# **Imaging Solutions Business**

#### Message from the Lead Officer



#### Yusuke Yoshimura Senior Vice President & Executive Officer Imaging Solutions Business

To continue to meet our customers' desires to "see", which is our Company's DNA, we have integrated five businesses (healthcare, imaging-IoT solutions, visual solutions, QOL solutions, and FORXAI) that provide value through "imaging data x AI", starting from our core technologies, as the Imaging Solutions Business. Under our long-term vision "Imaging to the People," we have been developing our business by utilizing a common fundamental technology named "FORXAI," but I believe that we can promote our business more powerfully by integrating our business and technology.

In this business, our customers come from a wide range of industries, including medical and nursing care, manufacturing, plants, and social infrastructure. We will focus on areas where our strengths can be leveraged, such as medical and nursing care, safety and security, and manufacturing, and build and deploy customeroriented solutions.

We will also establish a competitive advantage by integrating hardware and AI, evolving our business model to increase customer value through data accumulation and analysis. Since the scope of such a model is limited to our Company alone, we will enhance its value through cocreation with our variety of partners and link it to solutions to social issues.

I also take pride in what we have cultivated over the past 150 years and be willing to incorporate new elements to lead our business to maximize our contribution to the growth of Konica Minolta and the future of society.

## **Our Medium- to long-term Growth Strategy**

#### Fiscal 2023 review

In fiscal 2023, we promoted our business to put our growth areas that cross AI with our proprietary hardware, such as Dynamic Digital Radiography, on a full-scale track, resulting in a significant increase in revenue. In addition, services utilizing data accumulated in each of our businesses continued to expand, and allowing us to enhance added value and identify a path for evolving our business model over this fiscal year.

On the other hand, the healthcare unit faced a difficult environment due to the sluggish Japanese and U.S. hospital markets caused by restrained investment, and the imaging-IoT solutions unit faced intensifying competition due to the commoditization of stand-alone cameras.

In this environment, the Group reviewed the priorities of FORXAI's business areas and development themes, concentrated resources in areas where Konica Minolta can leverage its strengths, and transformed its business structure to one that can generate profits by efficiently and continuously introducing high value-added AI and solutions to the market.

#### **Imaging Solutions Business strategy**

To date, we have developed our businesses in the areas of medical care, safety and security, planetariums, and nursing care. Going forward, we will create new growth opportunities by utilizing common imaging technologies across these areas. With FORXAI, this business will accelerate the company-wide application of AI, data utilization, and knowledge accumulation, contributing to the enhancement of added value across all businesses.

In addition to our strength in hardware, we will promote the development of advanced AI specializing in inspection, diagnosis, and human behavior analysis. We aim to evolve it into a "multimodal AI" by utilizing large-scale language models and fusing complex data such as images, language, and voice. We will then accelerate this transformation into a highly profitable business model by leveraging customer relationships and accumulated data. This will be achieved by adding value through systemization, integrating hardware, networks, servers/clouds, and applications, and through cross-selling, combining data and app services.

Furthermore, this fiscal year, we will continue to improve productivity and review our cost structure, aiming to establish a stable profit foundation.

#### **Directions in each area**

In medical care, we will realize simple and advanced medical care through diagnostic imaging systems such as Dynamic Digital Radiography and diagnostic ultrasound systems, and medical IT solutions such as ICT and Al-based medical support services, thereby accelerating overseas expansion and medical DX within Japan. In the area of nursing care, we will reduce the burden on nursing care personnel and improve quality of care by supporting its process with data.

In safety and security, we will develop new products and expand our menu of solutions, focusing on network cameras, which have strengths in high durability, thermal technology, and edge AI processing. Furthermore, we will expand our business globally as an integrated solution by increasing customer value in line with the workflow of each industry, in the form of occupational safety, quality improvement (inspection), and work efficiency for the manufacturing industry, and gas monitoring and maintenance DX for the manufacturing industry.

### Imaging technologies and focus areas



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#### Healthcare

#### **Market Environment Awareness**

#### Opportunities

- Against the backdrop of medical personnel shortages, there is an increasing demand for healthcare DX that utilizes imaging, AI, and IT technologies to make healthcare more advanced and efficient.
- Due to declining birthrates and aging populations, mainly in developed countries, as well as higher medical expenses, the needs for early diagnosis and minimally invasive medical treatment are increasing.
- Rapid economic development, population growth, and increased longevity in emerging countries, particularly in Asia are leading to a greater need for healthcare and an expanded market for digital healthcare.

#### Risks

#### Market growth rate (2023-2025)

	institutions against the backdrop of soaring
	energy, labor costs, and interest rates
•	Supply chain disruptions caused by unstable

Limited capital investment by medical

- Supply chain disruptions caused by unstable international conditions and geopolitical risks.
- General X-ray diagnostic systems
   +5%

   Ultrasound diagnostic systems
   +4%

\* Konica Minolta estimates

#### **Strategy and progress**

This business leverages the strength of its brand and customer base developed through 90 years of history since the X-ray film business, as well as its advanced technologies and expert human capital related to imaging/AI technology, clinical development, and IoT, to provide products and services that contribute to early diagnosis, minimizing medical expenses, and QOL improvement.

In the field of X-ray imaging, we aim to expand global revenue of value-added X-ray systems, centering on Dynamic Digital Radiography, which we were the first company in the world to provide. In diagnostic ultrasound systems, we will leverage our strengths in high imaging quality and auxiliary functions, such as puncture needle visualization processing, to strengthen anesthesia, dialysis, and other genres in addition to orthopedics and obstetrics.

In medical IT solutions, we will expand sales of DX-enabled support services for clinics based on the "infomity" medical ICT service platform, which connects with approximately 20,000 clinics in Japan.

We will expand modalities of X-ray systems and high-value-added medical treatment solutions that combine AI-powered imaging diagnostic support, and strengthen the expansion of our Picture Archiving and Communication System (PACS) to the ASEAN region to increase revenue of our global digital business. In addition, we will promote strategic collaboration with global partner companies with strengths in their respective areas.

## Strategic KPI (vs. FY2022)

	FY2023 Results	FY2025 Targets
DR integrated X-ray system, Dynamic Digital Radiography	+1%	+40%
Asia business revenue growth rate	-20%	+55%
Medical IT service revenue growth	+7%	+45%

# Imaging-IoT Solutions, etc.

#### **Market Environment Awareness**

#### Opportunities

- Increasing demand for data utilization services for stable operation and more efficient monitoring in manufacturing sites and critical security management facilities, etc.
- Switching to alternatives through the development of new technologies
- Tighter regulations to combat climate change

## Risks

• Limited capital investment from customers due to economic recession

Network cameras	+11%

Market growth rate (2023-2025)

* Konica Minolta estimates	
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### **Strategy and progress**

The imaging-IoT solutions business' strength is in imaging-IoT technology, which integrates information from image input devices and sensor data for advanced AI processing. FORXAI is a key driver to accelerate on-site DX with the power of imaging-IoT. By combining the components of FORXAI - IoT platforms, devices, and AI - we are creating new solutions with partners who have strengths in technology and channels, including food manufacturing and warehousing and logistics. At the same time, by entering a wide range of customer workplaces, we solve workplace issues and contribute to the safety and security of society.

The network surveillance cameras owned by Group company MOBOTIX AG (Germany) have strengths in high durability, thermal technology, and edge AI processing. By linking these cameras to FORXAI, it becomes possible to quickly detect and analyze abnormalities and signs that may lead to serious accidents in frontline operations of various industries and contribute to their prevention. Sales of these cameras are growing through the sales channels of the Business Technologies Business in Europe and the U.S., as well as through Force Security (U.S.), which was acquired in fiscal 2023.

In addition, as oil and gas operators are required to comply with stricter methane emission regulations in the U.S, our gas leak inspection systems utilize advanced optical and image processing technologies to help visualize leaks of methane gas and other gases and are creating a market while shaping regulations and industry standards.

This business is positioned as a direction-changing business. In fiscal 2024, the business will transform itself into a solution provider and narrow down the countries in which it operates and will also review its strategic KPIs to transform itself into a business that can generate profits as soon as possible.

## Strategic KPI (vs. FY2022)

	FY2023 Results	FY2025 Targets
Imaging AI software revenue growth rate	+51%	+100%

Value Co-creation with Customers – Case 4

The world's first Dynamic Digital Radiography to

become a global standard in X-ray diagnostics

Healthcare





# Contributing to the optimization of healthcare through the Dynamic Digital Radiography that visualizes organ movements to lessen patient burden

In 2018, Konica Minolta commercialized a groundbreaking technology that allows the observation of organ 'movements' through simple X-ray imaging, leading the world with the release of the 'Dynamic Digital Radiography (DDR)' system. Traditionally, obtaining functional information such as ventilation and blood flow, influenced by organ movements, required contrast-enhanced CT scans or PET scans. However, these tests involve significant X-ray exposure and the risk of side effects from contrast agents, posing a substantial burden on patients. In contrast, research suggests that Konica Minolta's DDR does not require contrast agents and has the potential to acquire functional information such as movement of each organ and blood flow information in a low-exposure examination. Therefore, the future expansion of DDR usage is expected to contribute appropriate test selection and reduce the physical and economic burden on patients, thereby optimize overall medical care. In addition, the AeroDR TX m01, a mobile X-ray imaging system that was launched in 2022, enables the acquisition of DDR images at the bedside, such as in intensive care units, and is further expanding the scope of applications.

# Working with Key Opinion Leaders (KOLs) to deliver DDR's value to the world

Since DDR is a product pioneered by Konica Minolta, the testing and diagnostic methods have not yet been established, making it challenging to use in medical practice. To address this issue, Konica Minolta is working to spread awareness of DDR by (1) co-creating value through clinical research with medical institutions and (2) developing a guidebook for diagnostic imaging. Regarding (1), more than 80 academic papers have been published to date, contributing significantly to the expansion of DDR awareness. For (2), four KOLs in the fields of diagnostic imaging and respiratory medicine were invited to supervise the work, resulting in a guidebook that outlines examination methods and image interpretation, which is already being widely utilized.

DDR is currently in clinical use at more than 300 facilities in Japan, the United States, Asia, and Europe, primarily in the fields of pulmonary circulation, respiratory surgery, and orthopedics, and its use is expanding. In the future, we will accelerate clinical use of our products and establish even more robust evidence-based testing and interpretation to deliver the value of our products more widely.





**Ouantification of movements** 



Visualization of changes associated with movement



DM-MODF PI-MODF Tracking movement of Showing the degree of expansion diaphragm, etc. Video: https://x.gd/6h4Z6 and contraction of tissue in the lung cavity due to respiration Video: https://x.gd/q2a3j



## Voice



Clinical Development Group Medical Imaging R&D Center, Healthcare Business Headquarters

## I would like to make DDR-based inspection and diagnosis the worldwide "norm"

When we first developed DDR, even physicians had no knowledge of these new dynamic radiography images, so it was necessary to define their clinical value and promote their use. First, we communicated our desire to make DDR a commonplace test to KOLs in related fields and gained their support. Since then, we have persistently engaged in discussions, shared our concerns, and co-created clinical value while fostering technological development. KOLs had a strong desire to provide optimal medical care to patients, and as we deepened our discussions, we became convinced that DDR could transform medical care and contribute to society. We will continue to work with KOLs to transform healthcare around the world based on imaging technology that embodies value, which is one of our strengths.

Medium- to Long-Term Management Strategy

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