Special Feature 1

The New Value Creation Which MinebeaMitsumi Aims for by Leveraging the Synergy of Business Integration

Through business integration, MinebeaMitsumi has taken its first steps as a new corporate group, fusing the respective strengths of Minebea Co., Ltd. ("Minebea") and MITSUMI ELECTRIC CO., LTD. ("Mitsumi"). We interviewed directors who came from each company about the technology development synergy which is the driving force behind growth.

Dialogue

Michiya Kagami
Director, Managing Executive Officer
Chief of Engineering Headquarters

×

Hiroshi Aso
Director, Managing Executive Officer
Deputy Chief of Engineering Headquarters
Managing Executive Officer of MITSUMI ELECTRIC CO., LTD.

Background to Business Integration

Kagami: Minebea has focused its efforts on expanding the electronic product business in order to realize further growth. However, the company actually suffered from a severe deficiency of in-house engineers. In considering how to supplement this, we realized that Mitsumi, which had over 1,000 diverse and highly specialized personnel, was our ideal partner.

Aso: Mitsumi has operated for many years as a manufacturer of components for electronic devices, and was bolstering efforts in precision mechanical components with an eye on the future. Minebea, with its foundation in mechanics, possessed proficiency in microfabrication, and was therefore able to supplement Mitsumi in the area of precision products, which had been a deficiency of the company. Furthermore, by combining electrical elements of Mitsumi's circuit and wireless technologies with Minebea's business, centered on ball bearings, we will be able to make better products faster. I believe that the combination of seemingly opposite elements of a mechanical company with an electronics company will enable us to achieve a greater synergistic effect.

Kagami: Minebea did not have such great breadth in its technological development. Hitherto, it expanded based upon a certain number of core technologies, developing unsurpassed products in those fields. Meanwhile, from Minebea's perspective, Mitsumi had a very wide expanse of technologies. It excelled at quickly responding to the demands of customers and society to develop new products.

Aso: Originally, Mitsumi purchased components for assembly, and had a history of producing high value-added products. By working with Minebea, which possessed a core of strong technologies, we create a situation where we have what we need without the need to acquire products and technologies from outside the company. By fusing together the different types of technologies possessed by the two companies, we will achieve greater results than the simple sum of the two elements.

Kagami: In addition, we can see that Minebea's product line-up was centered on output devices such as actuators and monitors, while Mitsumi's line-up included many input devices, such as sensors and cameras. The fact that the two companies specialized in the different fields of input and output meant they could supplement one another, which is why we had high expectations for the integration.

The DNA of Minebea and Mitsumi

Kagami: The DNA of Minebea lies in the sincerity of its manufacturing. For many years, we have worked faithfully to create strong technology in niche fields. We followed an uninterrupted path of steady and diligent efforts for the improvement of products such as ball bearings, enhancing their precision, for over 50 years until the present. Karuizawa Plant, the "mother plant," or launch-pad, of Minebea, has developed these beliefs over many years.

Aso: I have been strongly impressed with Minebea's sincerity, fastidiousness, and seriousness toward manufacturing since we started working together following integration. It was an area where Mitsumi was lacking, and which we hope to actively incorporate.

Kagami: On the other hand, Minebea actually had a culture resistant to ready introduction of new technologies and products. Although, as a manufacturer, we strove to provide the world with "higher quality products, at a lower price, faster, and in greater quantities," we viewed products a risk if it would be difficult to achieve volume, and we tended to avoid them. We considered Mitsumi to be more flexible in this regard.

Aso: Working with the customer in order to create products the world needs is in Mitsumi's DNA. We grew by creating innovative products, developed through extensive communication with customers, and by expanding our reach in the periphery. Currently, the Tama Business Division, which manages Mitsumi's head office functions, continues that tradition, supporting manufacturing as a base for design and development.

Exercising the Synergy of Integration

Kagami: A good example of products where we can readily produce synergy are the sensors required for the future IoT*1 society. Minebea boasted among the highest volume of strain gage production globally, while Mitsumi possessed a line-up of sensors utilizing MEMS*2 technology. By combining our sensors, developed through different approaches, we believe that we can gain an advantage unmatched by our competitors.

Aso: We will certainly be able to leverage the strengths of the two companies in force sensors, which measure load. In addition, we will also be able to propose products which utilize sensors developed by Mitsumi for temperature, humidity, and airflow. For example, we could combine them with back lights and actuators, which are Minebea's specialty.

Kagami: Because Minebea produces various output devices, if we are able to successfully combine these with sensors, which are input devices, we can easily produce composite products and thereby achieve synergy.

Aso: Exactly. In addition, we will also attempt to apply technology from Mitsumi's semiconductor business for the control of motor products manufactured by Minebea to produce further synergy.

*1 Internet of Things: Connecting of various physical devices via the Internet.
*2 Micro Electro Mechanical Systems: Devices with micro-level construction comprised of sensors, actuators, electrical circuits and other mechanical elements assembled upon the silicon, glass, or organic material bases of conductors.

How to Produce Synergy

Kagami: Firstly we need to survey the technologies possessed by each company. With the fusion of the two companies, the engineers are able to easily share their respective cultures, due to the shared language of technology, and differences in awareness are virtually undetectable in matters such as the focus of business We are also sharing all of our data and engaging in open discussions.

Special Feature 1

The New Value Creation Which MinebeaMitsumi Aims for by Leveraging the Synergy of Business Integration

Aso: Following the organizational changes undertaken as part of our integration, there have been many cases where we have realized that the other party had technologies that we had been looking for. We have held frequent joint discussions on a range of topics whereby we have been able to arrange systems for advancing the projects comprised of members from each party.

Kagami: Presently, we are giving serious consideration to the technology-focused marketing we are advancing separately from that conducted by the sales division. Even if you are able to imagine the generalities of concepts which could improve people's lifestyles, in many cases it is difficult to identify the technology needed to achieve this. For example, we believe that the field of AI* is a key focus, and we must consider its progress to date, its future direction, and what auxiliary technologies are required for its promulgation.

Aso: We need to anticipate how society will change in the future and aim to create the products and technologies that will be necessary. Although this is not easy, this is our ideal.

*Artificial Intelligence

The Challenge Faced by the New Company MinebeaMitsumi

Kagami: When considering IoT and AI, which are the keys to the future of society, there is a tendency to focus on digital aspects such as how to handle data processing. However, another indispensable factor is how analog and digital phenomena can be mutually converted. This includes the aspects of "entry" that converts analog phenomena detected by sensors into digital data, the subsequent data processing, and the "exit" that converts digital signals into analog movement through motors and actuators. This is an area where MinebeaMitsumi, with its analog focus, can make a major contribution.

Aso: There will be no change to the fact that we, as analog specialists, will have unique strength in offering value in areas linking analog and digital. In addition, there is also the potential for the secondary creation of new business related to the digital sector. For example, we will be able to readily imagine how to take digitized breathing and pulse data measured with bed sensors and utilize it for the benefit of society.

Kagami: From the perspective of markets, we believe that, in addition to the medical and care fields, the automotive field will see significant growth. With the spread of hybrid and electric cars, there is strong demand for motor, actuators, and sensors. In addition, in focusing upon the field of smart cities, we can combine hitherto already highly efficient LED street lighting with the cloud network to create systems for the comprehensive management of various functions of urban life.

Aso: We also anticipate growth in the field of robotics. Both input and output technologies are essential in robotics. MinebeaMitsumi possesses technology such as sensors and cameras, which are the "eyes" of robots, with the ball bearings and motors used to enable movement, together with circuit technology which can enable more effective motor operation. We believe that this is a field we can tackle by exercising our synergy.

The Value which MinebeaMitsumi can Offer toward Resolution of Society's Challenges

Kagami: By working toward "stable supply and making reliable products with low energy consumption widely available," which we state in our Basic CSR Policy, we will contribute to the realization of a sustainable society. In particular, as a device manufacturer, MinebeaMitsumi will continue to focus upon miniaturization and enhanced efficiency, which has a direct impact upon resource and energy conservation in products and

production processes. The initiatives which are our core business are already playing no small part in the reduction of society's environmental burden, and we believe that this is the very reason for the existence of device manufacturers.

Aso: This is exactly correct. Nowadays, how we address environmental issues is indispensable for meeting client demands. By sincerely responding to the needs of society, our products naturally tend to be more environmentally friendly.

Kagami: Motors account for approximately 40% of global energy usage, while lighting accounts for approximately 25%. Improving the efficiency of these will certainly have a significant impact in reducing energy usage. Because we are a component manufacturer, we are not readily able to produce large-scale final products. However, we believe that, through provision of superior products and solutions, we play a valuable role in supporting the realization of the ideas of companies who are focused on challenging new possibilities for the future. Based upon our Basic CSR Policy, we will align our awareness and work together as a united company.

The Base Supporting MinebeaMitsumi's Manufacturing

Karuizawa Plant

Karuizawa Plant has operated for over 50 years since its establishment in natural surrounds on the tablelands of Nagano Prefecture in 1963. Not only does it operate as a base for manufacturing in Japan, it also plays an important role in the expansion of our production overseas.

As the mother plant for production bases in each country, it designs and produces various machinery, dies, and jigs, develops production technology, and conducts training and education of employees abroad, supporting production activities and thereby contributing to the development of other countries through manufacturing.

Tama Business Division

Mitsumi was established in Yukigaya, Ota-ku Ward, Tokyo, in January 1954, and expanded after it found success in the development of POLYVARICON* for pocket radios. In 2002, it transferred its headquarters to Tama City, Tokyo, where it is still located.

The Tama Business Division conducts design and development of connectors, electric power components, and automotive products. It also works to bolster the production technology for overseas manufacturing bases and provides production support. It supports manufacturing based upon Mitsumi, contributing to the supply of high quality, high precision products.

* Polyethylene variable capacitors, which use polyethylene film as dielectric. Invented and developed by Mitsumi. Product name of Mitsumi.