

# Aspiring to Be a Sustainable Value-Generator for People and the Earth that Is Qualitatively and Quantitatively Superior: OMRON Principles Yield Excellence

— Driving Innovation in Manufacturing Through “innovative-Automation!”



● Interviewer

**Setsuo Iwashita**

President & CEO, ULVAC, Inc.

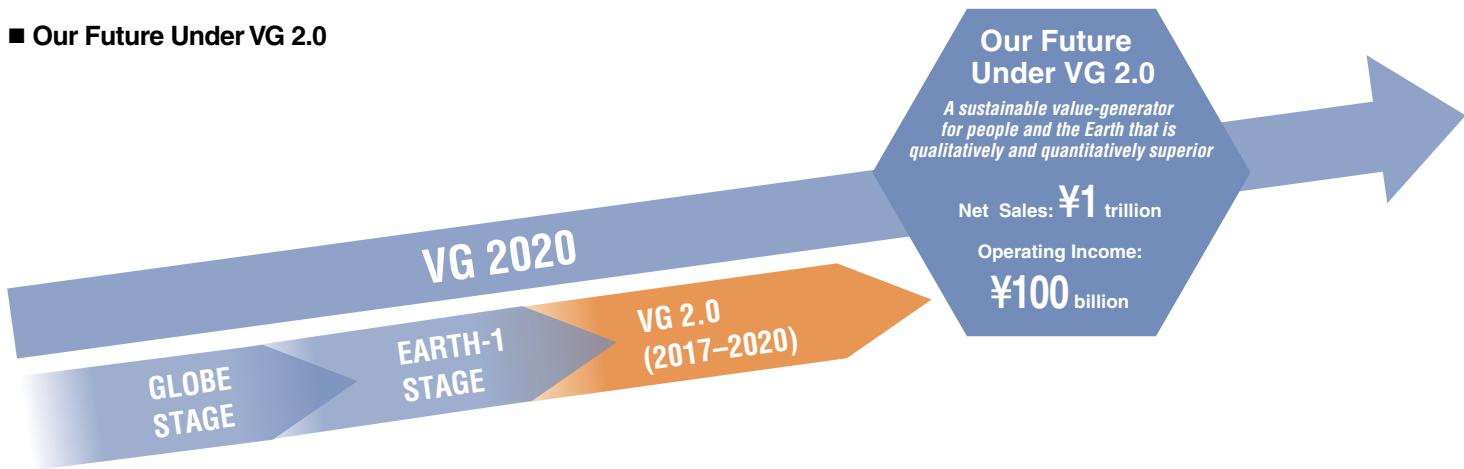
● Guest

**Mr. Yutaka Miyanaga**

Executive Vice President, OMRON Corporation  
President, Industrial Automation Company

OMRON Corporation was founded as Tateishi Electric Manufacturing Company in 1933 by Kazuma Tateishi. It is now a time-honored electronics company that the world regards as a symbol of Japan. OMRON has differentiated itself by growing a company for the ages that continues to stay true to the founder's intention to “contribute to global society through our business.” In 1990, the company changed its name to OMRON Corporation, and at the same time initiated long-term strategic planning with 10-year goals in order to build a stronger management structure. In this interview, I spoke about OMRON's creation of corporate value and the fundamentals of business development with Executive Vice President Yutaka Miyanaga, who is one of the planners of VG 2020, the long-term management strategy announced in 2011.

■ Our Future Under VG 2.0



**OMRON’s Long-Term Strategy: AI, IoT, and Robotics at the Forefront**

**Iwashita:** OMRON and many other companies in Kyoto are active globally and doing extraordinarily well. Why is this? Today I am visiting Vice President Miyanaga to find out, and I hope he will also share some of the energy of these Kyoto companies with me. (laughter)

**Miyanaga:** Kyoto has an image of being traditional and historical, but I think the people of Kyoto are actually fascinated by anything new, and they care a great deal about the city’s cultural identity. People joke that Kyotoites still think of Kyoto as Japan’s capital somehow. (Laughter) Because of this, they are very conscious of not bowing down to Tokyo. I also find that, as I mentioned, they have a heightened sensitivity to new things. One characteristic of Kyoto companies, in my



**Setsuo Iwashita,**  
President & CEO, ULVAC, Inc.

view, is that they focus on their own identity without imitating others and without trying to grow just for the sake of size.

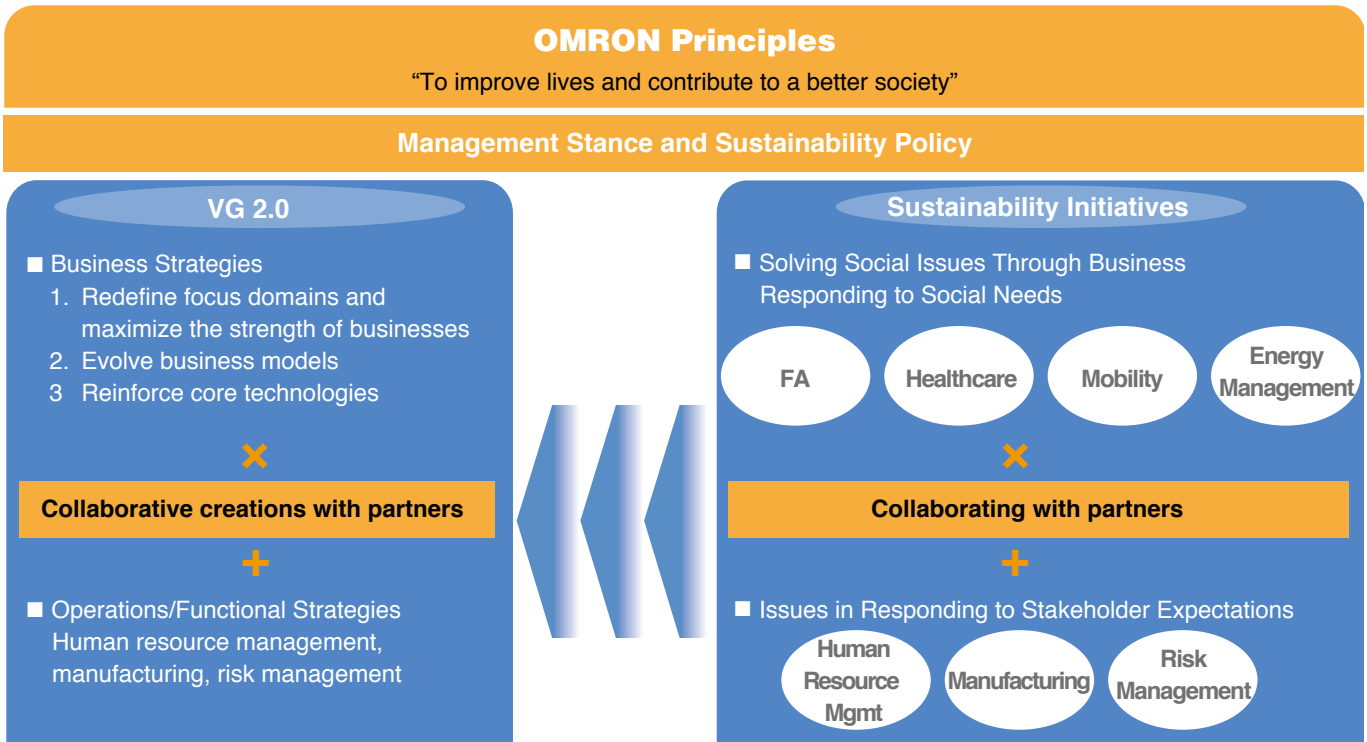
**Iwashita:** I became president of ULVAC in 2017. The market at that time was just heading into the Fourth Industrial Revolution, a technological revolution in AI, IoT, and robotics that represents a huge business opportunity for our company. This technological revolution calls to mind some of the words used in Omron’s VG (Value Generation) 2.0 medium-term plan. How is OMRON taking advantage of this big wave?

**Miyanaga:** As a result of this technological revolution, the market is expecting our automation products to solve social issues such as labor shortages, high labor costs, and the large-scale retirement of skilled workers. Particularly in the factory automation (FA) market, people at their desks sensed that innovation was happening, so in order to dramatically change direction starting in 2017 and keep growing through 2020 and then 2030, we decided to hit the accelerator again.

VG 2020, our long-term strategy that began in 2011, focuses on our corporate vision through 2020 and divides this 10-year period into three stages. We called the first subdivision (from 2011 to 2013) the GLOBE stage, and the strategy was to broaden our stretch geographically - for example, by leveraging growth in emerging markets to help us expand further. We called the second stage (from 2014) the EARTH-1 stage, and its aim was to pursue growth by creating new value. The EARTH-2 stage would then take this growth one step further. This was how we originally thought of these three stages. However, in the initial GLOBE stage, growth in emerging markets went so well that in the second stage, EARTH-1, we tried to launch another growth rocket by leveraging urban expansion in China and Southeast Asia. However, economic growth in China slowed a bit, and Southeast Asia did not grow as much as expected.

Meanwhile, the business environment has been changing at breathtaking speed because of the desire to solve various

■ Sustainability Management



social issues through new technologies, such as AI, IoT, and robotics. Therefore, we shifted our policy significantly. Instead of viewing the EARTH-2 stage (which started in 2017) as an extension of what came before, we revised our goal to promoting growth largely through innovation and called this VG 2.0. "VG" stands for Value Generation, which conveys our initiative to grow by creating new value. VG 2.0 starts with aspiring to be a sustainable value-generator for people and the Earth that is qualitatively and quantitatively superior as intended in VG 2020, and improves on VG 2020 by planting new seeds for realizing innovation.

**Major Goals of the Long-term Strategy Based on the OMRON Principles**

**Iwashita:** The 10-year span of OMRON's long-term strategy is impressively long. In my experience, long-term plans are usually around three years. Can OMRON read as far as ten years into the future?

**Miyanaga:** This is OMRON's third long-term plan. The first was the G'90s (Golden Nineties) in 1991, and then there was the GD2010 (Grand Design 2010) in 2001. I myself was involved in the planning of this third long-term strategy right at the time of the Lehman Brothers shock. People wondered how we could calmly and confidently set such a long-term plan when times were so difficult. In fact, this is exactly why a solid long-term strategy is important. Rather than predicting

the direction of world affairs and business over the long term, our long-term strategies have aimed to define OMRON. This has been one of their major goals. Ten-year plans allow us to return to this fundamental issue in ways that medium- and short-term plans do not. Many of our employees participate in deep-seated and passionate arguments about this every ten years. For these reasons, I think a long-term strategy is very meaningful.

Of course, our predictions do not always hit the mark, so we correct our direction with a plan called "VG Rolling." Our strategies require that we keep abreast of changes in the environment each year, and that we remain flexible enough to change our goals. We improved in this regard with the second long-term strategy. As a result, we are able to keep each long-term strategy open to changes at all times during the 10-year period so that the plan does not lose its effectiveness. We are seven years into the current VG 2020 long-term strategy, and it has become so deeply ingrained in employees' minds that they talk about it all the time.

**What is the Significance of a 10-Year Plan That Takes Two Years to Develop?**

**Iwashita:** How do you approach the important process of making a plan?

**Miyanaga:** Until very recently, long-term strategies were developed only by certain people in the company. This time,

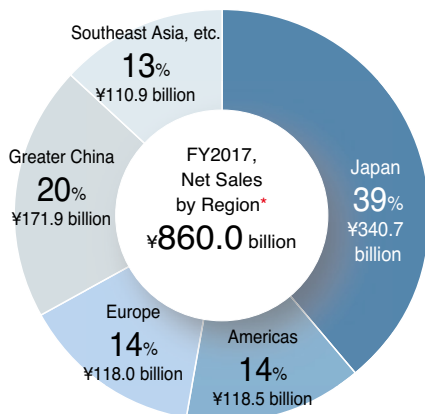


■ **TOGA (The OMRON Global Awards)**

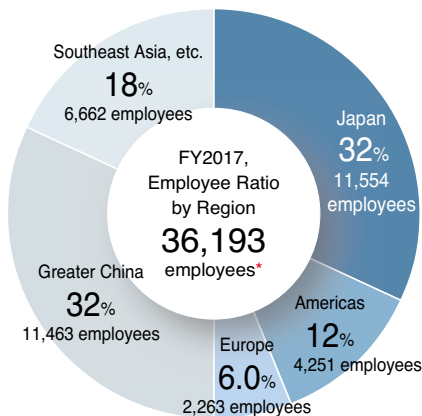
Launched in 2012, TOGA is an awards system designed to encourage employees to declare their own challenge projects based on OMRON Principles. Employee teams around the world then take these on, and through TOGA, we support and recognize their achievements.



■ Percentage of Overseas Sales: Approx. **61%**



Percentage of Overseas Employees: Approx. **68%**



\* As of 3/31/2018

Notes: The countries or areas in each geographic segment are as follows:

- Americas: Includes North, Central, and South America
- Europe: Includes Europe, Russia, Africa, Middle East
- Greater China: Includes China, Taiwan, Hong Kong
- Southeast Asia, etc.: Includes Southeast Asia, Korea, India, Oceania

we tried our best to listen to the opinions of employees worldwide, and we spent two years making this long-term strategy so that everyone would feel heard.

**Iwashita:** That’s a long time to spend planning!

**Miyanaga:** We could not allow ourselves to spend two years working on a 5-year medium-term plan, but because it was ten years, we were able to set aside a two-year preparation period. I traveled worldwide, heard honest opinions, provided immediate feedback, and had discussions based on management opinion as well. I think this period of two years helped in terms of reaching employees.

**Iwashita:** In VG 2.0 this time, you included sustainability issues and strategies in response to social changes. How is this significant?

**Miyanaga:** Last year’s sustainability and SDGs (Sustainable Development Goals) are related to one of the fundamental elements of management that I have long supported. OMRON management always keeps in mind the OMRON Principles: “to improve lives and contribute to a better society.” In other words, we always want to work towards creating a better society by solving social issues through business.

OMRON’s current business domains are in factory automation, healthcare, social infrastructure such as traffic control systems and railway station equipment, vehicle parts (automotive electrical equipment), and so forth. All of these business areas address social needs and social issues. OMRON is a company that has grown because it has contributed to the world by helping resolve social issues. In VG 2.0, OMRON would like its investors to understand this management stance and approach, and to make new investments.

**How TOGA helps to Instill OMRON Principles in Employees Worldwide**

**Iwashita:** Does OMRON consciously conduct evangelism-type activities in order to instill this “OMRON-ism” in its employees?

**Miyanaga:** Yes, we consciously do this to excess. We promote the OMRON Global Awards, which we abbreviate as TOGA, in order to further global employee understanding of our social approach and OMRON Principles. The awards are in their sixth year and involve all employees worldwide. Employees enter challenge topics, and then regional winners compete in a final competition held in Kyoto, where they present their ideas. This final competition is broadcast to all employees around the world.

**Iwashita:** What kind of topics are entered?

**Miyanaga:** They change year by year. The keyword is “challenge.” One of OMRON’s principles is “Challenging Ourselves,” so the goal is to create an environment and culture in which everyone down to the local level pursues challenges.

These are not individual challenges, but group entries. Entries reporting on the results of the year’s activities are submitted at the beginning of the fiscal year and are evaluated by everyone. The process of participating and entering is just as important as the results.

The teams that win in the preliminary competitions make their final presentations on May 10, the day the company was founded. A big trend this year is how to contribute to society by pursuing challenges.

For example, some young people at my company noticed a serious labor shortage at factories in the cold region of Hokkaido and worked with a local SIer (systems integrator) to develop a fully automated foodstuff “picking” system that functions without human labor. As a result, the factory’s productivity increased considerably. The title of their entry is “Rescuing Japan’s Food Supply.” This group courageously took on the challenge of doing work that would make a difference not only to customers, but also to society at large.

**Iwashita:** That is a very large-scale, progressive project. Wow!

**Miyanaga:** At the final presentations, the executives all highly praise the teams chosen for TOGA. Having held these awards for six years now, we are confident that employees worldwide understand that contributing to society through business is an OMRON Principle. OMRON has a total of 36,000 employees, and almost all of them participate. The number of participants is greater than the number of employees, because some employees are involved in more than one entry. The number of participants and entries increases each year. TOGA has been a natural way to achieve our goal of instilling OMRON Principles in employees throughout the world.

## The Key to Managing Globalization is Maintaining a High Rate of Local Hiring

**Iwashita:** The geographical distribution of OMRON employees seems to be well-balanced.

**Miyanaga:** Yes, around 40% of our employees are in Japan, and the rest are around the world.

**Iwashita:** You must have many ideas about global human resources and recruiting people from different countries and cultures, particularly from a diversity perspective, as mentioned in VG 2020.

**Miyanaga:** I think diversity is still in the developmental stages. OMRON focuses not only on gender diversity, but also on integrating our human resources across racial boundaries at every locale in which we do business. Many Japanese companies tend to appoint Japanese nationals as presidents and executives of their U.S. and European subsidiaries, but OMRON is trying to increase the number of local hires, which



**Profile of Mr. Yutaka Miyanaga**  
Executive Vice President, OMRON Corporation  
President, Industrial Automation Company

Apr., 1985 Joined Omron Corporation  
Sep., 2004 General Manager, Application Sensors Div., Sensing Devices & Components Division HQ., Industrial Automation Company  
Mar., 2008 General Manager of Corporate Planning Dept., Group Strategy H.Q.  
Jun., 2010 Executive Officer  
Mar., 2011 Senior General Manager of Global Strategy H.Q.  
Apr., 2013 Managing Officer  
Mar., 2014 President of Industrial Automation Company  
Apr., 2014 Senior Managing Officer  
Apr., 2017 Executive Vice President

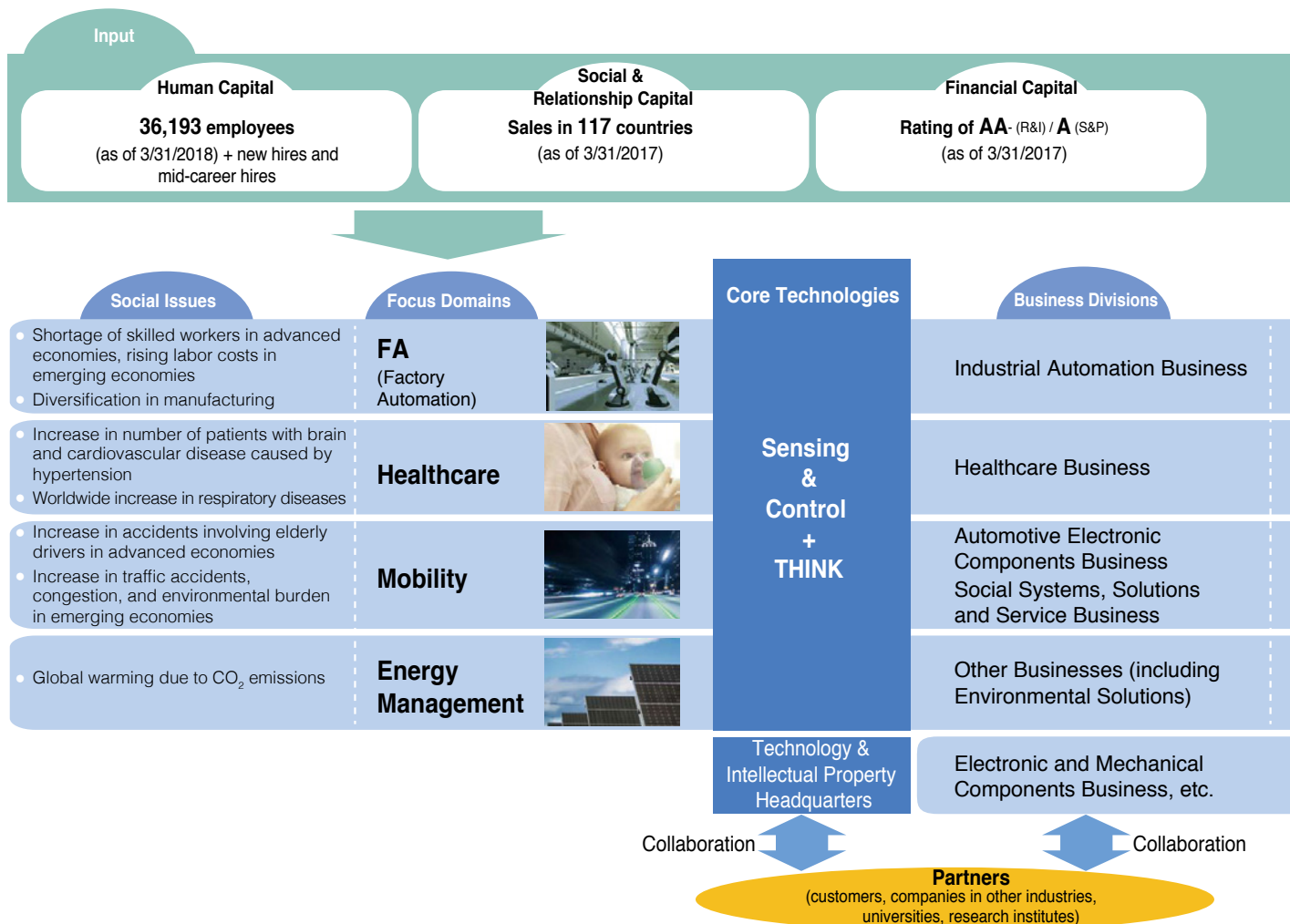
### Corporate Profile (as of March 31, 2018) OMRON Corporation

Head office: Shiokoji Horikawa, Shimogyo-ku, Kyoto 600-8530 Japan  
Representative: Yoshihito Yamada, President & CEO  
Established: May 10, 1933  
Incorporated: May 19, 1948  
Capital: ¥64.1 billion  
Net Sales (consolidated): ¥860.0 billion (2017)  
No. of employees: 36,193

currently comprise approximately half of the executive-level management in these regions. At first, there were concerns about this, and it felt daring to try it, but it soon became clear that our worries had been for nothing. Giving responsibility to local hires has produced results beyond expectations.

Very recently, for example, a Korean person was appointed as president of a subsidiary in Korea. Now Korean employees there believe that they too can aspire to top positions, which completely changed the local mood. This belief that one can be appointed to a variety of important posts eliminates the perception of a “glass ceiling” that prevents promotion on the basis of gender, race, and so forth.

## Value Creation Model



## Core Position Strategy is Key to Top-Down Human Resource Development

**Iwashita:** In developing a business, I think success depends on how much passion managers bring to the task. What is the secret of OMRON's success?

**Miyanaga:** Our success rate is not always 100 percent, but we have a core position strategy for our global human resource system. We have established 200 core positions that have a major impact on our business. These include division general managers, presidents of acquired companies, and the like. Mr. Yamada, our corporate president, holds all authority over personnel decisions for these 200 posts.

**Iwashita:** Does this mean that if an employee of Industrial Automation Company, the company of which you are president, holds one of these core positions, President Yamada's instructions with regard to that employee must be followed?

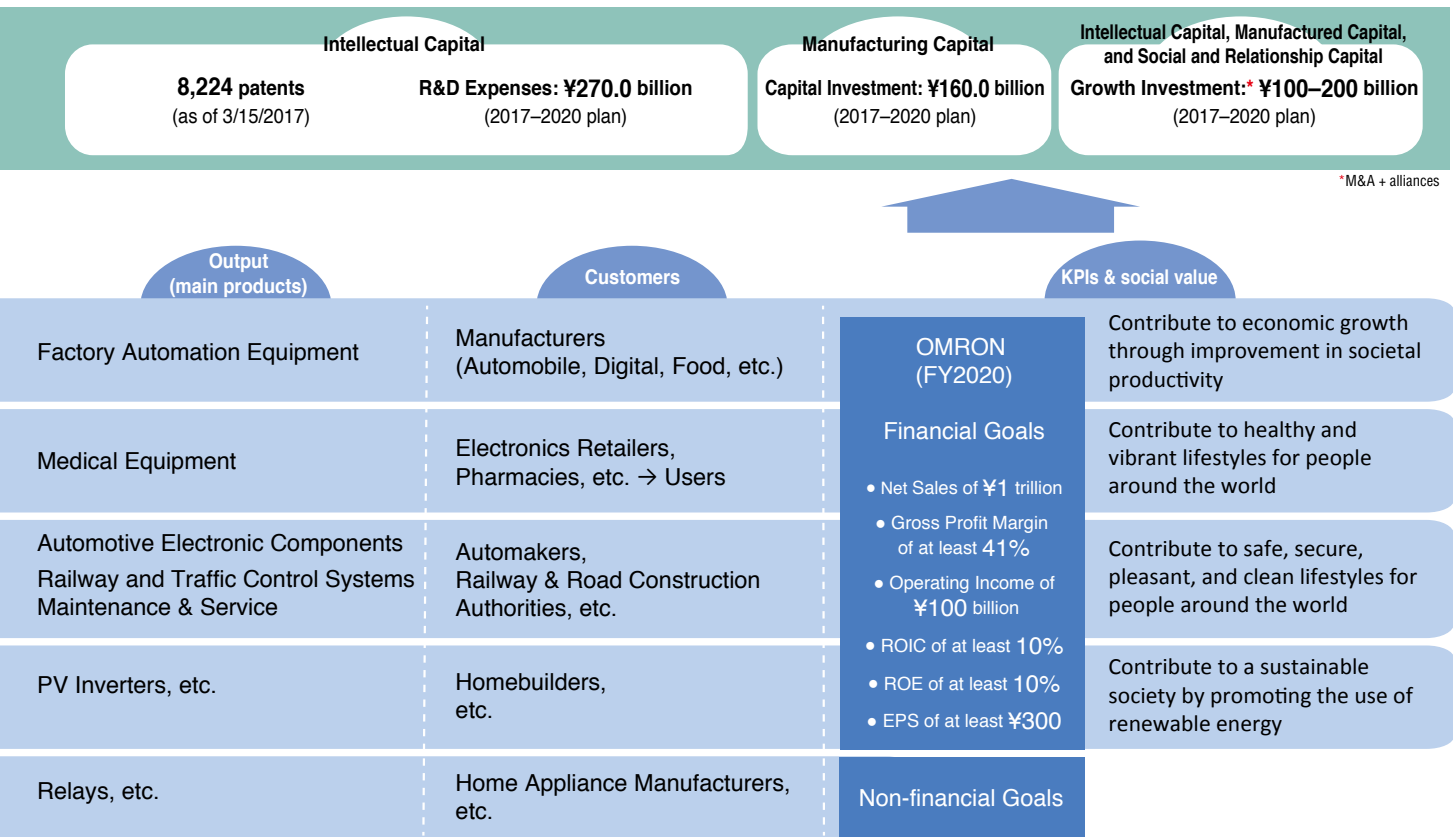
**Miyanaga:** If President Yamada says to make a change, then I have no right to refuse. Whether the 200 core positions are filled by people who are capable and dedicated are based on their ability and value to the company. If an employee does not produce results, he or she will be moved. In this

manner, core positions are always filled with capable, motivated people. Potential management personnel for these core positions are developed by keeping close tabs on them, and having them experience many highly challenging situations.

## Advantages of OMRON's Long-term Strategy in the Transition of Power Between Generations

**Iwashita:** OMRON is close to reaching annual sales of ¥1 trillion. Will you need to change how you do things because of your large size?

**Miyanaga:** In our long-term strategy, we are indeed aiming for ¥1 trillion in sales. President Yamada often says, "Let's become a company that the world can depend on. Living up to the expectations of people all over the world leads to growth, and continuing to meet customer and market expectations instead of simply increasing sales will generate new expectations. That will be a huge advantage for our company in the form of sales. Growth means that we are a company the world needs." We will not be satisfied with ¥1 trillion. We will treat it as just one point along the way.



**Iwashita:** It is just another goal for OMRON, isn't it?

**Miyanaga:** When we were formulating the previous long-term strategy, many senior employees in the company said, "We won't be here in 10 years, so you guys do it yourselves this time." They wanted employees to plan the strategy who would be able to participate fully for all of the next 10 years.

When I started on VG 2020, I was in my forties, so I was at an age where I could participate fully for the following 10 years. For the next long-term VG 2020 plan, looking towards 2030, we will probably gather together young employees who can support OMRON's future and start preparing a new post-VG plan around 2019. I suppose this is how OMRON shifts power to the next generation.

## Sensing & Control + THINK: Broadly Interpreted Automation Technology

**Iwashita:** When you make the next 10-year plan, what kinds of new domains do you think will be included?

**Miyanaga:** The next ten years will be a period of extremely fast change, but even so, I think factory automation is a key area where OMRON will be able to contribute to society.

However, I also think we will need to broaden our interpretation of automation to society in general instead of only factory automation. For example, social issues such as labor shortages and the aging of many populations are going to change the world. OMRON's idea for how to handle these changes is a new kind of automation that connects society with Control & Sensing + THINK as the core technology.

**Iwashita:** In the near future, if the average lifespan becomes 100 years, it would be great to have home automation that combines sensing technology, control technology, and robotics within a home. There is no end to the work OMRON can do!

**Miyanaga:** OMRON is aiming for the kind of automation that enables humans and machines to live in the closest possible harmony. At factories, people's movements and physical condition are sensed and monitored. Automation that contributes to society does not just mean fully automated or minimally-staffed factories, but a balanced society where humans and machines bring out the best in each other.

VG 2.0 is a plan made for innovative times. I do not think OMRON will change its focus on innovation in the next plan from 2020 to 2030.



- **FORPHEUS**, a robot table tennis coach that embodies the concept of Sensing & Control + THINK



The *FORPHEUS* System

### Sensing

Senses the speed and trajectory of the ball.

### + THINK

Assesses the characteristics of the ball hit by the opponent. Predicts the location of the hit and the speed at which the opponent will most likely return the ball.

### Control

Controls the position for returning the ball.

**True interaction between human and machine**

## OMRON's "innovative-Automation!": Innovation in Manufacturing with the World's Most Extensive Control Technology

**Iwashita:** It sounds like things are set up so that only OMRON makes money. (Laughter)

Could you give ULVAC some advice?

**Miyanaga:** You certainly do not need advice, but allow me to propose one thing. (Laughter) At OMRON we have quite a variety of equipment and technology to assist in the automation of devices and production lines. We call this ILORS: I is Input, L is Logic, O is Output, R is Robot, and S is Safety. I take pride in the fact that OMRON is the only company in the world that can provide one-stop solutions for sensors, controllers, motors, robots, and safety equipment to protect people from danger. Our aim is to connect ILORS with software based on the customer's plant and equipment needs, and to achieve innovation in manufacturing, which we call

"innovative-Automation!"

At OMRON, in order to resolve various issues relating to control, SE and field engineers from our Automation Center go to the customer's site and sometimes spend several months there. They gain experience on the factory floor, make software parts, and then improve them further with the customer. There are currently 150 programmable logic control (PLC) software parts that were made in this way, and they are able to control advanced machinery like never before. I hope that ULVAC, as a device maker, will work with us to achieve "innovative-Automation!" as well.

## Technology HQ Responsible for Advanced Innovation Amidst Rapid Change

**Iwashita:** How does OMRON handle its technology development strategy?

**Miyanaga:** By and large, OMRON has two development systems. One consists of the development system in each business unit. The other is the Technology HQ (Keihanna Innovation Center), which is linked to all of the units. The Technology HQ develops more advanced technology, and its role has grown rapidly since the adoption of the VG 2.0 plan. As IoT, robotics, and other fields change faster and faster, OMRON's own development team cannot keep up with progress by itself. The Technology HQ therefore functions as a hub for alliances with various companies, universities, and venture enterprises. Until now, development has been handled by individual business units, but going forward, it will be led by the Technology HQ.

**Iwashita:** What areas do the development departments of the companies work on?

**Miyanaga:** One thing is product development. Another is technology development that strengthens product development. The companies pursue technology development using a two-tiered system, one by means of the technology departments and one in collaboration with the Technology HQ.

**Iwashita:** Are there any boundaries between the companies and the Technology HQ?

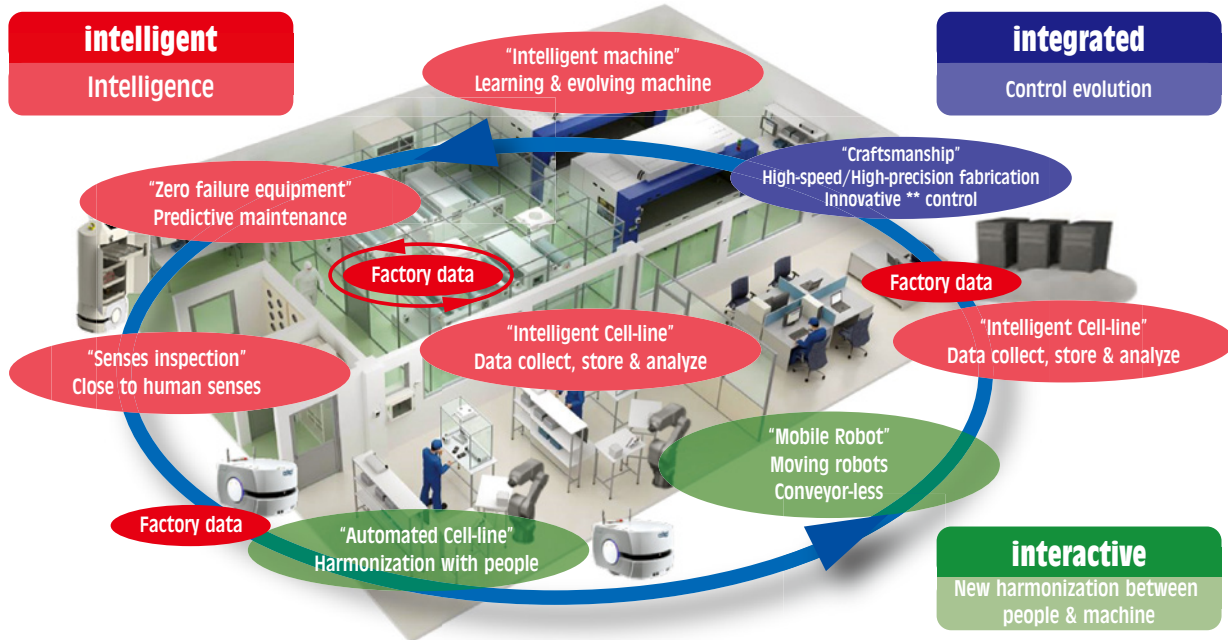
**Miyanaga:** There are organizational boundaries, but each year the companies and the Technology HQ split the workload and decide what topics to focus on. The personnel of both units interact very closely. Although they decide on topics together, the Technology HQ has external technologies and takes charge further into the future. As a result, they each have their own roles, and the Technology HQ pursues its own initiatives even though these may be somewhat less likely to result in successful products.

**Iwashita:** Does the Technology HQ receive an operating budget from the companies, or does it operate on a separate budget?



■ **innovative-Automation!**

Leads to Innovation in Manufacturing Based on OMRON's Three "i"s



**Miyanaga:** There is a separate budget. The Technology HQ falls completely under the jurisdiction of the President. We actively collaborate with them, but they launch new technologies and businesses, so they are a completely separate organization with a separate budget.

**Possible Collaboration Between OMRON and ULVAC**

**Iwashita:** ULVAC is a vertically divided organization with a division system, but I would like to establish a development center responsible for the control equipment of each business division across the organization. For example, value that will soon be added for devices is the ability to check device health. But if functionality that accurately responds to the data from the health check is not available, no added value will be realized.

**Miyanaga:** I think your idea of linking control devices across the organization is fantastic. I think control technology is one of the keys to creating a mesh network that makes the knowledge that machine manufacturers have about their machines available through data processing and communication.

**Iwashita:** I have a proposal. ULVAC's devices involve IoT, AI, and sometimes robotics. OMRON as a factory automation company and ULVAC as a device maker could become business partners. ULVAC could be used as a testing ground, and 4th Industrial Revolution

technology could be incorporated into ULVAC devices to increase their value. A joint team could be stationed permanently at ULVAC's main plant. Please consider collaborating with a device maker – we also want to grow.

**Miyanaga:** At OMRON, we collaborate, and we plan to achieve "innovative-Automation!" together with customers. Data is the key, particularly in the worlds of IoT and AI. How can large data be analyzed and utilized? We have reached a point where development is not possible without manufacturing. For example, a new control algorithm based on onsite data could be tested together with ULVAC and incorporated into a device. This would be true collaboration. We would be happy if we could collaborate with ULVAC.

**Iwashita:** We would definitely appreciate OMRON's partnership. Thank you for joining me today.

