to create new businesses for Group headquarters to incubate.

We established the Technology Expertise Committee, whose members exchange ideas beyond their focus areas to cultivate technical professionals and bolster their capabilities.



## Intellectual property initiatives

**Group Headquarters** 

With the transition to a business unit structure, we reorganized our intellectual property functions. The IP functions of business units are to formulate and implement specifically optimized strategies. At Group headquarters, the focus is on bolstering governance and frontline IP activities by formulating relevant companywide strategies and providing related inhouse services to business units. The CTO oversees these activities, which management and the Board of Directors decide on in meetings for management implementation.

We have established two areas where we are reinforcing our

IP strategy. One is digital services, for which we need to create and employ IP for innovations we pursue by co-creating and collaborating with diverse stakeholders in countries where we do business. To do this with a higher precision, we are enhancing information analysis and undertaking IP efforts that lead to very valuable patents.

The other area is edge devices, for which we use patents and expertise to protect our technological strengths, particularly for the core technologies we amassed over the years. Such efforts help us to maintain and enhance our competitive lead.