

Part 02 In-house conversation among persons responsible for product development

For realization of “integration of CSR activities into business operations”



Responsible persons of the Advanced Technology Division and the New Business Creation Department, in charge of a mission of developing new or next-generation markets, got together to talk about tackling and solving social issues, challenges associated with producing something new, and future prospects (in July 2020).

Topic 01 On Toyal Group products contributing to resolution of social issues

■ Approaches to social issues

- The solar cooker was, at first, intended primarily for community contribution and as part of PR activities. However, as that kind of approach will be a dead-end in the future, we started to work on a project of making it part of our business. As a commercially marketable product, it has been positioned as a counter-disaster product. The market launch is scheduled to be made by the end of the current fiscal year. (Hayashi)
- We often hear of difficulties associated with actions to satisfy the RE100 requirements. The Hane® Module we have developed can generate the same power with one-half weight of the conventional models. Of all companies around the world, I am confident that we are the only one capable of realizing this performance. This has been possible only because of our know-how accumulated in the past 20 years. (Minami)
- In Japan, prosthetic arms are rarely used; and myoelectrically controlled hands are used only by hundreds of people nationwide at most. There are only three Japanese hospitals handling these devices. One of the reasons may be that “they are heavy and big.” If we solve this problem, we can contribute to improving the current situation. (Kusai)

■ Challenges in the process

- There are many solar cookers other than ours in the market; we cannot compete with them in prices, as cheap models are available, particularly overseas. Our products are much superior functionally and in quality, but users do not yet fully understand how to use them. (Hayashi)
- As for selling Hane® Module, prices and market recognition are major challenges because of our position as a latecomer. (Minami)
- It is hard for any responsible person to decide which to take, social contribution or profits. (Hayashi)
- My weak point is lack of experience in handling medical devices. I sometimes feel at a loss about how different the views and needs are between medical practitioners at hospitals and commercial enterprises. (Kusai)
- There are products making me wonder why they are included in our repertoire. Perfect match between social issues and our proprietary technologies would be ideal but, in reality, is quite difficult to find; that is our problem. (Den)
- Our job does not end with making and selling products and parts; we are expected to deliver them to places where they are needed. As to solar cookers, our job does not end with delivering them to NGOs. As to the batteries, we must think about how the prosthetic arms are delivered to people with disabilities. For Hane® Module, in collaboration with installation service providers, we have established schemes covering the last installation stage. (Minami)

■ Future possibilities

- We would like to design solar cookers not only as per se, but also for other purposes; for example, they can be used as some kind of containers, etc. To that end, we need to seek combinations with other proprietary technologies. (Hayashi)
- If we make Hane® Module much lighter, we can expand the uses, and even overseas sales routes. (Mori)
- In the light of downstream situations, operations similar to R&D activities may also be considered. Sales license approaches may be another option. Uses other than prosthetic arms could also be developed. (Kusai)
- We have started studies on recycling solar batteries. As disposal methods of solar batteries have not been established, the Toyal Group, as a manufacturer, should take responsibility for solar battery recycling, which can be a pillar of our future business. (Minami)



Topic 02 How to continue innovation contributing to resolution of social issues

■ Knowing both internal and external technologies and seeds

- Knowing what can be done with internal technologies and how we handle them will lead to product development. We can facilitate and expedite our jobs by visiting various sites to acquire knowledge and information and properly applying and deepening them in products at hand (Hayashi)
- As to finding in-house seeds, there are extremely limited horizontal interactions between groups handling aluminium foils and those handling aluminium powder. Generally speaking, because materials handled separately will weaken the overall competitiveness, we need to connect different types of materials to produce combined results. (Den)
- We will also consider systems where a broad spectrum of knowledge can be shared and personnel transfers can be effectively implemented. (Den)

■ Taking external viewpoints

- We should take broader perspectives. Each of us should look outside more often and deeply to find new alliance partners and possibilities of combining different options, so that we can find our new strengths and develop new markets. (Minami)
- In implementing open innovation initiatives by creating internal/external cooperative systems, it will be difficult to coordinate all participants because everyone is likely to take the final results and profits. (Kusai)

■ Clarify concepts and keep going while implementing verifications

- Japanese prefer so-called “solutions”; in other words, after finishing concept verification, they immediately move on to solutions; and when several attempts end up in failure, they abandon the entire projects. This, I am afraid, may be a major cause of preventing innovation. (Kusai)
- It is important to create a system in which, after several concepts are created and verified one can go back to the starting point and ponder again what kind of opportunities are preferable, and consider whether the concepts really match the opportunities in the first place, or whether there can be any other new opportunities. (Kusai)

■ Maintaining motivation

- Because no other company in Japan has ever tried, why can't we be the “first penguin” to plunge into the ocean first? (Kusai)
- We can try something new by changing our basic premises, and gradually find and exert our strengths by repeating the process. (Kusai)
- It will be fun to think about how we can contribute to society from different perspectives, for example, evaluating how much CO₂ we have been able to cut through our products. (Minami)
- I would like to emphasize, above all else, our technologies, or our real strengths, based on which we can make something that we find exciting; that excitement should not be forgotten. (Den)
- We should not be satisfied with the positioning of social contribution; but should make marketable products and systems that can also contribute to profits. (Hayashi)



- 1 Advanced Technology Division
Core Technology Center Gumma Laboratory
Yuya Hayashi
- 2 Technical Strategy Department, Advanced Technology Division
Hiroyuki Kusai
- 3 Chief in charge of Solar Business Section, New Business Creation Department
Takahide Minami
- 4 New Business Creation Department
Kengo Den
- 5 Facilitator| Sun Messe Innovative Network Center (Sinc)
Yoshihiko Yamabuki

Conversation between
Chairman, CEO and
Representative Director
and outside directors

Toyal Group's centennial and the future beyond



A tripartite meeting was held by Masao Imasu, Chairman of the Board and Representative Director, CEO and two outside directors, Aya Shirai and Mari Christine, newly appointed in 2019, about the future of the Toyal Group; how the Group celebrating the centennial in 2031 can develop its future business, and what kind of company we would like to be.

(held in June 2020)

Significance of fulfilling corporate social responsibilities

Tanaka (facilitator): First of all, may I ask how significant it is for a company to be engaged in CSR activities?

Imasu: It may be obvious that a company cannot be accepted by society unless it fulfills its social responsibility. The first and foremost in the Toyal Group is its employees; enriching their lives and helping them realizing their dreams will enhance their motivation, and make the company's dream come true. Another point in corporate social responsibility is to make profits, which requires it to be a going concern.

Shirai: A company's social activities and economic activities now cannot be viewed as "either-or"; both must be pursued in parallel. In this regard, the Toyal Group properly places its foundation firmly on sustainability management, which places SDGs in the forefront.

Mari: While many companies are at a loss about what to do with CSR and SDGs, the Toyal Group maintains the firm and positive stance, "we can promote necessary activities while taking responsibility for our own learning." That is very impressive.

Tanaka: What could be important points in the Toyal Group's activities toward SDGs?

Mari: As a company handling huge amounts of aluminium, we need to consider whether any labor is forced under harsh conditions or whether any child labor is suspected, at aluminium production or mining sites. For SDGs, instead of working on all 17 goals simultaneously, improving the levels so far attained would be more important. We may not be able to attain 100%, but should try to get closer to it.

Imasu: For SDGs, we need to think about, and understand, what our group is required to do by society. By listening intently to market needs or users' expectations, we should reconsider the state of our services and product specifications. If we are so self-indulgent to say, "Because this is an excellent product, it must be widely accepted by society," that will be the end of a company.

Shirai: The current COVID-19 pandemic has made us realize anew that "the world is really connected." In this light, it will be crucial to know the basic tenet of SDGs, "leaving no one left behind."

Diversity and autonomy promote corporate growth

Tanaka: What is your impression about the Company in terms of diversity?

Shirai: Looking at the Toyal Group from the women's viewpoint, it is regrettable to see so many capable female workers still unable to fulfil their potentials or make the best use of their ideas and experiences.

Mari: All SDGs contain the concept of "inclusion," which represents the clear intention to improve what people have failed to be aware of, that is, perspectives of women and children.

As heavy users of consumer products of the Toyal Group are women, there manufacturing products, based on the female perspective would be no doubt quite effective. I hope you can use various female perspectives more effectively.

Imasu: Whether female or male, each person has the unique aptitude and inaptitude, depending on the character and ability, which must be carefully considered for optimal human capital allocations. We

are in the midst of "Management Platform Reform" aiming at reviewing performance appraisal methods and more expeditious decision making, etc. To realize these reforms, a change into an autonomous organization will be a must. By changing organizational milieu from order-following to autonomous, the roles of the management will be less on controls and more on expeditious responses to emergency situations. Furthermore, as expressed in the concept of "Group Genius," we would like to promote collaboration with external partners in areas where our strengths are not sufficient.

The centennial as a "pass point" and the future ahead

Tanaka: To conclude, would you give us your messages to the Toyal Group celebrating the centennial in 2031.

Shirai: I hope that the Toyal Group will be an entity commonly recognized as a major force for solving social issues. To that end, it will be crucial to promote various activities involving other organizations, as in Open Innovation and CSV (Creating Shared Value).

Mari: Because aluminium is an essential material to our life and society, with which we feel close affinity, I would like the Company to disclose more information about relationships between your products and our health. Through more information disclosure, cultivation of public awareness, and education toward society, through SDGs, the Company will win greater trust. I also hope that much better materials than aluminium can be developed in the future.

Imasu: We include "contributing to the society as a company with dignity" in our management principles, and "Let's aim for the top" in the Course of Action. Unless each employee is eager to heighten the sense of dignity, the dignity of the company cannot be enhanced. If it can maintain dignity, individual workers will know, as a matter of course, what course of actions they should take, or what action they must not do.

And, the intent of "Create the future, I will create it" stated in our Course of Action is that the future envisioned by the Company and the future aspired by each employee should be on the same stage and that how to visualize the future should be left to each individual's initiatives. Who owns the company? What purpose do you work for? I affirm that the Company is yours. It should belong to the employees intending to grow while working and to draw clear pictures about the future of their families and their own, and it must be the stage where you can realize your dreams. Once you realize that the company is yours, you may then be aware of social responsibilities that the company must fulfill.

The centennial may be only a pass point, but can present meaningful targets for us. I would like each employee to think what you can do to attain the targets. Visions are not to be given by someone, but should be created by thinking what you really want to be. Let's think about the missions, visions, and values of the Toyal Group in ten years ahead, and work toward the centennial and beyond.



Chairman of the Board and
Representative Director, CEO
Masao Imasu



Outside director
Aya Shirai



Outside director
Mari Christine



Facilitator
Representative of Sun Messe
Innovative Network Center (Sinc)
Nobuyasu Tanaka