

The sustainable management to which ULVAC aspires

Ever since ULVAC was founded, we have always placed the Basic Corporate Philosophy at the core of our business and contributed to the development of industry and science through the comprehensive utilization of vacuum technology and peripheral technologies. Ms. Yoshimi Nakajima, who became an ULVAC external director in 2018, and President and Chief Executive Officer Setsuo Iwashita exchanged views on issues and initiatives for ULVAC to continue contributing to the creation of a sustainable society through its business activities.



Yoshimi Nakajima
External Director

Setsuo Iwashita
President and Chief Executive Officer

ULVAC businesses closely linked to people's lives

Iwashita A year has passed since you became an external director at ULVAC. Now that you have become actively involved in management, what impression have you formed of ULVAC?

Nakajima ULVAC is a company honestly committed to businesses that benefit the world, and I am delighted to be a member of the management team. Since ULVAC is a B2B company, I had an image of ULVAC being somewhat far from consumers. However, while learning about the business from the inside during the past year, I have come to understand that ULVAC is closely involved with consumers in many ways. I think that the task now is to find a way to more effectively communicate these aspects of ULVAC to the world.

Also, although it appears that ULVAC does not actively publicize its global presence, I now have a renewed awareness that it is in fact a global company in terms of geographical coverage, business scale, and market share.

Iwashita That's right. Although ULVAC is involved in manufacturing in a wide range of fields, the substance of our business is difficult to communicate. For instance, our employees even have trouble explaining it to their own families. Although for many years an issue was that we were not very adept at marketing or communicating information to the outside world, we have strengthened our capabilities in these areas during the past few years.

Nakajima It may be that many employees aren't ordinarily conscious of the fact that their work provides a secure livelihood and a prosperous and comfortable way of life for their families. I think that focusing attention on this issue will create an opportunity for employees to think about solutions to social issues and social contributions through ULVAC's businesses. I also think that looking back on the company history will provide the reason why ULVAC has maintained continuity in society.

Iwashita During the course of ULVAC's history, there have been surprisingly many examples of products that have played important roles in areas closely tied to people's lives. For instance, packaging made of aluminum vapor-deposited package contributes to the long-term storage of food products in developing countries. Although in Japan, where high-tech fields attract attention, ULVAC is known mainly for production equipment for flat-panel displays, semiconductors, and electronic parts, we are deeply involved in people's lives through numerous industrial fields.

The high extensibility and expanding potential of vacuum technology

Iwashita In today's world, we face numerous social problems, including shortages of energy, water, and food, traffic congestion, inadequate medical care, and changes in the natural environment. The term "smart society" provides us with a means of solving these problems. ULVAC supports the propagation of the advanced key technologies and applications that constitute a smart

society by providing vacuum deposition processing technology and equipment fundamental technology.

In that context, looking at energy-related applications, reduction of semiconductor power consumption is required in a smart society, where data growth entails consumption of enormous amounts of electricity. For the past 25 years or so, ULVAC has been involved in the development of fundamental technology that has led to PDRAM, a new type of non-volatile memory that reduces power consumption to 1/100th of the previous amount.

Nakajima I think the story of PDRAM you just mentioned is symbolic in that ULVAC's effort in embarking on the basic research that led to PDRAM some 25 years ago, at a time when mass consumption indicated social prosperity, has led to results in the present era thanks to our steady pursuit of development. It's also symbolic that the technology is now required worldwide. In a smart society, in which information processing is carried out on an unprecedented scale, I think the fact that ULVAC unerringly grasped this key point and has led the technology essential for end-to-end is a selling point.

Iwashita It's not as if we engage in this type of development project with the form of the final product or technology application clearly in mind from the start. Rather, as society changes and social issues change as the development process unfolds, an approach for utilizing the product or technology comes into focus, and shifting to that approach leads to practical application. In other words, the curiosity and spirit of inquiry of engineers eventually leads to results, sometimes after twenty years or longer. This R&D approach may be said to be a tradition at ULVAC. What then becomes necessary is to earn higher profits as a business.

Nakajima Since ULVAC has ample capabilities to create things society requires, the question is how to publicize those capabilities to the world and broaden ULVAC's reach. I have high expectations for ULVAC's marketing operations, which have been beefed up in recent years, and I also think it will become important going forward to listen to external feedback and utilize it in development.

Iwashita That's right. We now promote development from a B2B2C perspective that involves approaching the end users of our customers and are engaging in product development and manufacturing based on a medium-to long-term outlook. To achieve this, it is important that researchers and business operation leaders alike are able to picture a vision and have a dream for the future.

I previously mentioned the example of packaging processed with vapor-deposited aluminum. ULVAC has created tremendous value in the healthcare and life innovation sectors as well as in the electronics and energy sectors. In particular, vacuum freeze-drying technology, which enables long-term storage and volume reduction of food products and pharmaceuticals, is widely used in the manufacturing of freeze-dried foods, emergency rations, powder vaccines, and other products. This technology contributes to solving social problems by handling issues such as reducing food loss, ensuring food supply during disasters, and spreading medical care. Also, our original Micro Powder Dry technology, with which liquid sprayed



Yoshimi Nakajima

Personal Profile

Joined The Yasuda Trust & Banking Co., Ltd. (currently Mizuho Trust & Banking Co., Ltd.) in 1980. After working at manufacturing companies, Citibank, N.A., and Societe Generale Securities Services, joined American Express International, Inc. in 2002, serving as a senior vice president of Japan branch and later as president and representative director of American Express Japan Co., Ltd. Appointed an external director of ULVAC, Inc. in September 2018.

under vacuum is freeze dried, is attracting attention for use in the production of sterile products and a variety of other applications ranging from food and cosmetics raw materials to electronic materials.

Nakajima It would seem that the high extensibility of vacuum technology expands the application field, and potential usages became apparent in the development process, enabling value creation covering a number of fields.

Turning to another subject, I think that responding to global climate change is an important challenge in the industrial world. What are your views on environmental initiatives at ULVAC, in relation to the solving of social problems in the energy sector you mentioned earlier?

Iwashita We engage in environmental initiatives centered on three themes: pursuing environmental protection in our business activities, delivering environmental performance that meets the needs of customers, and contributing to the environment through final products.

ULVAC operates six main production plants, located mainly in East Asia. Each plant not only conforms to and complies with local environmental standards and regulations but also undertakes environmental impact reduction by promoting energy and resource conservation and striving to reduce CO2 emissions, water use, and waste emissions.

The vacuum deposition systems and other products

made at our plants meet the stringent environmental performance conditions of customers and deliver added value in the form of reduced power consumption and improved energy conversion efficiency.

And, our development outcomes give rise to the development of applications, such as PCRAM, solar cells, lithium-ion batteries, power devices, and other final products, and contribute to the environment through power generation, energy saving, and energy storage.

Thus, I want to proactively convey the fact that we protect the environment in multifaceted ways throughout the entire supply chain with which ULVAC products are associated.

Nakajima That means that there are environmental impact reduction and environmental conservation effects available only from vacuum technology. I do think ULVAC should push forward the concept of “vacuum is clean.”

Sustainable initiatives supporting the realization of a sustainable society 50 years and

Iwashita If our customers didn't use vacuum technologies at their production sites, they would use more energy and need greater quantities of deposition materials. I think that ULVAC will need to communicate to the world in an easy-to-understand way the expanding potential and diverse value inherent in vacuums themselves.

HR policies for the realization of sustainable management

Nakajima Nowadays, work style reforms and diversity are important management issues facing companies, and workers are asking themselves again “What do I work for?” There is growing momentum for people to reexamine the relationship between him/her and company as well as between him/her and work. At ULVAC, what are your thoughts about human resources, a critical factor for companies to realize sustainable management?

Iwashita ULVAC currently has around 6,400 employees, half of whom work overseas, and localization of top management personnel has progressed at our overseas subsidiaries throughout the world. At the same time, although we are increasing the number of foreign nationals promoted to executive positions at the head office, nearly all of the top management personnel at the head office are Japanese nationals.

When I reflect on this Group management situation, I wonder whether our employees who work overseas

under orders from the head office really share a common mission and are able to fully play an active role with a sense of purpose in their work. This is because, with regard to the question “What do I work for?” that you mentioned, people's values and sense of purpose differ from country to country, or region to region. So, I think that ULVAC is at the stage where we should reconsider whether our traditional way of engaging in global management under one set of rules and a single policy is the best approach.

Also, at ULVAC there is no discrimination of employees on the basis of gender or race. Nevertheless, with respect to promoting the participation and advancement of women, the number of women promoted to a managerial position remains low. I recognize that this is the matter I must consider to make improvements.

Nakajima Promoting the participation and advancement



are important for the realization of a sustainable society 100 years ahead.

of women isn't based on achievement of a target ratio of women in management positions. I think that, first of all, it is important to recognize differences in the way men and women think and in the work at which they excel and create workplaces that enable people to demonstrate their capabilities free from unfavorable treatment due to those differences.

I don't sense preconceptions or stereotypes toward women in ULVAC's corporate culture, and I think diversity has taken hold in that regard. However, I think that what will be required going forward is inclusion that brings about a new culture arising from diversity. The transformation to global management, such as the promotion of foreign nationals to executive positions that you mentioned, is something that can be achieved as ULVAC promotes inclusion, and I believe that ULVAC is now in that transition period.

Iwashita Another topic I would like to discuss concerning HR policies is initiatives to develop people. A company should be a place where people grow and develop, and I think that companies should provide opportunities for growth and assistance for constant development of skills and abilities. I think that, in addition to operation of education and training programs, what's important is for employees to venture out of their current workplaces, think about things in circumstances different from those they have experienced before, and come to know themselves. This is true in development of next-generation executives as well. For instance, I want division

general managers to gain management experience at overseas subsidiaries and develop their talents while actually exercising authority and responsibility.

Nakajima This process of developing next-generation executives can be considered a succession plan unique to ULVAC, which has many overseas subsidiaries. Various skills are required of the executives of a global corporation, and this approach will also provide an opportunity to study management deeply rooted in each country.

Future aspirations and expectations for ULVAC

Iwashita You have been involved in the management of many companies, and I would like to create opportunities for you to speak to our employees and their families about ULVAC from an outside perspective. Also, I would be very grateful for your assistance in making Board of Directors meetings a forum for more free and frank discussion.

Nakajima I intend to continue to be thoroughly involved in the management of ULVAC as an outside director. Since I have a strong personal interest in people and corporate culture, I want to directly meet more people and support the development of ULVAC, which has a unique, open-minded corporate culture, and high potential. I particularly want to assist in establishing the brand and actively communicating ULVAC's uniqueness to the world.

Although in the past ULVAC followed a growth trajectory without taking major risks, I have high expectations that ULVAC will surely be able to secure even greater growth opportunities by focusing on and thoroughly discussing social and environmental risks that lie 50 years or 100 years ahead.