'Each challenge, regardless of the scale, serves as an opportunity for transformation and learning'

In an exclusive interview, Hamamatsu Photonics President Tadashi Maruno explains how the global giant has met and overcome adversity across 70 years as it celebrates its platinum anniversary

What do you consider to be the most significant achievement of the organisation?

We believe our organisation's most significant achievement, which we also consider our responsibility, lies in the positive impact our solutions have on humanity, society, and the environment in cooperation with business partners, suppliers, employees, shareholders, and local communities. It not only enhances our corporate value, but also compels us to persistently make meaningful contributions for a better future.

How do you think Hamamatsu Photonics has managed to prosper so well across such a long period, and therefore what do you consider to be its most significant strengths?

Since our founding, we have focused on light technology, consistently advancing product performance, such as high sensitivity and speed for sensors, and high brightness and long life for light sources. This has been the result of our commitment to addressing our customer requests and challenges.

This philosophy also extends to our opto-semiconductor products, because we strive to supply high-value-added and unique products tailored to specific customers and applications rather than cost-oriented solutions through mass production.

To facilitate these objectives, we invested in self-owned and expanded facilities, allowing for in-house design and manufacturing – a critical element in achieving these goals. An additional aspect of our success lies in the implementation of a department management system for product development. This system, based on sales and profits, is characterised by product-specific manufacturing

"The core of our accomplishments lies in our people, technology, and knowledge"

departments. Each department takes responsibility for the product's success, fostering a management mindset that values both product excellence and personnel development. However, since we believe there is always room for improvement, our ongoing commitment is to refine and enhance our processes.

To summarise, at the core of our accomplishments lies our people. technology, and knowledge - this is the foundation upon which our success is built. Our business advancements not only satisfy our customers, but also instil a sense of pride in each employee. Our driving force is knowing that our technologies and products contribute to improving society and the advancement of science.

Across its 70-year history, what was Hamamatsu Photonics' most significant challenge and how did the organisation change or learn from this experience?

At the beginning - and throughout our founding period – we experienced scarcity in resources including people, goods, or funds. This was the backdrop against which Hamamatsu Photonics was forged. Following this period, another challenge emerged as we ventured into the development of opto-semiconductor products, transitioning from our exclusive focus on electron tube products. Then, the establishment of subsidiaries, coupled with the bold expansion of our operations overseas, added layers of complexity to our growth trajectory.

The oil crisis of the 1970s posed a significant financial challenge, leading us to re-evaluate and recover from deficits. It was during such testing times that the introduction of a divisional management style became imperative for strategic agility. Finally, the establishment of our Central Research Laboratories marked a significant milestone in reinforcing our commitment to innovation.

We have tackled numerous events. themes, and issues, both internal and "Each department takes responsibility for the product's success, fostering a management mindset that values both product excellence and personnel development"

in response to external changes. It is intrinsic to our company's values to take on challenges refusing to remain confined by the status quo. Each challenge, regardless of the scale, serves as an opportunity for transformation and learning.

What philosophy has most contributed to the company's strength?

At the heart of our company's resilience is a philosophy rooted in the pursuit of the unknown and unexplored areas to create new markets harnessing photonics technologies. Embracing the essence of our slogan – 'Photon is our business' – we are committed to dedicating our efforts to the advancements of science and technology for a better society and a healthier planet. To achieve this commitment, we hold in high esteem the principles of autonomy and the spirit of challenge. Our dedication to turning this vision into reality is unyielding.





Is there anything unique in the way Hamamatsu Photonics works with its customers that you think makes the difference?

It goes without saying that building a close relationship with customers is extremely important. Our company's style is to develop and provide custom products that meet our customers' needs, rather than selling standard products in large quantities. In our commitment to excellence, gaining the trust of our customers is not solely about meeting product specifications; it extends to understanding the challenges and issues our customers face. We delve into the intricacies of our customers' challenges, collaboratively working to create tailormade products that not only meet, but surpass their expectations.

Now that you have changed management [in December 2022], what should customers expect in terms of strategic changes?

Since the change in management, customers can anticipate several strategic enhancements at Hamamatsu Photonics. Our unique products are intricately linked to robust business strategies tailored by

each division within the company. The new management is dedicated to fortifying our existing strengths while proactively addressing our customers' challenges. The Hamamatsu Group's management strategy unifies individual business strategies, guiding investment and development decisions. This will ensure a more prompt and efficient product launch process.

The environmental context and sustainability have always been a key consideration for Hamamatsu Photonics. Can you provide some examples of how the company puts this concern into practice?

We recognise that environmental sustainability is essential for the growth of our group. We actively contribute to a carbon-neutral society by participating in the 'RE100' initiative, which we have done since 2022. Our goal is to achieve 100% renewable energy usage within our group by 2040. This involves the conversion of purchased power to green power and the introduction of renewable energy.

Furthermore, we are working to improve the work-life balance of our employees and foster a diverse and inclusive workplace. As a result, we earned prestigious

"X-ray inspection, such as lithium-ion batteries and automotive circuit boards, as a result of electrification of cars, is another example of significant change that has taken place in recent years"

certifications, including the '2023 Health & Productivity Stock Selection1' and the '2023 Certified Health & Productivity Management Outstanding Organizations (Large Enterprise category) White 5002' (sixth consecutive year), awarded by the Ministry of Economy, Trade and Industry (METI) program.

Looking further into 2024, can you summarise what you consider to be the greatest challenges facing Hamamatsu Photonics today?

We recognise several challenges, including the impacts of global monetary tightening;

concerns regarding economic downturns in China and other parts of the world; and the rising of prices poses significant hurdles for our operations.

Which industries, such as medical, life sciences, semiconductor, automotive, aerospace, electronics, drive your presence? Have there been any shifts over the years?

Medical, life sciences, semiconductor and non-destructive testing are key industries, accounting for more than 70% of our sales. Especially the medical sector had a sudden expansion, particularly in X-ray CT and PCR systems, driven by the challenges posed by Covid-19. We anticipate that X-ray CT in particular will continue to be a major application for us in the future.

Furthermore, the increased demand for X-ray inspection in areas such as lithiumion batteries (LiBs) and automotive circuit boards - as a result of the electrification of cars – is another example of the significant changes that have taken place in recent years. Our Micro Focus X-ray source is widely recognised as a critical product in fulfilling the needs of this evolving inspection landscape.

Similarly, which technologies that you offer have gained the most attention?

The focus on our technologies has evolved in response to the market's demand for comprehensive solutions rather than standalone products. Therefore, we also provide built-in modules, serving as the engine of our customer's instruments.

These are equipped with not only sensors and light sources, but also drive circuits and interfaces.

Have there been any shifts over the years? If so, what caused this shift? Notably, the demand for products that

include software, including AI, as well as hardware has driven, and is driving, this shift that we see. It is really increasing year by year.

Considering your answers to the previous two questions, do you foresee these trends continuing over the next six to seven years, or do you anticipate a significant change in the markets by the close of this decade?

We anticipate the trends observed in recent years to persist over a certain period. In the healthcare sector, for example, it is essential to have diagnostic equipment that diagnoses diseases at an early stage, so we can ensure good health and longevity for all, therefore this market will continue to expand in the future by embracing new technologies.

Based on our experience, it may take six to seven years or more for new technologies or products to be established and recognised as having a certain scale of use and market presence. The same will be true in other industries that have an impact on the quality of our lives and the environment. However, while innovation can reshape conventional market structures, we are committed to being a company that maintains a strong

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and relevant presence amid evolving technological landscapes.

In which areas of photonics technology/ applications are you currently seeing a significant number of start-ups emerge? Do you see this as a growth opportunity for Hamamatsu Photonics?

We observe a surge in several application fields. Although we have been in business for 70 years, there are still unknown and unexplored areas, presenting opportunities for innovation and growth, akin to a startup company. One notable expansion is in quantum technology, which is opening new possibilities in photonics technology for sensing, communication, and computing. We view this as both a challenge and an opportunity and we are eager to work collaboratively with numerous companies, including start-ups.

Embracing these emerging technologies aligns with our commitment to staying at the forefront of photonics innovation.

How do you see Hamamatsu Photonics celebrating its 100th anniversary, which is just 30 years from now?

In envisioning our 100th anniversary – as you say, 30 years from now – I believe that we will be a dynamic group company that thrives on the exchange of new ideas and knowledge through robust internal and external collaborations worldwide. Embracing the enduring spirit of 'wa'. a Japanese word highlighting diversity, where individuals respect themselves, acknowledge differences and cooperate seamlessly, making us a truly global enterprise. Our commitment extends beyond business success as we aspire to contribute unwaveringly to society, the environment, and humanity. With a steadfast dedication to innovation and collaboration, Hamamatsu Photonics envisions a future where we continue to make a meaningful and lasting impact on a global scale. **EO**



References

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