Konica Minolta's Journey Ahead

Five-year (FY2021) targets

To establish an IoT business model with digital imaging (images and data) at the core with the goal of transforming Konica Minolta into a high-profit enterprise

<table>
<thead>
<tr>
<th>Operating profit</th>
<th>Operating profit ratio</th>
<th>Profit attributable to owners of the company</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>¥100 billion or more</td>
<td>10%</td>
<td>¥70 billion or more</td>
<td>11%</td>
</tr>
</tbody>
</table>

How to make this a reality

The new Medium Term Business Plan

SHINKA 2019
Evolution

FY2019 targets

<table>
<thead>
<tr>
<th>Operating profit</th>
<th>Operating profit ratio</th>
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<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>¥75 billion or more</td>
<td>7%</td>
<td>¥50 billion</td>
<td>9.5%</td>
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</table>
Adopt portfolio management that emphasizes earnings

The new Medium Term Business Plan, SHINKA 2019, sets the goals of establishing an IoT business model with digital imaging (images and data) at the core and transforming Konica Minolta into a high-profit enterprise in five years’ time (by FY2021). In order to achieve these goals, it also lays out our three business domains—core, growth, and new. Along the way, we will allocate corporate resources to achieve high-profit businesses as we revamp our business and earnings structures.

Operating profit across core, growth, and new businesses (Billions of yen)

<table>
<thead>
<tr>
<th>Year</th>
<th>Core businesses</th>
<th>Growth businesses</th>
<th>New businesses</th>
<th>Companywide operating profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>110.2</td>
<td>78.2</td>
<td>65.7</td>
<td>33.8</td>
</tr>
<tr>
<td>2015</td>
<td>106.4</td>
<td>79.0</td>
<td>60.0</td>
<td>32.3</td>
</tr>
<tr>
<td>2016</td>
<td>85.5</td>
<td>79.9</td>
<td>50.1</td>
<td>46.0</td>
</tr>
<tr>
<td>2017 (forecast)</td>
<td>-8.2</td>
<td>-15.0</td>
<td>-10.8</td>
<td></td>
</tr>
<tr>
<td>2019 (plan)</td>
<td>-9.5</td>
<td>-14.6</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>2021 (target)</td>
<td>-11.7</td>
<td>-8.0</td>
<td>75.0</td>
<td></td>
</tr>
</tbody>
</table>

* The right side bar graph for FY2014-2016 and broken line graph show operating profit calculated using the exchange rate assumptions for FY 2017 (US$=¥105, Euro=¥115)

Core businesses
- Focus on providing high added-value
- Reform our global cost structure
- Manage ROIC at the business level

Growth businesses
- Maximize benefits of M&A
- Cultivate digital customer value and increase earnings

New businesses
- Establish profit-oriented business model for the IoT age
- Build management infrastructure

The new Medium Term Business Plan, SHINKA 2019, sets the goals of establishing an IoT business model with digital imaging (images and data) at the core and transforming Konica Minolta into a high-profit enterprise in five years’ time (by FY2021). In order to achieve these goals, it also lays out our three business domains—core, growth, and new. Along the way, we will allocate corporate resources to achieve high-profit businesses as we revamp our business and earnings structures.
With the goal of becoming a digital company with insight into implicit challenges, Konica Minolta will transform itself into a high-profit company capable of sustainable growth.

Shoei Yamana
President and CEO
Review of FY2016 Operating Performance and Achievements under TRANSFORM 2016, the Previous Medium Term Business Plan

Pursuing business portfolio transformation toward medium- to long-term growth

The so-called IT revolution has sparked dramatic social change in recent years, from macro-level change involving business models and industrial structures to change on a more personal level with lifestyles and the way people work being affected. Now, the Internet of Things (IoT)—the connection of all things via the Internet—has led to the continuous creation of unprecedented value and businesses in a broad range of domains. Even prior to being appointed president, I was determined to change the way Konica Minolta competes given that we are entering the age of IoT and transform us into a game changer.

Konica Minolta’s strengths can be divided into two broad categories. The first consists of the “core technologies” we have developed over our long history. These are the imaging, material, nanofabrication, and optical technologies that we have nurtured since the early phase of our existence, when we made cameras and film. Konica Minolta is a manufacturing company that has delivered world’s “firsts” and “bests,” including the world’s most sensitive film, the world’s first autofocus cameras, and the world’s first copiers equipped with a zoom function. Achievement and innovation are in our DNA.

Our other strength is the bond we have forged with about two million corporate clients from 150 countries around the world nurtured through the sales of and services for such products as digital MFPs, medical image diagnostic equipment, and measuring instruments. And though our clients span a broad range of industries—manufacturing, distribution and retailing, printing, and healthcare and nursing, to name a few—more and more are demanding IT-based workflow solutions that lead to increased productivity, improved marketing ROI, and innovations to their business models.

With this in mind, we have worked steadily to achieve the objectives outlined in the TRANSFORM 2016 Medium Term Business Plan since 2014 toward providing enhanced value to customers. Over the three-year period of the plan, we have invested more than ¥ 120 billion and promoted a variety of preparatory steps devised to lead us down the path to sustainable growth.

One preparatory step of particular importance is strategic M&A with the goal of acquiring the technologies, knowledge, expertise, people, and other resources needed to add value to...
existing businesses and to create new businesses. With a primary focus on companies in the information devices and healthcare fields, we have selected and added to the Group a number of outstanding enterprises from around the world.

One example in the Business Technologies Business is our consolidated subsidiary MGI, a France-based company that is essentially in a league of its own. The company specializes in digital decorative printing including varnishing and hot foil stamping. This acquisition strengthens our competitiveness in industrial printing, which includes the printing of labels and packages—areas set to see growth as digitalization proliferates. Turning to our Healthcare Business, we acquired Viztek, a company based in the U.S., the world’s largest market. Viztek provides medical image diagnostic equipment, applications, and healthcare IT solution services to mainly primary health care providers. And, for the purpose of acquiring technology that would enable us to launch a new area of business, we acquired networked camera manufacturer MOBOTIX as a consolidated subsidiary. This fortified our competitive capabilities in image inputting and color measuring instruments, areas of strength for Konica Minolta. This Germany-based company makes monitoring cameras utilizing edge computing and has developed a proprietary video management system. We also acquired U.S.-based Radiant, a company with technologies for automating visual inspections in production processes. With this acquisition, we have taken a step forward in automating the inspection process, a process that had been dependent on the human eye, and established a foundation for the creation of business supporting enhanced productivity in the manufacturing process.

Furthermore, the strategic M&A activity we have conducted over the last three years have brought us people with the expertise to propose effective workflow reform measures crucial to expanding our businesses. We have acquired more than 30 IT service companies based primarily in the U.S. and Europe, and have added a great number of people well-versed in the various business workflows employed by our customers. These were preparatory steps taken in anticipation of the commercialization of the Workplace Hub.

As in the preceding fiscal year, we maintained close relationships with our customers and tried to anticipate problems, providing solutions by adding services to products as part of our strategy to establish a high value-added sales model and implement it worldwide.

In our mainstay Business Technologies Business, our bizhub series of A3 color MFPs, core products in our genre-top strategy for the office service field, retained its momentum and saw unit sales increases in all business regions. Although competition remains fierce in the MFP market, we have succeeded in achieving penetration particularly in North America and Western Europe with our hybrid-type sales model—featuring document solutions centered on Konica Minolta MFPs packaged with a range of IT services—resulting in improved per-customer sales and earnings ratio.

In the production print field, sales were up in North America, China, and Asia for the bizhub PRESS C1100, our top-of-the-line color digital printing system. Turning to our textile printing business, orders in France and Turkey for our high-productivity Nassenger SP-1 contributed to increased sales in the industrial inkjet field. Looking at industrial printing, with full-fledged sales activities underway in all markets for the AccurioJet KM-1 digital inkjet printer and the new MGI digital decorative printers, we have laid the groundwork for the implementation of our sales strategy.

Performance in our healthcare business was strong, buoyed by significant growth in DR (digital radiography) products thanks in part to Viztek in the U.S., and business expansion supported by robust sales of solution-oriented products in the primary care market. Sales were strong for all digital products in Japan, and the AeroDR cassette-type digital X-ray diagnostic imaging system continued performing well in Japan and abroad. Sales volume for the SONIMAGE HS1 diagnostic ultrasound system increased dramatically in Japan, and sales of the system were launched in the U.S. and China.

Unfortunately, concerning our Industrial Business, materials and components were faced with increasingly challenging business conditions. Sales volume and revenue for performance materials decreased compared with the previous year due to increased price pressure. This came in spite of
progress being made in the shift to high added-value products such as VA-TAC films for LCD TVs, Zero-TAC films for IPS panels, and ultra-thin TAC films for small- to medium-sized displays. Sales of optical systems for industrial use rose, due in part to the shipment of measuring instruments at the end of the fiscal year following the securing of a large order. Industrial and professional lens sales dropped, however, due to the effects of a decline in sales to end-product markets.

As a result, consolidated net sales for the period were ¥962.5 billion (down 6.7% year on year), operating profit of ¥50.1 billion (down 16.5%), and profit attributable to owners of the company of ¥31.5 billion (down 1.3%). As a whole, the Group recorded decreases in revenue and profit. However, these figures were greatly impacted by exchange-rate volatility. Although the yen started weakening in the fall, for the period it was much stronger than the corresponding period the previous fiscal year against both the U.S. dollar and the Euro. This contributed to a ¥91.8 billion decrease in sales and a ¥19.6 billion decline in operating profit. Looked at in real terms excluding the effect of the exchange rate, sales increased about 2% year on year while operating profit rose approximately 16%.

Despite continuing severe business conditions, we maintained annual dividends for the period at the previous year’s level of ¥30 per share. Konica Minolta’s basic stance on dividends places a greater emphasis on absolute value than the dividend payout ratio. The Company will continue investments toward realizing sustainable growth while improving business performance so that we can proactively distribute the profit and cash generated and meet our shareholders’ expectations.

Konica Minolta’s Objectives under SHINKA 2019, the New Medium Term Business Plan

Resolving societal issues as a digital company with insight into implicit challenges

Toward ensuring that the preparatory steps taken under the previous Medium Term Business Plan generate tangible results, Konica Minolta launched its new Medium Term Business Plan, SHINKA 2019, in April 2017. “SHINKA” (evolution) reflects our strong commitment not only to transforming our business portfolio through the efforts made in the previous Medium Term Business Plan (TRANSFORM) but also to supporting innovation by our corporate clients, to generating new value that will support the “evolution” of the business ecosystems of those companies and society as a whole, and contributing to the resolution of issues that plague society.

Becoming a “digital company with insight into implicit challenges” is the corporate vision we have outlined in the new Medium Term Business Plan. Having insight into implicit challenges means working with our customers and society to identify not only problems that are already evident but also to anticipate potential problems, and collaborating in the development of solutions. Our aim is to take advantage of the digital technologies we have developed over the years as well as the AI, robotics, IoT, and other game-changing technologies now available to quickly identify the problems our customers face. We will then leverage these technologies—fortified through the preparatory steps taken to this point—along with our accumulated expertise, and take the lead in working to solve those problems.

These solutions and services businesses originate not from products, but from customers. Our efforts so far have been focused on our transformation into a company that provides customer-oriented products and services. The fact is, however, that our sales activities are still very much business oriented. It’s clear to me that it will take more time for us to achieve the ideals of One Konica Minolta.

SHINKA 2019 therefore takes an entirely different tack, focusing on re-examining our businesses from the perspective of the customer or the market. The launch of this new plan heralds the beginning of our efforts to fundamentally reform...
our sales system while transitioning from our traditional business and product-specific sales approach to a Go-To-Market (GTM) system oriented toward business type. This will involve looking at our customer base of two million companies around the world by industry and type of business, integrating the knowledge and expertise we have accumulated in the development of products and services, and going beyond our business and product framework to offer optimum solutions for each customer. We will then work in a unified manner to propose ways for our customers to optimize their workflow processes based on their area of business.

**A digital company with insight into implicit challenges**

- The entire company works together to support the transformation of client companies by sector and industry
- Predict potential issues for client companies and create solutions together

**Fortifying the organizational structure toward transforming Konica Minolta into a high-profit company**

To achieve the transformation into a high-profit company under SHINKA 2019, we have realigned the Group’s business domains under three headings: core businesses, growth businesses, and new businesses. Going forward, we will clarify the profit responsibilities for each business as we transition to a new earnings structure.

Key issues for Konica Minolta management to address over the next three years (fiscal 2017 to 2019) will be improving the profitability of core businesses while bringing to fruition the objectives of the various preparatory steps taken under the previous Medium Term Business Plan in our growth and new businesses.

For our core businesses, which currently generate the lion’s share of our earnings, management regards boosting profitability as a top priority. As the markets in which these businesses will operate are in advanced stages of maturity, we will improve profitability by focusing on reforming our cost structure on a global level rather than on expanding earnings by increasing the scale of operations.

We also plan to take action toward reducing costs by roughly ¥30 billion over the next three years. Concerning production costs, we are aiming to save about ¥16 billion through the horizontal deployment of digital manufacturing techniques used at our Malaysian plant to production facilities in China and elsewhere. We also expect to lower service costs by about ¥6 billion through initiatives that include leveraging deep learning, AI, and other technologies in predicting failures, strengthening remote services, and prolonging the life of parts. With regard to administration and indirect costs, our goal is to achieve a reduction of roughly ¥8 billion over three years by,
Following through on preparatory steps in transformation to high-profit company

- Size of circle: Operating profit amount

### Operating profit ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Core FY21</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY17</td>
<td>FY19</td>
<td>FY19</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Office
- Production print
- Digital medical diagnosis equipment
- Color measurement
- Materials and components

### Konica Minolta-style edge IoT strategy

- Workplace Hub
- Status monitoring
- Bio-healthcare
- BIC new business development themes

among other means, greatly simplifying the Group’s indirect functions.

Rather than treating core, growth, and new businesses as independent entities, we believe we need to approach this new structure as an integrated, three-pronged strategy. Our goal is to transform the entire Group into a high-profit "digital company with insight into implicit challenges." We intend to accomplish this by strengthening the relationships with customers that we have cultivated through the operation of our core businesses and leveraging the experience we have accumulated toward the expansion of growth businesses and the creation of new business models. The objectives of the new Medium Term Business Plan, are to achieve ¥75 billion or more in operating profit, ¥50 billion in net profit, and an ROE of 9.5% by fiscal 2019, the final year of the plan.

### Management targets

<table>
<thead>
<tr>
<th>Fiscal 2016 results</th>
<th>Fiscal 2017 forecasts</th>
<th>Fiscal 2019 Management targets</th>
<th>Fiscal 2021 Medium-term targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating profit (Operating profit ratio)</td>
<td>¥50.1 billion (5.2%)</td>
<td>¥46.0 billion (4.7%)</td>
<td>¥75.0 billion or more (7%)</td>
</tr>
<tr>
<td>Profit attributable to owners of the company</td>
<td>¥31.5 billion</td>
<td>¥30.0 billion</td>
<td>¥50.0 billion</td>
</tr>
<tr>
<td>ROE</td>
<td>6.3%</td>
<td>5.8%</td>
<td>9.5%</td>
</tr>
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</table>
Establishing the foundation for highly profitable platform-based business

Something that I am promoting with great conviction with respect to our growth businesses and new businesses is our Edge IoT platform strategy and the partner strategy that will enable us to take advantage of it. Having a customer base of two million companies around the world means that Konica Minolta’s networked MFPs, digital medical diagnostic devices, and measuring instruments are deployed at two million businesses. Having this vast platform through which we are connected to our customers in real time gives us a major advantage at the “edge,” where data is input and digitized.

There is no shortage of IT companies providing cloud services including big data analysis and deep learning, and I have no intention of going head-to-head with them. Although Konica Minolta’s platform-based business utilizes cloud services, the management and business issues faced by our customers are resolved in real time at their worksites (at the “edge”) by collecting and analyzing data on the platforms deployed at those worksites. The “Edge IoT platform” (a platform for analyzing and resolving problems at the edge) itself is value we provide to the customer and is something that differentiates us from our competitors. With this platform now in place, we can pursue high profitability.

The Workplace Hub (WPH) announced in March 2017 serves as the core element of our Edge IoT platform strategy. The WPH supports increased workflow efficiency at workplaces in a broad range of industries extending beyond general office environments to encompass production facilities, medical care providers, and educational institutions. At the same time, it analyzes constantly changing real-time data, enabling the visualization of the status of IT infrastructure usage and of workers in action. These features allow us to provide solutions helpful in reducing customers’ IT infrastructure management costs and making their business processes more efficient.

In the process of putting this platform to use in solving industry- and business-specific problems as mentioned above, the preparatory steps that have been taken over the past three years will begin to bear fruit. For example, connecting a MOBOTIX camera to the WPH would enable a company to conduct real-time tracking of movement and activity inside offices and plants, making possible efficient circulation planning and use of space. Connecting measurement hardware from Radiant to the WPH would allow manufacturers, once defective products had been discovered, isolate the process where the problem originated, or which supplier’s quality test was insufficient. In the healthcare industry, connecting Viztek’s IT platform for primary care to the WPH would enable comprehensive management of medical images, hospital management, and management of patient data.

Konica Minolta-style Edge IoT platform/partner strategy

- Use of advanced input devices
- Real-time processing and issue solutions on site
- Genre-top in specific image and data area

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The ecosystem in which we co-exist with our partners will be essential in executing this strategy. In commercializing the WPH, we formed a partnership system with Microsoft, Hewlett Packard Enterprise, CISCO Systems, and SAP. These large IT companies face cost constraints in marketing directly to our customers, the majority of which are small and medium-sized enterprises. We hope that by using our platform they will become able to provide services to enterprises previously out of their reach.

By unifying all of the benefits achieved through our M&A and product development activities, we aim to implement these strategies toward transforming Konica Minolta into a digital company with insight into implicit challenges, capable of providing our customers with comprehensive support in innovating their businesses.

Focusing on bio-healthcare, a future important source of profit for Konica Minolta

Konica Minolta positions bio-healthcare as a new business. Japan is struggling with rising healthcare costs resulting from its aging population, and two of the biggest issues are ineffective medications and those with strong side effects. As a possible solution to these issues, precision medicine is attracting attention globally. Precision medicine is a medical model that involves identifying the genetic expressions, proteins, and other characteristics of individual patients’ cells at the molecular level, precisely classifying individual patients, and then administering the proper medicine, treatment, or preventive measures based on the patient’s characteristics. In addition to the potential improvements in effectiveness of medication and treatment provided to patients, precision medicine is seen worldwide as a possible solution to improving new drug development success rates at pharmaceutical companies and to ballooning healthcare costs.

This prompted Konica Minolta to launch precision medicine business operations last year with the development of High Sensitive Tissue Testing (HSTT), a technique that enables the digitizing of the number and location of proteins manifesting in cancer cells and high-sensitivity, molecular-level tissue analysis.

And in July of this year we announced our acquisition of Ambry Genetics ("AG"), a U.S.-based genetic testing business, in partnership with the Innovation Network Corporation of Japan (INCJ), marking our full-fledged entry into the field of precision medicine. As a company specializing in genetic testing services, AG is a leading presence in the U.S. market, home to state-of-the-art genetic diagnostic techniques. This acquisition makes Konica Minolta one of the only companies in the world to have two core technologies essential to precision medicine: genetic testing and cytoscreening using HSTT.

By tackling these serious societal issues head on, we seek to grow our healthcare operations into a high-profit business indispensable to society. Our initial targets are sales of ¥100 billion and operating profit of ¥20 billion by fiscal 2021. Beyond that, we will work to become a world-leading healthcare company in Asia and Europe, as well as in Japan and the U.S.

Enhancing corporate value for the medium to long term

It is my belief that enhancing corporate value over the medium-to-long-term requires strengthening every area of the company’s operation, and we will be working hard to improve competence even with regard to ESG and other non-financial indicators. This does not imply a passive approach that seeks to merely minimize ESG-related risks; the goal is to work proactively toward becoming a global top runner in ESG. To this end, last year we identified the “six material issues.”

Although all require our attention, I consider the “environment” and “social innovation” issues particularly important for our future business expansion. Climate change and other environmental challenges are pressing issues for the international community. Konica Minolta has established a set of long-term environmental goals in the form of Eco Vision 2050, and has taken steps toward solving environmental problems while also achieving corporate
growth. In fiscal 2017 we established an objective we named “carbon minus.” This calls for working with stakeholders including business partners, customers, and members of the community to achieve the elimination of CO2 emissions reductions exceeding the volume of emissions by 2050. My aim is to contribute to reducing environmental impact to a degree much greater than we could achieve on our own.

We will also be focusing on “social innovation” efforts with the aim of developing businesses oriented toward resolving societal issues. There are numerous areas in which Konica Minolta can apply its capabilities in addressing key societal problems. These include improving nursing and primary care in an aging society, providing precision medicine to the bio-healthcare industry, working style reform in offices, innovating manufacturing techniques at production sites, and developing new business models for the distribution and retail sectors.

Two other equally important material issues are “human capital” and “diversity.” The final key to our becoming a digital company with insight into implicit challenges is achieving a “human capital transformation,” and our hope is to develop worldwide a force of people to stand at the forefront of change and tap into their ample creative resources to create value for the customer. Moreover, through the Group-wide expansion of businesses that contribute to advancing society and resolving societal issues, we hope to maximize employee motivation and drive. I have taken the lead in promoting diversity. We will continue to work to create an environment which is conducive to employees fully realizing their potential and creativity, regardless of nationality, gender, or age, by changing the way work is accomplished, instituting career advancement programs, and executing reforms to the organizational structure and corporate climate.

Working on these material issues will serve to strengthen our global competitiveness and, as a signatory to the UN Global Compact, contribute to achieving the SDGs toward the creation of a sustainable society.

With respect to corporate governance, while we have endeavored to improve the effectiveness of our system, I want to raise the bar even further. This will entail focusing on “offensive governance” as a keyword while undertaking the cultivation of more strategic discussion by the Board of Directors, the implementation of a Director compensation system tied to the achievement of Medium Term Business Plan objectives are achieved, and other measures.

As I mentioned, I firmly believe that helping to solve problems our customers and their employees face by working to achieve the aims of SHINKA 2019, our new Medium Term Business Plan, can only benefit society. Anticipating and isolating customers’ problems and collaborating to devise solutions to support their transformation will make us an essential partner. Conducting these activities continuously and working tirelessly to contribute to the evolution of business and society—this is the kind of company Konica Minolta aspires to be. Once Konica Minolta has accomplished all it has set out to do in the Medium Term Business Plan, I believe we will have become a vital entity not only to our customers, but to society as a whole.

Shoei Yamana  
President and CEO  
Konica Minolta, Inc.
Becoming Carbon Minus by 2050
Evolution of Long-Term Environmental Target Eco Vision 2050

Aiming to further evolve its long-term environmental target Eco Vision 2050, Konica Minolta has established a new target in the form of “carbon minus.” This calls for working with stakeholders to eliminate more CO2 emissions than we emit through our business activities. Coincident with the start of the new Medium Term Business Plan, SHINWA 2019, we launched the Medium-Term Environment Plan 2019 in fiscal 2017. This will guide our efforts to expand environmental initiatives’ contribution to sales and profits through the solving of environmental problems as well as social problems based on the SDGs (Sustainable Development Goals).

Overview of the Medium-Term Environmental Plan 2019

<table>
<thead>
<tr>
<th>Key Action</th>
<th>Priority Issue</th>
<th>Medium-Term Environmental Plan 2019</th>
<th>Fiscal 2017 Targets</th>
<th>Environmental value</th>
<th>Business value</th>
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<tbody>
<tr>
<td>Green Products (planning and development)</td>
<td>Creation of Sustainable Green Products (SGPs) sought by customers and society</td>
<td>Sales</td>
<td>Sustainable Green Products sales: 3.9 trillion yen (sales ratio: 70%)</td>
<td>Sales</td>
<td>Sustainable Green Products sales: 4.1 trillion yen (sales ratio: 65%)</td>
</tr>
<tr>
<td></td>
<td>Cost reductions</td>
<td>Resource-saving cost reduction</td>
<td>CO2 emissions reduction during production usage: 17.2 thousand tons</td>
<td>CO2 emissions reduction during production usage: 17.2 thousand tons</td>
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<tr>
<td></td>
<td>Complying with government procurement standards and environmental label requirements</td>
<td>Sales</td>
<td>Eliminate lost sales opportunities</td>
<td>Sales</td>
<td>Eliminate lost sales opportunities</td>
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<tr>
<td></td>
<td>Cost reductions</td>
<td>Reduce environmental impact through compliance with standards</td>
<td>CO2 emissions reduction at suppliers: 5.0 thousand tons</td>
<td>CO2 emissions reduction at suppliers: 5.0 thousand tons</td>
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<tr>
<td></td>
<td>Dependably complying with product-related laws and regulations</td>
<td>Risk avoidance</td>
<td>Reduce hazardous chemical substance risk by conforming to laws and regulations</td>
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<tr>
<td></td>
<td>Excellent Green Factory activities</td>
<td>Cost reductions</td>
<td>Energy and resource cost reduction</td>
<td>Effective resource utilization: 1.9 thousand tons</td>
<td></td>
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<tr>
<td></td>
<td>Expansion of Green Supplies activities</td>
<td>Cost reductions</td>
<td>Supplier cost reductions</td>
<td>Effective resource utilization: 2.8 thousand tons</td>
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<tr>
<td></td>
<td>Expansion of recycling materials deployment as materials for packaging, etc.</td>
<td>Cost reductions</td>
<td>Material cost reductions</td>
<td>Effective resource utilization: 9.3 thousand tons</td>
<td></td>
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<tr>
<td></td>
<td>Expanded adoption of renewable energy</td>
<td>Sales</td>
<td>Eliminate lost sales opportunities</td>
<td>Sales</td>
<td>Eliminate lost sales opportunities</td>
</tr>
<tr>
<td></td>
<td>Supply chain risk response</td>
<td>Risk avoidance</td>
<td>Eliminate environmental impact from procurement, production, and sales</td>
<td>Risk avoidance</td>
<td>Eliminate environmental impact from procurement, production, and sales</td>
</tr>
<tr>
<td></td>
<td>Green Marketing (distribution, sales and service, and collection and recycling)</td>
<td>Cost reductions</td>
<td>Reduce cost of distribution and packaging</td>
<td>Effective resource utilization: 0.3 thousand tons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complying with laws on collection and recycling of used products</td>
<td>Risk avoidance</td>
<td>Resource recycling through collection and recycling of used products</td>
<td>Risk avoidance</td>
<td>Resource recycling through collection and recycling of used products</td>
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Our goal is to build the optimal financial foundation with a view to both business expansion- and reinforcement-oriented activities.

Seiji Hatano Senior Executive Officer

Implementing M&A Strategies that Emphasize PMI and Strengthening the New Businesses and Growth Businesses that will Pave the Way to Medium- to Long-Term Growth

For Konica Minolta to achieve medium- to long-term growth as a high-profit company, it will be essential to create new businesses while reinforcing and expanding growth businesses. We see M&A as an important step in making this possible. Under the previous Medium Term Business Plan, TRANSFORM 2016, we conducted a large number of M&A in each of our business segments with the goal of more quickly transforming our business portfolio.

We take full advantage of Konica Minolta's strengths, technical expertise, portfolio assets, and other resources at the planning stage of every merger or acquisition and analyze the areas where we can best achieve synergy. In order to ensure a more seamless and complete postmerger integration (PMI), we conduct thorough preliminary surveys that focus not only on business compatibility but also on that company’s management philosophy, vision, corporate culture, and other aspects. Our M&A process involves a multifaceted consideration of many things, including that company’s affinity with Konica Minolta’s business strategies, the feasibility of business plans, the suitability of investment amounts, profitability, safety, and the business management system that will result following the acquisition.

The acquisition of Ambry Genetics Corporation, which was announced in July 2017, was a major project that resulted from these decision-making standards. We chose Ambry Genetics because it best fit our overall strategy as determined through painstaking research that looked at multiple companies with technologies and expertise in precision medicine that Konica Minolta did not have.

In addition to the normal executive functions they perform, the Investment Assessment Committee and the Business Assessment Committee, which I chair, examine every merger, acquisition, or other investment project from all sides. For the acquisition price, we use the net present value (NPV) indicator to calculate the current value of the investee based on the cash flows during the investment period. We then take a well-rounded look at their business plans, considering such things as how many times more the acquisition price is than the profit, as well as the length of the payback period. After the merger or acquisition, we conduct a thorough PMI with the goal of further enhancing corporate value through Group synergy.

Konica Minolta adopted the IFRS international accounting standards beginning with its fiscal 2014 annual securities report, and always conducts impairment tests once a year. As with other impairment tests, during the fiscal 2016 impairment test we received approval from an auditing firm that none of our Group companies should declare impairment.

As with previous plans, the new Medium Term Business Plan launched in April 2017, SHINKA 2019, states our intention to establish an investment and loan limit of ¥130 billion over three years for future growth and to prioritize allocation to new business domains.

Investment and lending

Fiscal 2014-2016 ¥124.5 billion

Fiscal 2017-2019 ¥130.0 billion

Building a Global Cash Management System to Maximize Capital Efficiency while Minimizing Financial Risk

One of my primary responsibilities as CFO amid Konica Minolta’s avid efforts to make growth-oriented investments will be to maintain our credit rating while at the same time both
minimizing financial risk and maximizing capital efficiency. This prompted the building of the Global Cash Management System during the previous Medium Term Business Plan period. This entailed creating a treasury management system, visualizing capital, improving capital prediction accuracy, deploying a cashless system for payments made between affiliated companies, consolidating exchange rate risk management, and other efforts as part of the construction of a sophisticated global financial management platform. This system of cash management has earned Konica Minolta high praise from financial institutions and other companies’ finance departments.

Meanwhile, we are also monetizing the assets in our possession. As a result of efforts to maximize the value of our intellectual property rights, in fiscal 2016 we recorded ¥7.8 billion in the third quarter as compensation for the license to exercise patent rights in the field of optical systems for industrial use. Under our corporate real estate (CRE) strategy, in 1Q FY2017 we procured ¥4 billion by liquidating (via sale and leaseback) a portion of the real estate we held in Japan. This represents the product of making optimal use of the facilities (land and buildings) for which we have given consideration in recent years with a view to global business expansion.

We will continue to implement these measures while maintaining financial discipline, keeping the shareholders equity ratio at 50% or above, and aiming to achieve a net debt-to-equity ratio of 0.1 over the medium-term.

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**SHINKA 2019 Medium Term Business Plan**

**Finance and Tax Strategy: Improving ROE**

The new Medium Term Business Plan seeks to achieve a 9.5% ROE by fiscal 2019. In concert with the goal of imparting greater added value to our business departments in order to strengthen earning power, I will be implementing four measures as CFO.

The first of these will be thorough balance sheet management. Due to the significant differences among our businesses concerning such aspects as accounts receivable, inventory size, and payback period, we have been carefully checking each business’s cash conversion cycle and conducting balance sheet management that is optimal for each business. In fiscal 2018, we will begin to further improve capital efficiency while strengthening each business site’s ability to independently execute by implementing business unit-specific return on invested capital (ROIC) management with core businesses as the main focus. Along with promoting voluntary improvement activities at our business sites, we will be carrying out an earnings growth strategy that strikes a balance between growth and efficiency by using both the operating profit ratio and balance sheet as indicators.

The second measure will be working style reform with the use of IT and AI in order to improve business productivity. As an example, the streamlining of business processes using robotic process automation (RPA) is being considered for even finance departments.

The third measure is improving our readiness for exchange rate volatility. Although the value of the yen against the dollar has little effect on our business, we incur ¥1.2 billion in losses when the yen goes up one point against the euro and other European currencies. We have therefore been adversely impacted by the stronger yen in recent years. In response, our plan during this new Medium Term Business Plan period is to push forward measures to expand euro-denominated procurement and sell products and services from European acquisitions to other regions, among others, in order to improve our exchange rate sensitivity to the euro and other European currencies.

The last measure is the formulation of the Group Tax Policy implemented in fiscal 2016. This policy accords with international taxation system reforms being made in response to the base erosion and profit shifting (BEPS) project recommended by the OECD and G20. By sharing this taxation policy with the public, we are working to build strong relationships with tax authorities in Japan and abroad while actively seeking to observe taxation rules and ensure transparency. I also see this as an opportunity to strengthen the Group’s tax governance. As such, we will be optimizing our tax liability through means that include using IT systems to seamlessly collect tax information from Group companies worldwide and reducing double taxation risk.

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**Managing ROIC at the business level**
Value Creation Process

Konica Minolta

Office Services (→P.43)

Commercial and Industrial Printing (→P.45)

Healthcare (→P.47)

Optical Systems for Industrial Use (→P.49)

Performance Materials (→P.49)

Konica Minolta-style Edge IoT platform
Offering Solutions for Problems Our Customers Confront

Cloud
Deep Learning

Input
Recognition
Analysis
Prediction
Output

Unstructured data (email, human movement, video images)
Structured data

Customer value proposition

Unstructured data
Structured data

Konica Minolta’s strengths

Technical expertise (see pg. 12)
Base of two million customer companies (see pg. 11)
Environmental technologies and expertise (see pg. 87)

Corporate Governance (→P.59)

Financial

<table>
<thead>
<tr>
<th>KPI</th>
<th>Operating profit</th>
<th>Operating profit ratio</th>
<th>Profit attributable to owners of the company</th>
<th>ROE</th>
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<td>FY2019 business targets</td>
<td>¥75 billion or more</td>
<td>7%</td>
<td>¥50 billion</td>
<td>9.5%</td>
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KONICA MINOLTA, INC. Integrated Report 2017 27
Value provided to society

- Improving quality of life
- Improving manufacturing quality and productivity
- Shortening production lead times
- Improving public security
- Preventing social infrastructure accidents
- Reducing environmental impact
- Eliminating loss in the production process

KPI

Cut lifecycle CO₂ emissions by 50% (compared to FY2005 levels)
Achieve ¥770 billion in sales of sustainable green products
Workplace Hub supports workflow transformation at customers' places of business

Seeking to construct a high-profit platform business, Konica Minolta has developed Workplace Hub as a strategic product that will form the core of that business. Our goal is develop services that will create new value, and to grow those services into a high-profit business.

Leveraging the Workplace Hub to solve our customers’ undiscovered problems

With the advance of the Internet of Things (IoT), companies have come to accumulate large stores of data. Edge computing is a technology that enables the processing and analysis of such data with high speed and high precision. Konica Minolta will use the Workplace Hub (WPH), an edge IoT platform, to help companies better use their data, improve productivity, and more effectively share information and collaborate, thereby helping to enhance our customers’ workflows.

One of our great strengths that we bring to the creation of WPH is the technology for “making the invisible visible” that we have built up over many years. Konica Minolta leverages image processing technology to turn the actions of people and things in offices, along with information written in paper forms, into digital data. We further use AI to propose solutions to the underlying issues that our customers face. WPH is a product that will form the core of this business.

Another strength of Konica Minolta is our sales channels, through which we have provided about two million companies around the world with digital multi-functional peripherals. In developing WPH, we talked with 3,500 customers worldwide and worked their collected comments and requests into WPH services.

In creating the WPH business, we will also build partnerships with global IT companies. Through these, Konica Minolta will acquire diverse applications that will be offered through WPH, and will take mutual advantage of our and our partner companies’ customer bases. We will grow the WPH business by building win-win relationships with partner companies.

Gradually adding more services with an eye to realizing a high-profit business

Konica Minolta will provide medium- and small-sized customers with All-in-One managed IT services on the platform of WPH. For companies that have no designated IT department and are unable to take steps in adopting IT for reasons such as cost constraints, we will provide total support that includes management and operation of wide-ranging IT infrastructure, application installation and license management, and security measures, acting in the role of a face-to-face partner. We will also provide services that support internal and external information sharing and collaboration, and will set up a cloud-based marketplace offering a lineup of the latest applications. These services will be available for monthly fees with no initial charges.

Moreover, we will leverage AI to achieve automation of routine work such as forms processing, and eventually to analyze the actions of people and things and the operational status of equipment by collecting data from varied equipment connected to WPH in offices and factories. Doing so, we will move forward in developing new solutions.

Konica Minolta will launch WPH worldwide on a rolling basis beginning in fiscal 2017. In fiscal 2018, we plan to introduce solutions for the manufacturing industry and for hospitals as part of efforts to make ourselves into a high-profit business that provides new value to our customers.

Message from a business partner

Through partnership with Konica Minolta, we will provide support for our customers’ digital business.

Cisco has identified business development with deeper roots in the marketplace, as well as support for our customers’ digital business, as key strategies. Within these strategies, the IoT is an area of particular focus for our company. Cisco alone is unable to achieve innovation in the IoT.

Co-creation with ecosystem partners across industries and business categories is essential. Cisco is pleased to play a collaborative role as a Workplace Hub Global Ecosystem Partner, a matter of great significance to our company as we push to transform working styles. We further believe that the concept of an edge IoT platform aligns well with the fog computing concept that we advocate. Cisco will combine these things with the collaboration and security that are our strengths, and will play a role in accelerating support for customers’ digital business through Workplace Hub.

Mr. Yoshiyuki Hamada
Director, Chief Technology Officer & Trust Strategist
Cisco Systems G.K.
Business model for All-in-One managed IT services

**Business partners**

- Microsoft
- Hewlett Packard Enterprise
- SAP
- Cisco
- BAINREE
- SOPHOS
- CANONICAL

**Application provision**

**Platform provision**

**Konica Minolta**

**ADMIN DASHBOARD**
- Centralized management of internal IT systems that include servers, storage, Wi-Fi, and multi-functional peripherals
- Significantly reduce workload in checking of resource usage status, review of service agreements, and addition of applications

**IT infrastructure**
- Equipped with storage, server, access point, and hybrid cloud functions
- Always maintain updated functionality and security through feature additions and system updates

**Managed IT service**
- Konica Minolta’s help desk uses advanced technology to perform management and operations of IT infrastructure, freeing customers from the daily work of IT management

**User company**

**Customer value proposition offered by Workplace Hub**

- **All-in-One IT**
  - Comprehensively provide needed IT basic features
  - Allow easy implementation of marketplace solutions matched to business needs

- **Easy IT management features**
  - IT operational status can be easily seen via dashboards
  - Data integration and flexible and easy visualization of data
  - Remote monitoring and support for individual needs through outsourced IT services

- **Assured security support**
  - Data and network security, certification, and ID management
  - Post-disaster data recovery

- **Monthly service fees**
  - Monthly fees based on services, with no initial investment

- **Team collaboration**
  - Project space for collaborating with teams regardless of organization, location, or language

**Issues facing medium- and small-sized companies**

1. **Insufficient IT human resources and know-how**
   - Lack of human resources to implement IT
   - Inability of employees to make use of IT
   - IT matched to content of work is not available
   - Appropriate advisors, etc. are not available

2. **Cost and management burdens**
   - Do not know or cannot evaluate the effects of implementation
   - Unable to shoulder costs

3. **Security concerns**
   - Risk of personal information leaks
   - Risk of leaked technology or know-how

4. **Too little creative work**
   - Collaboration does not proceed smoothly with internal and external experts at global sites, partner companies, etc.
Examples of the use of Workplace Hub

### Solutions for the manufacturing industry

**Reduction of equipment maintenance expenses**

**Issue**

A company uses equipment of many differing model years and is unable to collect data from older equipment, resulting in unnecessary maintenance expenses as well as wasteful operations and maintenance work that is dependent on workers’ experience.

**Value provided**

WPH and data collection tools are combined to offer a solution for the visualization, analysis, and integrated management of operational information on all equipment. This supports the reduction of maintenance expenses over the life cycle of the equipment through the performance of maintenance at optimal times.

**Productivity improvements through focus on core work**

**Issue**

A company faces constraints on staff employment, and employees spend considerable time on indirect operations. The company is also unable to deploy resources in direct operations, making the improvement of productivity an issue.

**Value provided**

Data on inspections performed using equipment from Radiant is collected in WPH. Automated creation of inspection records and daily reports reduces the man-hours spent on this work. In addition, flow path data for people and things, collected using equipment from MOBOTIX, is analyzed to propose workflows that lead to improved productivity.

### Solutions for healthcare

**Reduction of workload on IT managers**

**Issue**

Management of an overall system is difficult due to the procurement of treatment, pharmacy, surgery and other systems from different vendors. Moreover, as the system was constructed on-premise, management costs have expanded while storage capacity for backups and other purposes has become inadequate.

**Value provided**

A solution that enables integrated management of IT infrastructure and applications within the hospital through WPH. WPH’s cloud storage service and backup service eliminate storage management work and file backup work, reducing the workload for IT managers.

**Enhancement of medical services**

**Issue**

Achieving regional healthcare coordination and telemedicine requires the construction of a secure network environment. It also requires compatibility for various types of medical treatment and diagnostic data, including electronic medical records.

**Value provided**

Provision of an environment that enables secure accumulation and mutual use of medical treatment and diagnostic data using WPH. Data inside hospitals, along with vital data on home-care patients and other data, are integrated into WPH through mobile devices. This contributes to the enhancement of healthcare services throughout the region, as well as to the improvement of management efficiency and the reduction of workloads in the medical institutions.
The background and the impetus that led you to develop Workplace Hub
With digitalisation developing at lightning speed, we asked ourselves what this means for our own future. What technologies are driving behavioural change in the workplace and how can we make our mark in this new world? We want to not only transform ourselves, but also the market, and above all empower our customers in this new era of IOT.

We knew that to reap the benefits of digitalisation, there needed to be a bridge between our existing markets and the growth markets of the future. That bridge should maximise on the existing value and capabilities that we have in Konica Minolta, and represent greater value to the customers and society in general.

The catalyst came when there was the realisation that as a company, we already have a 1x1m² space occupied by our MFPs in millions of offices and workplaces around the world. And so came the idea of adding value to that square metre, to not only give our customers what they need in today’s workplace, but also to solidify our position in the IT services market for tomorrow.

From Business Innovation Centres to a market-transforming big bet
Our global distributed Business Innovation Centres were the perfect platform to build the concept that would fill the untapped needs of customers – and define exactly what that need is. The Business Innovation Centres are located near the customer base and pursue a customer-centric approach to creating concrete value-added solutions, which was the perspective needed for Workplace Hub.

Using our skilled BIC team’s incubation knowledge as a foundation, across countries and with numerous ideas to help shape its growth into a business case, the Workplace Hub Group was born to bring the vision to reality.

The potential for Workplace Hub to be adopted by customers and to expand as a business
The fact that our devices occupy a square metre of our customers’ workplaces allows us to quickly develop and test new value propositions based on the existing footprint. We can also leverage our extensive field support network and customers’ trust in the quality of our service delivery. Therefore the potential for adoption ranges from those who have existing relationships with, to those who are new but also want IT to work on their terms.

Once initial acceptance is made, the opportunities to expand are endless. The centre of the office will become much, much more; it’s a physical centre at the moment but it will become a cognitive centre. We are developing new IOT, AI and decision support capabilities and services and offerings, which will make our position in the market stronger than ever.

How you wish to see Workplace Hub develop as a business from here on out
At this stage, we envisage the first generation of services and applications will start offsetting any revenue gap caused by the transformation from paper to digital, and that we will gain important recognition as a provider of a broader range of smart workplace solutions.

Workplace Hub is the cornerstone towards the growth of our new platform orientated IT and future workplace offerings that can be quickly tested in the marketplace, thus allowing us to predict what clients want more precisely, and adapt our strategy and portfolio in any relevant direction with great agility. In other words, Workplace Hub will serve as the basis for creating new platforms in the future, thereby making our company more resilient towards the uncertainties of digitalisation.

What you currently hope to undertake now or in the near future to achieve the above
Using the core platform as a basis, we can expand into different verticals and markets to deliver targeted solutions. Workplace Hub provides a core system that will allow us to branch out aggressively into different industries and channels to deliver targeted solutions in a variety of areas such as IOT and AI orientated office services, manufacturing, and healthcare.

The Workplace Hub: empowering our customers in the new IOT era

Dr. Dennis Curry
Deputy CTO at Konica Minolta, Inc.

Key Person Interview
Aiming to Help Raise the Bar for Primary Care
Konica Minolta's Full-Fledged Entry into Precision Medicine

With a view to strengthening its bio-healthcare business, in July 2017 Konica Minolta announced its joint acquisition (with the Innovation Network Corporation of Japan) of U.S.-based Ambry Genetics Corporation (AG), a company with world-class genetic analysis technologies. By helping to advance primary care, we are seeking to establish new earnings drivers.

Helping to advance primary care, improve patients' QoL, and reduce healthcare costs

The advancement of primary care (early diagnosis) is becoming a major theme in the world of healthcare as a means to quickly identify and treat medical conditions — cancer being a key example. Konica Minolta has been working to advance primary care by combining ICT services with image diagnosis systems that use X-rays and ultrasound to make it possible for even primary care doctors and other smaller healthcare institutions to provide diagnoses with precision. Another focus of ours going forward will be precision medicine.

Precision medicine refers to using molecular analysis to analyze a patient’s genes, proteins, and other physiological characteristics, group patients with precision, and provide treatment appropriate to their characteristics. This allows for greater accuracy and efficiency in treatment, medication, and preventive care compared to traditional standardized healthcare.

Precision medicine shows promise for use against cancer and other conditions for which treatment often involves a high susceptibility to adverse genetic and constitutional effects. Anticancer drugs, despite being expensive and carrying the risk of side effects, are said to have response rates between 20% to 30%. A greater proliferation of precision medicine will allow doctors to choose more effective treatments that carry fewer side effects, helping to improve patients’ quality of life. Moreover, pharmaceutical companies will also be able to more efficiently develop drugs with higher response rates, while also shortening drug development time and costs, leading to lower drug prices. In addition, early detection and more efficient treatment will prevent long recuperation times and help to cut healthcare costs across the board.

Becoming a Global Leading Company in Precision Medicine

Konica Minolta has developed HSTT (high sensitive tissue testing) to visually express certain proteins, and promoted the business using this technology in the field of precision medicine. HSTT is a method that utilizes the image processing and material technologies Konica Minolta has developed in photographic film, the wellspring of the Company’s business, to quantify cancer cells and other specific proteins with high precision. This makes it useful for accurately and efficiently diagnosing cancer and for effectively developing and administering therapeutic agents. Since fiscal 2016 we have sought to develop a new drug discovery support system using this technology, and have begun conducting joint research with the France-based Pasteur Institute, which has made a number of achievements in fields that include immunology.

In addition to these existing technologies, our recent acquisition of Ambry Genetics Corporation (AG) grants us access to world-class genetic analysis technologies. Konica Minolta now possesses technologies pertaining to proteins and genes, two elements indispensable to precision medicine. With these technologies, we will become an unrivaled global provider of precision medicine to both healthcare providers and pharmaceutical companies.

AG has a large, state-of-the-art laboratory and provides a wide range of genetic diagnostic services in the U.S. In addition to pursuing greater synergy with this company, Konica Minolta will be focusing on open innovation with pharmaceutical companies and research institutes around the world. Our goal is to establish bioinformatics technologies that enable the high-precision grouping of patients into subsets, provide genetic diagnostic services in Japan, Asia, and Europe, and become a global leading company in precision medicine.

Moving away from standardized medicine into the age of precision medicine

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<th>Standardized Medicine</th>
<th>Precision Medicine</th>
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<td>By Organs</td>
<td>Patient Group through Molecular Analysis</td>
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<td>By Diagnosis And Treatment Dept.</td>
<td>Prevention • Prognosis Treatment • Medication Drug Discovery</td>
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<td>Medicine B</td>
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<td>Medicine under Development</td>
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Recognizing gene mutation and protein expression on molecular level

Grouping patients based on their characteristics
Konica Minolta’s Full-Fledged Entry into Aiming to Help Raise the Bar for Primary Care

Special Feature 2: Building a Bio-healthcare Business

- Medicine A
- Pharmaceutical Companies
- Patients
- Society
- Genetic analysis
- Protein analysis
- Diagnostic imaging
- Database
- AI
- Bioinformatics
- High Accuracy Gene And Protein Diagnostic Service Model

Message from a Business Partner

On the Joint Acquisition of Ambry Genetics Corporation

Since its establishment in July 2009, the Innovation Network Corporation of Japan has been seeking to make Japanese industry more competitive by making investments in a range of fields, a key example of which is health and medical care. Now, we have embarked on the joint acquisition of Ambry Genetics Corporation (AG) together with Konica Minolta. By combining the High Sensitive Tissue Testing technologies unique to Konica Minolta with genetic diagnostic technologies developed by AG, we are within shooting distance of establishing a global leading company with state-of-the-art technical expertise. We expect that this joint acquisition will help form the infrastructure for precision medicine in Japan, establish associated businesses, and achieve its full-scale practical application. The Innovation Network Corporation of Japan will also be promoting open innovation together with Japanese companies, academia, and healthcare providers in the hope that this will help pave the way to creating new added value in the health and healthcare industries.

Mr. Mikihide Katsumata
President and COO
Innovation Network Corporation of Japan
**Exercising Synergy with AG**

In the U.S., where genetic diagnostics is covered by insurance, precision medicine is widely practiced and involves analyzing patients’ unique constitutions from their genes and then either treating, medicating, or providing preventive care to the patient. AG is one of the leading companies in the genetic diagnostics business in the U.S.

But in Japan, where Konica Minolta has built up a customer base in the healthcare business, genetic diagnostics has yet to enter the mainstream. Yet, precision medicine that involves the use of genetic diagnostics should soon become widespread here as a means of combating the social problem that is rising social welfare spending amid an aging population. The advanced technologies, expertise, and network that AG has developed over the years should prove to be of considerable benefit in quickly establishing genetic diagnostics businesses in Japan.

Meanwhile, the ability to now exercise technological synergy between the two companies to conduct analyses based on genes (the blueprints of cells) and proteins (the components of those cells) holds great significance in expanding our businesses around the world. Konica Minolta shares with AG a vision to play a role in advancing Japan’s national genome strategy.

**Business prospects going forward**

The global precision medicine market is estimated to be roughly $4 billion. This is expected to grow quickly, hitting $7 billion in five years and $10 billion in ten years. By providing high added-value diagnostic services not achievable by any other company in the industry, we will construct a high profit business model that will aim for sales of ¥100 billion and a 20% operating profit ratio by fiscal 2021.

The first step is to launch a genetic diagnostics service by fiscal 2018 in Japan, where we have a network with healthcare providers. Concurrent with this will be our collaboration with Innovation Network Corporation of Japan, who will help us gain approval to offer insurance that covers genetic diagnostics, and otherwise put in place the necessary business infrastructure. This will see us quickly establish a business model in Japan, where genetic diagnostics has yet to take root. Future efforts will focus on creating a database of genetic information gleaned from performing diagnostics. The database will allow us to contribute to conducting genetic analysis based on the unique characteristics of Japanese and to developing effective and efficient therapies and medicines informed by these results. As an extension of these efforts, we will also work with genetic research organizations to play a role in advancing Japan’s national genome strategy.

**Future Plan for Bio-health Business**

![Graph showing future sales and expansion plans](image-url)
Leveraging the Resources and Technologies of Two Companies to Contribute to Precision Medicine

Aaron Elliott, Ph.D.
Chief Executive Officer
Ambry Genetics Corporation

ABOUT US:
Ambry is a molecular diagnostics company with a mission to understand disease better so cures can come faster. For nearly 20 years, our customers have come to trust our evidence-based research and quality genetic testing to help them find answers so they can more precisely guide patient care.

Our comprehensive test menu includes single-gene analysis, multigene panels, microarrays, exome sequencing and novel paired testing (germline/somatic). We focus on hereditary testing for oncology, cardiology, women’s health, preventive care, neurology and general genetics. Our Translational Genomics Lab (ATG Lab) is a unique lab service offering novel evidence through validated functional assays to bring clarity to variants of unknown significance (VUS). We developed the ATG Lab with the goal to give clinicians a better understanding of their patient’s test results and offer clear guidance on future medical management.

Founded in 1999, Ambry began by sequencing samples from cystic fibrosis (CF) patients, using a methodology that produces more complete and accurate results. We continued to specialize in the application of new technologies by offering microarray, and in 2010, we were the first commercial lab to offer Next Generation Sequencing (NGS). The following year we became the first lab to provide CLIA-approved exome services for applications in clinical diagnostics. In 2012, we achieved another first with our hereditary cancer panel offering. Then in 2013, making both history and headlines, we took on the daunting challenge of eliminating gene patents and won in a precedent-setting case against Myriad Genetics. Through this crowdsourcing of genetic data from individuals with specific diseases, we believe we can accelerate scientific discoveries like new candidate genes and targeted treatments.

In 2016, we built a customized 65,000 square-foot highly automated CLIA/CAP certified lab. To ensure proper tracking and testing accuracy, samples are DNA ‘fingerprinted’ before and after testing using a unique set of genetic markers. Our ‘super lab’ produces some of the fastest turn-around-times in the industry, with uncompromising accuracy and specificity.

At any one time, we have over 200 on-going research collaborations with the top clinicians and academic institutions in the world, in an effort to bring about a better understanding of genetic disease and clinical utility. Our methods of detecting deletions and duplications have been validated through extensive research, using more than 30,000 samples that we analyzed using arrayCGH and NGS. We have published the largest accuracy study to date for NGS panels and are the only lab with established and published criteria for validating genes. We continually keep our tests up to date and clinically relevant as new genes are identified.

Above all, Ambry is a place of taking risks, where passion and a patient-centered philosophy blend with sweat equity and innovative research. We are proud to be leaders of scientific innovation, not because of a profit-driving mindset, but with heart, guts and an uncompromising commitment to improve patient care.

WHY WE ARE PARTNERING WITH KONICA MINOLTA:
We strongly believe we have a responsibility to evolve science and move us closer towards precision medicine, which can ultimately improve patient care and quality of life. Unlike other labs that try to blur the line between screening and clinical diagnostic testing, Ambry focuses on quality and accuracy, above all else.

Over the years, Ambry has been approached regarding an acquisition and each time we asked ourselves the same questions. Does this company truly care about finding answers? Do they have what it takes to go the extra mile to improve patient care? Do they share the same vision to progress the science in a responsible and life-giving way?

Ambry is very excited to partner with Konica Minolta because together we can accelerate the development of new diagnostic tests for many different diseases for patients throughout the world. Together we have the combined resources, technology, and scale to advance biomedical research on a global scale resulting in better tests for doctors and more precise treatments for their patients.