



Creating Value from Barriers

Participants on a barrier-free-information-gathering event organized by Mirairo
Photo: Courtesy of Mirairo Inc.

Kakiuchi Toshiya is contributing to the creation of a society in which everyone irrespective of their ability or disability can live with ease through design that transforms barriers into value.

SATO KUMIKO



Kakiuchi Toshiya
Photo: Aizawa Tadashi

MIRAIRO Inc. provides consulting for Universal Design. Kakiuchi Toshiya, the current president, founded the company in Osaka ten years ago when he was a university student, though he had made up his mind to start such a business long before that.

“I suffer from a disease called osteogenesis imperfecta, which causes my bones to be weak and break easily. It was so inconvenient to go out in my wheelchair when I was a child that I hoped to achieve, as soon as possible, a society in which everyone is free from such inconveniences,” says Kakiuchi.

Universal Design is a concept proposed in 1985 by Ronald Mace of the Center for Universal Design at North Carolina State University’s College of Design. Universal

Design aims to create an environment that is accessible to everyone, irrespective of their ability or disability. Kakiuchi believes that the “barriers” that people face, meaning their disabilities or psychological challenges, can be changed into “value” by drawing on these people’s viewpoints and experiences. Kakiuchi set his company’s corporate philosophy to be one of transforming society through “barrier value.”

“Because we are challenged, we can notice things. We can create something based on new ideas and make things more user friendly for everyone by incorporating this feedback into planning and designing,” says Kakiuchi. Twenty-seven of Mirairo’s eighty-seven employees have some form of disability. In addition, about 5,000 cooperative registered partners



The Bmaps interface
Photo: Courtesy of Mirairo Inc.



Participants on Mirairo's Universal Manners program learn firsthand about the challenges faced by people with disabilities
Photo: Courtesy of Mirairo Inc.

who also have disabilities provide a wide variety of feedback to the company via surveys and other means. The mission of Mirairo, headed by Kakiuchi, is to use this feedback to create a social system that can include people who might otherwise find themselves in a socially disadvantaged position.

Mirairo's business started from consulting in the barrier-free conversions of commercial facilities, public facilities and schools, and now covers a broad range of areas, such as creating printed materials and signs that everyone can read easily, dispatching sign language interpreters and providing awareness-raising educational programs. In addition, the company also develops and operates "Bmaps," a map app that enables everyone to post and view information about barrier-free shops. Bmaps provides detailed information for more than 180,000 barrier-free shops and facilities in Japanese, English, Spanish, Korean and Chinese. The information includes, for example, how many steps and bumps there are at the entrance of buildings, the lighting and area of spaces, and whether or not there are wheelchair- and

stroller-accessible restrooms and parking spaces.

Mirairo's business model has been evaluated highly and received the Minister for Economy, Trade and Industry's award in the Japan Venture Awards 2018. Currently, Kakiuchi also serves as an advisor to the Tokyo Organizing Committee of the Olympic and Paralympic Games. The company has been praised highly by the International Olympic Committee (IOC) and the International Paralympic Committee for its many initiatives, including distributing 3-D-printed mascot images at a mascot selection event that involved the participation of children nationwide so that visually impaired children could understand the mascots' shapes by touching them.

In July 2019 Kakiuchi was selected as a member of a Working Group set up by the Osaka Prefectural Government to decide on a future vision for Osaka leading up to World Expo 2025 Osaka-Kansai Japan. Because the World Expo is scheduled to last for 185 days, quite a long period of time, there are many issues to be addressed. Kakiuchi regards the World Expo

as the perfect opportunity for Japan to build up experience in providing facilities for persons with disabilities.

"When the 1970 World Expo was held in Osaka, braille blocks (tactile paving) were laid at stations for the first time, which marked dramatic progress in barrier-free measures in Japan. I expect that the World Expo 2025 in Osaka will also bring about good social changes, including in public awareness," says Kakiuchi.

When Kakiuchi was a university student, about 4,900 persons with disabilities entered domestic universities every year. But with entrance examination systems and school facilities now being designed in consideration of persons with disabilities, the number has increased to about 33,000. And as public transit systems are also now equipped with elevators and multi-purpose restrooms, public spaces are becoming increasingly barrier-free. "Japan is an advanced barrier-free country. We have a large accumulation of experience developed here in Japan. I believe that we can make better use of it for the benefit of the world," says Kakiuchi. 