

Material Issue 2

Social Innovation

Creating new value to solve issues that customers and society face, by making the most of the unique technologies developed across the years—this is Konica Minolta's mission and reason for being. By continually creating value that offers new innovation for society, Konica Minolta is promoting social and environmental sustainability.

Our Concept

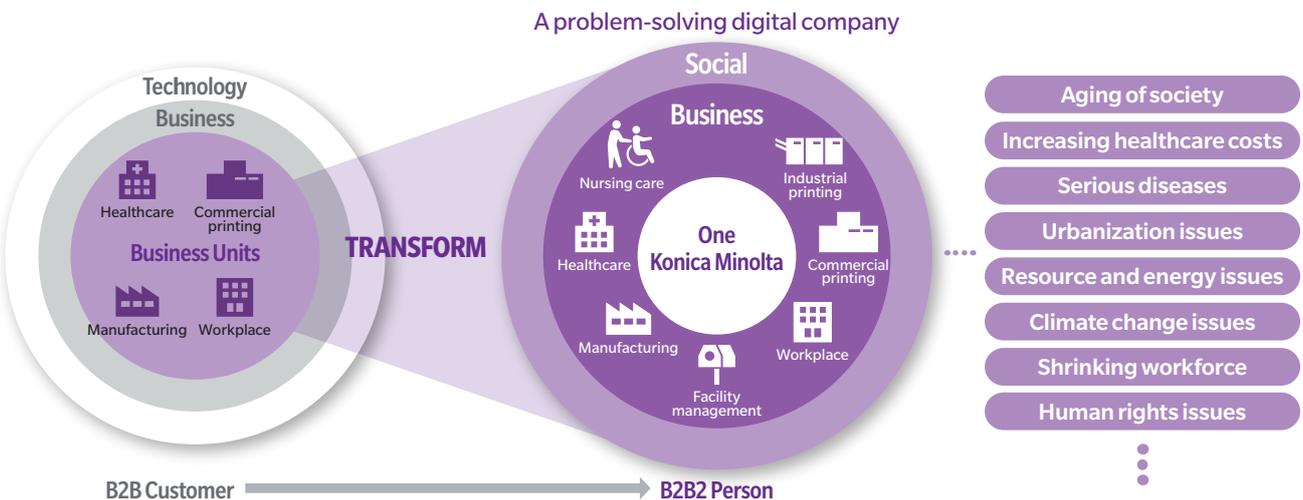
Aiming to Be a Digital Company That Solves Social Issues

In recent years, there has been an urgent need for initiatives that help solve global issues for humanity, such as climate change as well as resource and energy issues. Meanwhile in Japan, which is becoming a super-aged society, issues such as a shrinking working population and rising healthcare and nursing care costs are intensifying. Konica Minolta's mission, "The Creation of New Value," stated in its management philosophy, means that the company is working to help solve these social problems and generate new value that brings innovation to people and society.

Under its Medium-Term Business Plan, TRANSFORM 2016, Konica Minolta is currently promoting a bold change in its business focus. The aim is to use digital technology

to combine the company's strengths in optical, image-processing, and sensing technologies. The company seeks to become a problem-solving digital company that creates products and services that help resolve social issues.

This is why the company not only embraces the perspective of its immediate clients, but is also now extending its focus to their customers—all the people who make up society—in other words, switching its focus from B2B to "B2B2Person." Toward this end, Konica Minolta is building new organizations that cross the boundaries between its current business units, aiming to work as One Konica Minolta to meet customer and social requirements in each business area.



C Lose Up 1

Delivering Even More Advanced Healthcare by Providing Solutions for Home Care and Regional Healthcare Collaboration

Social Issues

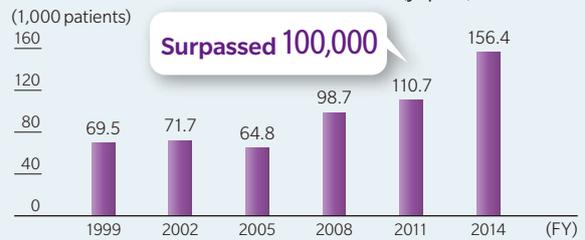
Regional Healthcare Systems Needed for Growing Numbers of Home Care Patients in an Aging Society

With a quarter of its population now 65 or older, Japan has reached the globally unprecedented situation of being a super-aged society. As such, it faces various issues, including more patients who cannot make hospital visits, fewer doctors in local communities, and higher healthcare costs for the whole society. As a result, there is a growing need for care products and services that enable healthcare to be provided in the home.

In order to further popularize home care and expand healthcare provided in the home, local clinics that provide diagnostic visits and general hospitals that have specialized knowledge and facilities will

need to work together to care for patients over large areas. There is an urgent need to create a system to support this kind of service provision.

Patients Who Received Home Care (Japan)



Source: Prepared based on the "Patient Survey" of the Ministry of Health, Labour and Welfare

Social Innovation

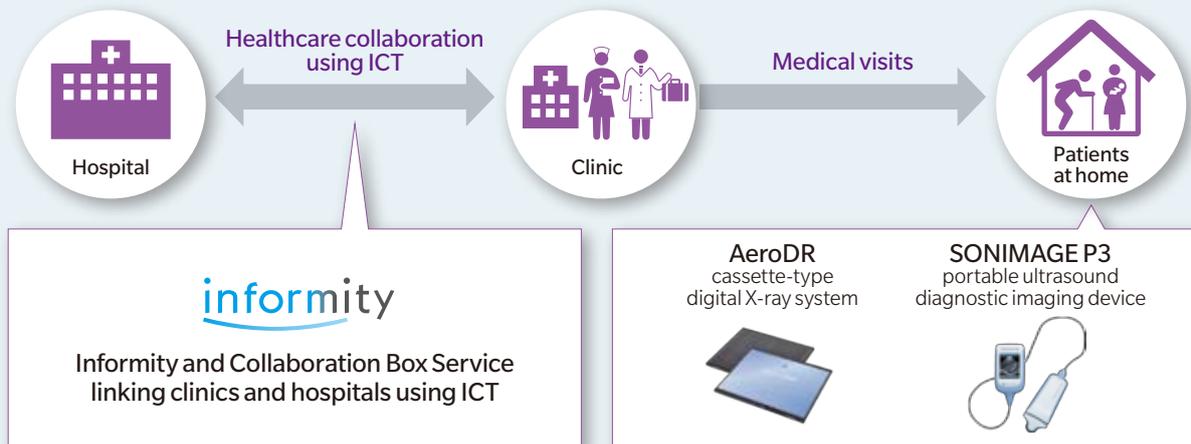
New Diagnostic Solutions to Support Home Care and Community Healthcare

Konica Minolta provides new solutions to support the future of healthcare.

For example, the company has realized a digital X-ray system and an ultrasound diagnostic imaging device that are lighter, more compact and wireless. As a result, the diagnostic imaging equipment can be taken out of the hospital, and it is now possible to make highly accurate medical diagnoses with a visit to the patient's home, thereby reducing the stress on the patient.

The company is also supporting regional health-

care collaboration through its Informity ICT service, which provides broad support for building healthcare networks. The company's Collaboration Box Service, which allows the seamless sharing of diagnostic data such as medical images between medical institutions, makes greater healthcare cooperation possible. For example, specialists in the hospital can perform diagnosis based on data sent from a local clinic, and then inform the clinic of the necessary treatment and patient transport.





Innovating in Nursing Care Workflow to Facilitate Care Support Solutions for an Aging Society

Social Issues

Shortage of Nursing Care Staff in an Aging Society

Along with the graying of society, more people are in need of nursing care. Meanwhile, the shrinking workforce has worsened the shortage of nursing care staff.

Given this situation, Konica Minolta determined that it could help to reduce the workload of nursing care staff by promoting workflow innovation on the frontlines. The company visited nursing care facilities to ascertain and analyze operations in detail. Nursing care operations were separated into individual workflows initiated by a nurse call. That made nursing care staff run around the facility. It was clear that this was creating a major burden.

Social Innovation

Workflow Innovation for Nursing Care Staff, Starting with Highly Accurate Action Recognition

In order to tackle the challenges of the nursing care field, Konica Minolta's business development staff gathered information directly at about 70 nursing care facilities. Stationed in the facilities for about three months, they ascertained the nursing care operations in detail. Based on this, the company developed its Care Support Solution, a monitoring system for nursing care workflow innovation.

The Sensor Box, which is the core of the system, performs 24-hour monitoring using near-infrared and microwave sensors, and operates regardless of the room's brightness or the posture of the room occupants. If a patient sits up on the bed, leaves the bed, falls down, or falls out of the bed, nursing staff are notified via a

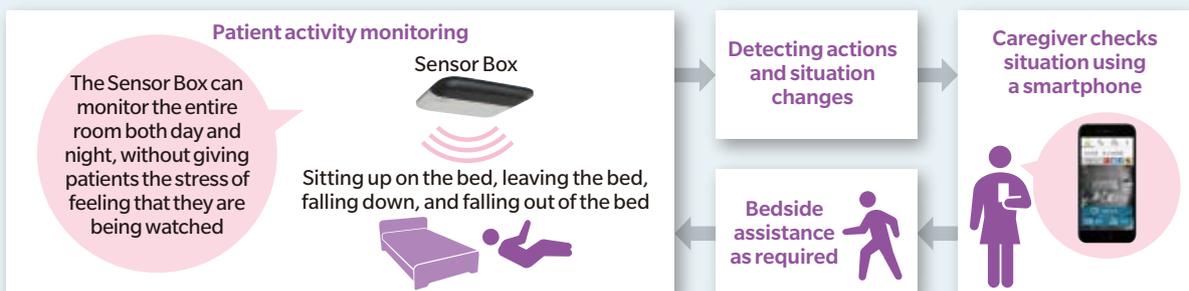
2015 Worker Shortfall by Occupation in Japan*



* Labor shortage figures are calculated by subtracting the number of effective job seekers from the number of effective job openings
Source: Labor market indicators by occupation (Ministry of Health, Labour and Welfare)

smartphone with video display. By checking the video of the patient, the staff can decide whether to rush for assistance and can predict patient behavior, which significantly reduces their workload. Since the staff can also use their smartphones to input care records or vital-sign data on the spot and share them instantly, the system substantially reduces record-keeping work and helps to prevent miscommunication. By providing one-stop total innovation that covers both the nursing care frontlines and administrative work such as record keeping, the Care Support Solution offers greater efficiency for the entire nursing care operation.

Konica Minolta's Care Support Solution



Close Up 3

3D Laser Radar Pioneering the Future for a Safer and More Secure Society

Social Issues

Need to Improve Sensor Detection Accuracy to Achieve More Reliable Security

With society's growing awareness of safety and security, improving security levels has become a social issue. This includes measures to prevent street crime especially in downtown areas, security measures for areas where crowds gather, and strengthening security at facilities where safety is required.

Rapid personnel response is essential to maintain the current level of security. However, due to a shortage of human resources and the need to reduce costs and raise efficiency, there are growing needs for security technology such as surveillance cameras. Facilities with extensive grounds are facing detection accuracy

issues, such as unnecessary personnel dispatch due to sensor false alarms, and reduced detection ability due to blind spots or nighttime and rainy conditions.

Cases Where Greater Detection Accuracy Is Needed



Social Innovation

Realizing Advanced Security Using Motion Detection in Addition to High-Precision, Real-Time Detection

3D Laser Radar was developed by Konica Minolta utilizing its proprietary optical technology. It can perform 3D scans from high angles and distant locations, and detects objects and people with high accuracy. In addition to ascertaining the position, shape and size of an object in real time, the technology can also recognize a moving object, while detecting its direction and speed. Moreover, through the addition of image processing and analysis technology using artificial intelligence, situation prediction is also possible. By realizing an efficient surveillance system that only sends alerts when there is an actual problem,

and by conducting behavior detection of suspicious persons based on analysis of accumulated behavior data, an even higher level of security is being realized.

As an unprecedented high-precision, high-performance detection tool, 3D Laser Radar is expected to be adopted for a variety of applications. It will help realize a safer and more secure society not only as part of monitoring systems, but also in self-driving vehicle development and social infrastructure surveillance.



3D Laser Radar



Self-driving Vehicle Development

3D Laser Radar can be combined with various sensors for pedestrian detection to increase driving safety, and for creating high-accuracy maps for use by self-driving vehicles.



Preventing Traffic Accidents

By indexing behavior patterns based on collection and analysis of pedestrian and vehicle behavior data, pedestrians who suddenly dart into the street can be predicted.



Risk Prediction at Construction Sites

Since a wide area can be monitored at one time, the technology can also be used to predict operational hazards and monitor safety at construction sites.