Touching from a Distance

These Tokyo-based companies are leading the way in convenient and intuitive touchless technology.

by **Kuv Ahmad**

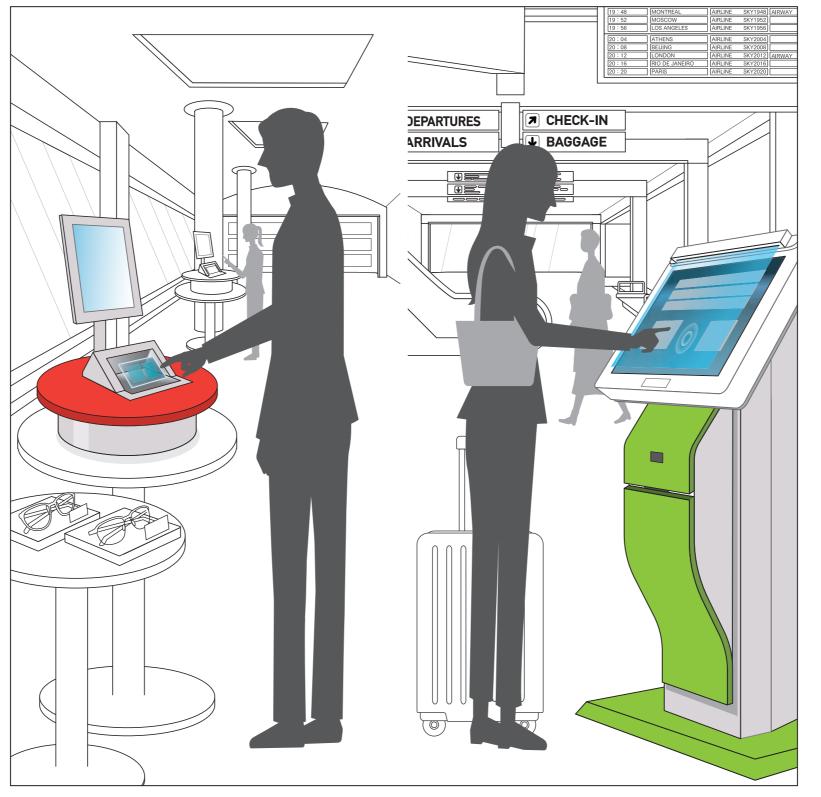
I t would be an understatement to say that people's way of living has changed somewhat over the past two years. These days, alcohol spray can be found at the entrance of shopping malls and inside elevators. Pressing buttons, opening doors, and using ATMs come with a hesitancy that did not exist before the pandemic.

Tokyo is at the forefront of technological solutions that will help with these changes to peoples' daily lives. Leading the way with their touchless technology are two pairs of companies that have both formed partnerships: Dai Nippon Printing Co., Ltd. (DNP) and MIRAI BAR Inc., which debuted their floating display technology at the Shiseido Global Flagship Store in Ginza in 2020, and MT-planning, Ltd. and Tsubota Technica Co., Ltd., which came together to create a prototype sensor-based touchless kiosk in May 2021.

The joint development project between DNP and MIRAI BAR resulted in a product that showcases their technological strengths. Stakeholders at the former were fascinated by the one-of-a-kind patented display technology that the latter possessed, making possible floating displays that are bright enough to be used in well-lit stores. Leveraging DNP's extensive know-how for creating the projected content, the two companies joined forces to create a future where data can be inputted without touching anything physical.

MIRAI BAR created a product that projects a screen in the air capturing the attention of passersby. The infrared sensor that reads finger movement went through many iterations before it was accurate enough to be ready to market. For those who have used it, interacting with thin air has brought a mixture of confusion and surprise. However, as with much new tech, touchless inputting is something that can be understood intuitively and acclimated to quickly and easily.

As COVID-19 spreads throughout the world,



Like a magic trick, purchases can happen with a simple gesture made in the air.

Left, the "floating display technology."

Right, the "sensor-based touchless kiosk."

using a product like this in public facilities and shopping malls has many advantages, and inquiries about this new tech from them are on the rise. In a world where a vast amount of information is exchanged by IoT, the two companies have taken a step into a future in which novel ways of delivering information will doubtless be to humanity's benefit.

Another joint venture—this one between MT-planning and Tsubota Technica—further cements To-kyo as a global hub for touchless technology. When released, their touchless kiosk terminals will allow any number of customers to complete in-store purchases themselves without the need to touch the display panel.

The touchless kiosk terminal is similar to a conventional touch panel kiosk. However, instead of physically touching the display, the finger of the user hovers over the panel and "mimes" tapping the on-screen buttons. These gestures are picked up by a sensor, and translated into input data, allowing a whole host of interactions to take place.

MT-planning has plans to develop their own brand of kiosk terminals to further enhance the customer experience, and believes that because patrons can easily operate the terminals themselves, waiting times will be reduced. Their products will also help to provide solutions for labor shortages.

There is every reason to believe that contactless technologies will revolutionize a variety of industries. Our interaction with machines in the new normal will become fundamentally more hygienic and convenient, and companies like these are spearheading this change.

With their benefits in the prevention of infectious diseases all the more apparent now in the age of COVID-19, the future is bright, convenient, clean, and safe, and it is already becoming a reality in Tokyo today.

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