



June 16, 2022 MIRAIT Holdings Corporation

[MIRAIT Corporation]

Field Test Utilizing Al-based "WaitTime" for Visualizing Congestion at Kyoto Research Park Commences in the Smart District Working Group

Promoting changes in behavior through the visualization of congestion conditions and distribution of coupons

MIRAIT Corporation (head office: Koto-ku, Tokyo; President: Toshiki Nakayama; "MIRAIT"), which is a Group company of MIRAIT Holdings Corporation commenced a field test utilizing WaitTime^{*1} using AI to analyze congestion in real time and visualize congestion conditions in the field test conducted by the Smart District Working Group^{*2} supported by the Kyoto Big Data Platform^{*3}.





In the field test, "WaitTime" is installed in the GOCONC^{*4} food salon on the first floor of Building #10 of Kyoto Research Park^{*5}. By working with companies participating in the Smart District Working Group to deliver information on congestion conditions to next-generation smart signage (development: Cisco Systems G.K., DENSO Corporation; content management: ADDD-Link Co., Ltd.) installed within Kyoto Research Park and smartphones in real time, changes in behavior due to the visualization of congestion conditions and coupon distribution will be verified in the field at Kyoto Research Park until the end of December 2022 (scheduled).

Kyoto Research Park is a large business center housing 500 companies where 6,000 people work. GOCONC gets extremely congested depending on the time and the day because it is used for meals, meetings and events. In the field test, congestion conditions visualized with WaitTime are delivered to signage and smartphones in real time, and promotes changes in behavior such as changing the hours of use due to having an understanding of the congestion

conditions before visiting the store. Furthermore, as WaitTime has a reporting function for providing daily notifications of congestion conditions to the store side, it also contributes to the improvement of service quality such as optimization of in-store operations through the analysis of congestion conditions.

Furthermore, functionality for issuing coupons linked to WaitTime will also be provided. Coupons are displayed at the bottom of the congestion conditions on signage and smartphones, and the content (text) of coupons can easily be changed on the stores side. The time and valid period displayed on the coupon can be set on the store side, and it is also possible to link to the congestion conditions in WaitTime for automatic display settings such as "only display coupons when unoccupied." Coupons for discount services, etc. are issued according to congestion conditions, and it is also possible to attract customers in hours when there are many vacant seats, increase purchase rates and take steps against food loss by issuing coupons for specific food and beverages.

In future, we will aim to improve convenience for facility users by utilizing multiple forms of human movement data by linking with MODE Sensor Cloud provided by MODE, Inc. and the Smart Data Platform for City data utilization infrastructure provided by NTT Communications Corporation. Furthermore, we will embrace the challenge of creating new value by linking with the Kyoto Big Data Utilization Platform.

*1 WaitTime

WaitTime is an advanced AI-based congestion alleviation solution provided by WaitTime, which is headquartered in Detroit, USA. It is a solution that realizes the alleviation of overcrowding by using AI to perform real-time analysis of lines and congestion in locations where many people visit such as stadiums, and providing easily understandable information for patrons on smartphones and digital signage. In particular, it contributes to the shortening of waiting times and maximization of sale opportunities by identifying lines such as those at restrooms and stores, and guiding patrons to less crowded ones. Past examples of implementation are increasing globally centered on large-scale sporting facilities including an American professional basketball (NBA) arena and a multipurpose stadium with a capacity of 80,000 people in Australia.

*2 Smart District Working Group

The Smart District Working Group calls for diverse ideas from Kyoto Big Data Platform members, creates membership executing the creation of new projects and execution of projects, makes applications for various subsidies, and aims to implement and put into practice specific proofs of concept. It verifies smart city blocks using Kyoto Research Park as a virtual area. (In future, it is anticipated that the results and know-how obtained in the field will be applied to other similar city blocks.)

The 1st Smart City Block Working Group was held in January 2021. The 2nd Smart District Working Group was held from September 2021 and is currently conducting a field test by an alliance of enterprises using Kyoto Research Park as the field.

*3 Kyoto Big Data Platform

The Kyoto Big Data Platform is a public-private platform made up of Kyoto Prefectural Government, Kyoto Smart City Promotion Association and Kyoto Industrial Support Organization 21. In order to promote data utilization, a platform will be created with participation by diverse players such as universities, research institutes, enterprises, tourism federations, DMOs and government organizations to provide a place for the creation of new services and alliances with the aim of revitalizing industry and creating an ultra-comfortable smart society based on data utilization.

*4 GOCONC

GOCONC is a food salon on the first floor of #10 Building of Kyoto Research Park. GOCONC has three characteristics: being able to have meals, being able to hold events and being able to work. The concept is a "station concourse." Just like this is an open space or entrance to a station for a variety of people visiting with diverse objectives, such as people getting on and off transportation, and people sending off or coming to pick up other people, it is a food salon enabling a variety of people to gather, meet and interact such as having meals or tea, conducting work, negotiations and meetings, and sometimes holding events. The name is derived from "Gojo Concourse" combining the location of being on Gojo-dori Street with the concept, and abbreviating this to "GOCONC."

*5 Kyoto Research Park

Kyoto Research Park was established in 1989 as the first privately operated science park in Japan. It houses 6,000 people in 500 organizations including industry support organizations of Kyoto Prefectural Government and Kyoto Municipal Government, and leases offices and labs and provides rental conference rooms, in addition to conducting a variety of activities leading to the creation of new businesses and new industries such as entrepreneurial development, open innovation support and holding seminars and social events. Kyoto Research Park contributes to new business changing the world through the provision of an appealing stage and business environment for interaction to people around the world to create innovation. <u>https://www.krp.co.jp/english/</u>

Images of the field trial



Next-generation smart signage installed in Kyoto Research Park

×	5 GOCONC
	www.wattime.
_ (GOCONC 混雑状況
	レジカウンター
	壁侧席
	密側席 (五条通側)
	中央席
	Protect by -M-MIRAIT
X	

Signage display



Smartphone display

It provides an intuitive understanding of congestion conditions by displaying green (unoccupied), yellow (slightly congested) or red (very congested)



Example of a coupon displayed on a smartphone

Coupons can be used by showing a screenshot of the screen displayed before paying

2022/04		2022/06				
H	月 2	<u>%</u>	*	5	€	± 7
B	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
				3-2-10904		
29	30	31				

Coupon configuration screen