

Special Feature: Talking about the Innovation Strategy Division

Fostering innovation to meet and exceed the expectations of society



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In January 2023, Nabtesco established the Innovation Strategy Division as an organization to foster measures to become "Leaders in Innovation" as upheld in the long-term vision. The executives who are in charge of corporate planning, technology and human resources at Nabtesco also have concurrent roles in the Innovation Strategy Division.

They talked with the Division head about their perception of innovation-related issues, the desirable corporate culture for promoting innovation and about the direction of reforms to be taken by the Company.



Higuchi

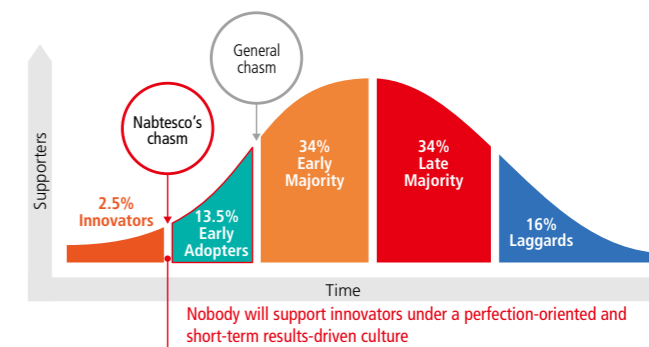
Things that seem to be irrelevant to us might lead us to find something new. We therefore need to broaden our horizons and look beyond the present ahead of society at large, not just ahead of our customers.

To avoid becoming a victim of our own success

Higuchi: Thinking it is essential to foster innovation for the sustainable growth of Nabtesco, we set the catchphrase, "Innovation in Action" for our long-term vision. However, we have not yet successfully fostered innovation to the degree we had hoped for and so the establishment of the Innovation Strategy Division was proposed as a cross-departmental initiative for the strategic promotion of innovation.

Sasaki: Nabtesco was founded in 2003 through the merger of NABCO and Teijin Seiki, which had been founded in 1925 and 1944, respectively, based on the

● Innovation viewed based on Chasm Theory



Japanese government's industrial promotion policy. After the end of World War II, NABCO worked on its pneumatic and hydraulic technologies and Teijin Seiki its hydraulic and speed reduction technologies to contribute to Japan's postwar industrial reconstruction and the establishment of infrastructure while also boosting their own competitiveness. These two companies had been giving first priority to working closely with customers and meeting their needs, and top-class companies adopted our products. This practice of consistently meeting customer needs perfectly and achieving short-term success continued to be valued even after the two companies integrated to become Nabtesco. Amid this prevailing organizational culture, novel ideas unrelated to customers' needs and personnel with unique abilities tended to be overlooked and undervalued. This recognition formed the basis of the hypothesis that is now informing our human capital management.

Higuchi: We had been feeling a sense of crisis about our slow progress with innovation. In 2018, in order to mitigate this feeling, we founded Nabtesco Technology Ventures AG in Switzerland to conduct corporate venture capital (CVC) activities. Subsequently, in 2021, we established the CVC Promotion Division (presently CVC Promotion Department) out of a need, in these turbulent times, to use unconventional methods to find inspiration and not depend solely on our own resources. For example, in the automobile industry, it is impossible for a company to respond to the EV trend by relying solely on its own technologies. The same applies to our industry and we need to apply digital technologies to our products and processes. Accordingly, we now have the CVC Promotion Department and the Digital Transformation Promotion Department under the Innovation Strategy Division. The two departments will strive to create new value by adopting knowledge and expertise from outside the Company to create new businesses together.

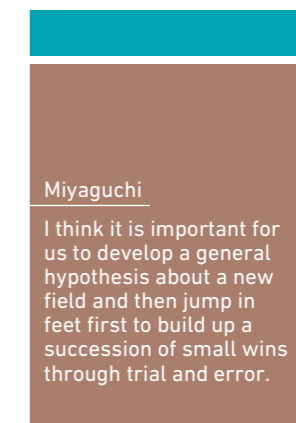
Boosting momentum through both tangible and intangible measures

Sasaki: For the strategic promotion of innovation, it is

essential to conduct CVC and DX activities. We also need to give support to in-house innovators on a company-wide basis toward boosting the momentum for innovation across the board. Chasm Theory has helped us to share an understanding of Nabtesco's innovation-related situation. According to the theory, there is a chasm between early adopters and the early majority, and you can win majority support in the market by successfully crossing the chasm. In the case of Nabtesco, however, the Company might need to cross a chasm to reach early adopters or even to reach innovators. We are concerned that the culture of perfectionism might make it difficult for innovators at the Company, if they appear, to find supporters. I therefore think it is also necessary to create a corporate culture of and momentum for supporting in-house innovators.

Higuchi: Yes, indeed. We have newly established the intrapreneurship program "Light" and the in-house company innovation system with an eye to building a culture for innovation. The establishment of the systems is one of the tangible measures that we have implemented for the Company to proactively listen to employees' ideas for innovation and give support for their materialization.

Sasaki: To support such measures, we also need to implement intangible personnel measures. For human capital management, it is essential to foster both tangible and intangible measures.



Miyaguchi

I think it is important for us to develop a general hypothesis about a new field and then jump in feet first to build up a succession of small wins through trial and error.



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Sasaki

For innovation, it is necessary to implement both tangible and intangible measures.

Kiryama: At the Technology and R&D Division, employees are spending the time saved through work style reforms to participate in the free discussions held for the generation of new ideas under the leadership of younger employees as well as to conduct research independently. I also participate in these activities, thinking it is important for a leader to encourage younger employees to engage in free discussion and provide them with an environment where they can proactively express their opinions, which will in turn help the organization to produce new ideas.

Sasaki: DX-based process innovation is a key factor to save time. DX could be regarded as a purpose rather than a means. If we can increase our operational efficiency through DX to save time and thereby help employees to feel more relaxed, the number of employees who can serve as early adopters might increase. To this end, it is also important to foster communication. Taking the opportunity provided by the 20th anniversary of the founding of Nabtesco, I hope that we will be able to foster communication and thereby promote innovation across the Company.

Exceeding expectations from a long-term viewpoint

Miyaguchi: Nabtesco adopts the in-house company system and each of the in-house companies is responsible for their respective earnings. Accordingly, they tend to pursue short-term profit and inevitably input their resources into their current business activities. A major reason for this is that such activities generate short-term profits. However, activities that are conducted on a long-term basis should also be evaluated, including the struggle to develop new products, the effect of which cannot easily be proven using figures.

Sasaki: In fact, in the performance evaluation of the in-house companies, non-financial elements, such as the creation of intellectual property and the reduction of CO₂ emissions, are becoming increasingly important.

Higuchi: From the viewpoint of profit distribution, it is of course necessary to evaluate short-term results, but focusing too much on them might hinder us from achieving long-term growth. The in-house company innovation system represents one of our tangible measures to support the in-house companies in continuing their innovation efforts, which are absolutely necessary on a long-term basis, and this system is to be implemented in parallel with the intrapreneurship program "Light."

Kiryama: The Technology and R&D Division has created a technological roadmap in collaboration with the in-house companies. We summarize the key technological fields, new market opportunities, and the existing businesses of the in-house companies in a matrix format with a focus on new types of energy, smart robotics and next-generation mobility as new growth fields.

The next challenge for us to meet includes promoting open innovation and M&A based on our existing core technologies. It is also important to identify promising business fields by making effective use of the Intellectual Property (IP) Landscape analysis method. We have already identified the following needs and challenges for the CMFS business, which is a new business that we are currently working on intensively: macro research for patents regarding offshore wind power generation systems; prevention of equipment failures; higher operational efficiency; longer product life and failure detection; and remote monitoring. We are of course also proactively performing IP Landscape analysis in the technological fields of other in-house companies.

Miyaguchi: In the wind power generation field, we are promoting collaboration with eologix, which has advanced technology to monitor the status of wind turbine blades, through CVC investment. We are working to combine eologix's technology with our CMFS to advance it as a condition monitoring system and to contribute to increasing the operational efficiency of wind turbines.

We have two targets to attain through CVC. First, we aim to foster open innovation to support the in-house companies. Second, we are promoting collaboration with startups engaging in new disruptive innovation-related fields. For space development, we have invested in SPACE ONE, and including the space business in our business portfolio has helped us gain great insights. For example, we learned about the strictness of component specifications as well as about the possible scenarios for our future

participation in the satellite business. For new innovative fields, we are committed to speeding up our measures so that we can participate before it is too late for us to become a leader in a niche market or before it has become a mainstream market.

Aiming for 60% rather than being perfect

Sasaki: For us to be innovators, I think we need to jump into a new field when we are 60% ready for it, rather than waiting until we're at 100%, which would be a departure from Nabtesco's perfection-oriented culture. But it is of course important to ensure quality as a precondition for this.

Miyaguchi: For ideas proposed under the Light system, it is absolutely necessary to do so.

Higuchi: From now on, in complete contrast to the past, those proposing new ideas at Nabtesco will be supported by "accelerators," who will guide them toward successful innovation. For the creation of new business ideas, it is important to identify potential needs in society ahead of others, for which we need to take a broader view beyond the scope of our own industry. Things that seem to be irrelevant to us might lead us to find something new. We therefore need to broaden our horizons and look beyond the present ahead of society at large, not just ahead of our customers.

Miyaguchi: I think it is important for us to develop a general hypothesis about a new field and then jump in feet first to build up a succession of small wins through trial and error.

Kiryama: Regarding the free discussion and research activities led by younger employees, which I mentioned earlier, the employees will also be able to learn various new things by participating in trade fairs and seminars, regardless of whether the events are related to their own business field or not. Such experiences will help them make new findings and make connections between those findings and what they are already doing, which will in turn help them hit upon new ideas and make even more findings.

Higuchi: So, you need to learn and know more. It is said that only three out of a thousand ideas lead to innovation, and so we need to increase the number of ideas proposed, for which it is essential to provide employees with an environment where they can gain inspiration.

Kiryama

It is important for a leader to encourage younger employees to engage in free discussion and provide them with an environment where they can proactively express their opinions, which will in turn help the organization to produce new ideas.



Meeting and exceeding expectations as one Nabtesco team

Miyaguchi: Unlike conducting short- and medium-term development activities, in generating innovations that help solve social issues we will face various uncertainties. However, compared with when we started CVC activities, I think the in-house companies and employees have become more open-minded. How should we try to cross the chasm? To cross it, we need a corporate culture that enables employees to think together as an organization, and I would like to create such a culture as a member of this team of four.

Higuchi: Learning lessons from past failures to commercialize new ideas, we set up the Innovation Strategy Division. We will make full use of Nabtesco's resources to implement both tangible and intangible measures toward the commercialization of innovative ideas.

Kiryama: The four of us share the same commitment. We will collaborate with one another to create new products and businesses that will be Nabtesco's next-generation mainstays. I would of course like to cooperate with members of both the administrative departments and in-house companies to work as one Nabtesco team.

Sasaki: Successful innovation depends on whether or not we can motivate personnel and increase the momentum of the entire organization. As for personnel, I would like to make necessary investments proactively and foster measures to increase our corporate value on a medium- to long-term basis.

While valuing the fact that we have long been meeting the expectations of our customers, we will make it part of our corporate culture to strive to exceed customer expectations, even just a little, for which I would like to foster personnel measures to support employees in making such efforts.

All four: It is important for us to keep the momentum for innovation going.