

November 11, 2021 MIRAIT Holdings Corporation

[MIRAIT Corporation] "Digital Twin Shibuya Project" Launched to Visualize Various Data in Shibuya-ku

First step is to create a digital twin of the Sasahatahatsu area

MIRAIT Corporation (head office: Koto-ku, Tokyo; President: Toshiki Nakayama; "MIRAIT"), which is a Group company of MIRAIT Holdings Corporation has partnered with Future Design Shibuya, General Incorporated Association (headquarters: Shibuya-ku, Tokyo; Representative Director: Hideki Koizumi; "Future Design Shibuya") and companies participating in the Shibuya Data Consortium to launch the "Digital Twin Shibuya Project" aiming to realize smart urban development with the residents of Shibuya City, and various people and enterprises involved in Shibuya City by utilizing digital twin* technology to collect a variety of information on the real world in digital space to recreate the city.

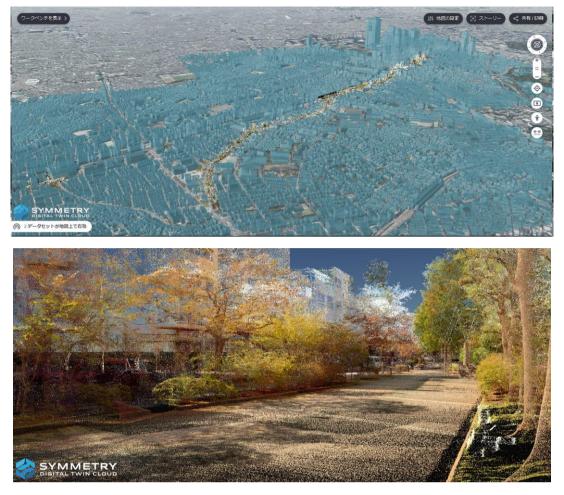
The first initiative under the "Digital Twin Shibuya Project" involved Future Design Shibuya, Shibuya City, Symmetry Dimensions Inc. (head office: Delaware, USA; representative: Shogo Numakura; "Symmetry"), Nreal Japan Ltd. (location: Minato-ku, Tokyo; representative: Joshua Yeo; Nreal Japan) jointly creating and visualizing a digital twin of the Sasahatahatsu area centered on the Tamagawa Josui Old Waterway Green Road where a redevelopment plan is currently being implemented.

Utilizing open data of the national government and local government such as 3D point cloud data on the Sasahatahatsu area and the "Project PLATEAU" three-dimensional urban model provided by the Ministry of Land, Infrastructure, Transport and Tourism along with data held by enterprises, and visualizing and sharing these using browsers and AR glasses enables analysis and simulations utilizing three-dimensional space.

Furthermore, the group will work with Shibuya City and Sasahatahatsu Machi Lab to consider how to utilize the digital twin.

* Digital twin

A digital twin is a technology enabling analysis and forecasting, etc. by using IoT devices, etc. to convert locations and phenomena existing in physical space into data and reproducing them in digital space. It is expected to be utilized as a method for optimizing operations utilizing data in a variety of areas such as manufacturing, construction and smart cities.



(Figure above) The Sasahatahatsu Green Road in the Digital Twin Shibuya Project Three-dimensional urban model: Ministry of Land, Infrastructure, Transport and Tourism Project PLATEAU

> Three-dimensional point cloud data source: MIRAIT Corporation Other data on Shibuya City



Visualization of data such as diagnostic chart information on trees owned by Shibuya City

Preparations are being made to enable viewing of the three-dimensional data on the Sasahatahatsu area and data owned by the city.

Furthermore, displaying opinions of people living in the region provided at workshops, etc. on the digital twin will be used to reflect the opinions of people such as those living in the Sasahatahatsu area.



(AR glasses supplier: Nreal Japan)

Left: Using AR glasses

Right: data overlaid on the real world using AR glasses

The data registered in in digital twin is displayed as AR in the real world through the AR glasses provided by Nreal.

