

Feature: Turning Diversity into Advantage to Build an Inclusive Society

■ Chieko Asakawa

IBM Fellow

Joined IBM Japan, Ltd. in 1985. Earned a Ph.D. in engineering from the University of Tokyo in 2004. She has been an IBM Fellow since 2009, a Distinguished Service Professor at Carnegie Mellon University since 2014, and a researcher at IBM's Thomas J. Watson Research Center in the United States since 2018. In April 2021, she also became Chief Executive Director of the National Museum of Emerging Science and Innovation (Miraikan).



■ Shigeo Taniuchi

President and Chief Executive Officer

Taniuchi: As one of its strategies for 2030 and beyond, Santen is taking on challenges every day to build a society that is inclusive to all regardless of visual impairment. The life sciences industry has been in a state of flux in recent years, with major changes in medical care, patient needs and technologies, while Santen itself is working to harness new treatment methods and digital technologies. As someone who has developed many different technological tools to help people with visual impairments participate more fully in society, what perspectives have you brought to your research?

Asakawa: I joined IBM Japan in 1985, and in the 35 years since then I have been researching accessibility for people with visual impairments. I was initially involved in research and development to increase accessibility of information and developed the Home Page Reader in 1997. Since around 2010, with the advances in smartphones, the Internet of Things and artificial intelligence, I have focused on research to improve real-world accessibility, developing the AI Suitcase in 2020. This suitcase contains a broad suite of sensors to detect information on surroundings for navigation powered by AI.



The AI Suitcase, announced in February 2020

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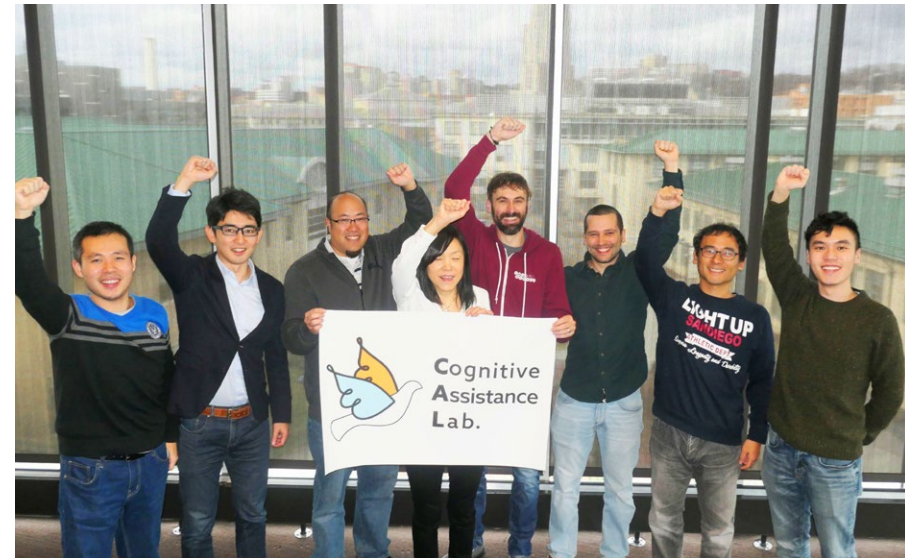
Taniuchi: That really brings home to me the importance of improving physical accessibility in the real world as well as enhancing information accessibility. Santen's values include the principle "Act with agility." In terms of building an inclusive society, is there something you emphasize from your position as a person with a visual impairment?

Asakawa: I think an impairment in vision or hearing should be viewed as part of one's individuality and thus part of one's strength. The fair treatment I have received from IBM regardless of my disability is at the heart of my positive approach and behavior today and has been an asset in my life. All I can do is to try to tell others about my own experience as I am doing now, but I hope to help build a society in which as many people as possible see diversity as strength and individuality.

Taniuchi: Santen employs four staff members with visual impairments.¹ Since joining the Company, they have provided invaluable input on points to consider as we worked to gradually improve the workplace environment. I think that in-house activities such as the Blind Experience² program have led to a definite change in awareness throughout the Company. This relates to our principle, "Act with agility." Moving promptly in this way is essential for promoting diversity, equity and inclusion. Fixating on differences in nationality, gender, disability, age and the like makes it impossible to increase productivity. I want to make diversity a strength so that each member of Santen's small but highly skilled workforce can fully demonstrate their potential.

Going forward, what do you plan to tackle in your aim to achieve a society where no one is left behind?

Asakawa: No matter how wonderful a technology is, it cannot be applied without obtaining society's understanding. For example, from the standpoint of privacy protection, data that can identify an individual's face cannot be collected without controls of some sort, presenting an extremely high hurdle for the practical application of that data. In the future, I intend to focus on activities to help society understand the need for data collection to support people with visual impairments and the elderly, and to create mechanisms for using such data.



Chieko Asakawa with members of the Cognitive Assistance Laboratory at Carnegie Mellon University

As for Santen, I hope that you will turn your attention to effectively communicating information to people with visual impairments or conditions, and to creating opportunities for them to acquire skills such as IT literacy. I also look forward to your future cooperation in social proof-of-concept testing of the technology we develop.

Taniuchi: As a company that specializes in ophthalmology, we at Santen want to take on initiatives that benefit all people while continuing to develop innovative treatment methods and drugs to help resolve eye-related social issues. If there is any way we can help you in your endeavors, we would very much like to make that happen. Thank you for taking the time to speak to us today.

Watch a demonstration video of the AI Suitcase here (Japanese only).

<https://caamp.jp/technology/>



¹ As of May 2021

² An in-house program aimed at promoting understanding of visual impairment, with employees with visual impairments as lecturers.