





Digital Garage Supports Joint DX PoC Projects by 8 Major Companies and 10 Real Estate Startups through "Open Network Lab Resi-Tech"

~Verifying Business Models for the New Normal and Next-generation Technologies~

Digital Garage, Inc. (TSE first section: 4819; HQ: Tokyo; Representative Director, President Executive Officer and Group CEO: Kaoru Hayashi; DG) supports proof-of-concept (PoC) projects carried out jointly by 8 partner companies (COSMOS INITIA Co.,Ltd.; Takenaka Corporation; Tokyu Group; Tokyo Tatemono Co.,Ltd.; West Japan Railway Company; Nomura Real Estate Holdings, Inc.; Hankyu Hanshin Properties Corp.; and Mitsui Fudosan Co.,Ltd.) and 10 startups through "Open Network Lab Resi-Tech (https://onlab.jp/en/programs/resitech/)," a global accelerator program for real estate-related startups.

There is a pressing need in the real estate industry for DX, new initiatives tailored to our new normal, and other responses to the falling population, aging society, and impacts of COVID-19. DG and its partner companies (major real estate, construction, and lifeline companies) are striving to resolve common industry challenges in collaboration with startups like DATAFLUCT, Inc., which utilizes real-time big data for Smart City design; RESORTWORX Inc., which verifies the impacts of workcation demand on luxury resort facilities' weekday occupancy rates; Mapsted Corp., a Canadian company that uses a highly precise indoor location based technology for marketing and communication with facility visitors; and Leela AI Inc., a Boston-based company with casual reasoning technology utilizing a visual AI engine for purposes such as detecting anomalies at commercial facilities and more. Multiple partner companies and startups will simultaneously conduct PoC projects to reduce the time required for standardizing the specifications confirmed in these projects, and also to step up the construction of new business models for DX and the new normal. DG will continue to support the creation of new businesses and the resolution of social issues through communities that comprise major Japanese partner companies and real estate-related startups.







■ Summaries of PoC Projects

Utilizing big data to provide data analysis services to all sorts of industries, including Smart Cities

This project will verify functions for providing total data services, from collection to analysis, required for decision-making when acquiring real estate sites (for newly built houses, rental housing, and condominiums). It will build a structure to monitor activity (human traffic, emotions, and economics) to verify functions that can be utilized for the PDCA cycle of urban development and town management.

Startup	DATAFLUCT, Inc. (https://datafluct.com/)
Description	DATAFLUCT, Inc. is a data science and startup "studio" that provides data analysis services to resolve social and corporate issues under the vision of "Data as a Service." Leveraging the company's strength as a JAXA ventures, it utilizes satellite data and accumulates all sorts of data (such as human traffic, climate, and marketing) to offer a wide range of services. DATAFLUCT, Inc.'s full-stack services—spanning from data collection and analysis to product development—easily promote advanced machine learning at low prices to all industries.

Verifying a workcation business and studying the behaviors of workcation users

This project will examine the impact of workcation demand on the weekday occupancy rates of luxury resorts and other hotels through a demonstration project for the use of workcations at hotels and membership facilities owned by partners. More profound behavioral research will also be conducted on the Izu Peninsula in collaboration with "Izuko" (MaaS for the tourism industry).

Startup	RESORTWORX Inc. (https://resortworx.jp/)
Description	RESORTWORX Inc. proposes the new normal of work styles through its "RESORTWORX" service and community. "RESORTWORX" is a service that provides access to membership facilities and hotels in resort areas at special prices. Individuals and corporate welfare programs can visit these facilities for workcations on weekdays, which have low occupancy rates, allowing them to use high-grade facilities at special prices.

Verifying an indoor location positioning and analysis technology that requires no location referencing equipment

Technical verification will be performed for a solution using original indoor location based technology, which is expected to offer higher precision than before at terminal stations, large commercial facilities, complexes, etc. This project will consider the effects of implementation, including increased convenience and productivity as well as planning and marketing applications.

Startup	Mapsted Corp. (https://mapsted.com/)
Description	Mapsted Corp. is a Canadian startup that offers marketing, statistical analysis, and other services based on location information acquired with its (patented) indoor location based technology that does not rely on the use of external hardware. It currently provides services to numerous clients including transportation, real estate, retail, healthcare, hospitality, and government, and helps companies offer better customer experiences.







Helping detect anomalies at commercial facilities and construction sites with an AI engine that can understand concepts

This project utilizes the "Constructive Learning Engine (LACLE)," an AI engine that can understand concepts, to verify required performance, issues, etc. regarding the ability to learn and understand concepts from small amounts of training data, as well as the feasibility of using LACLE to detect anomalies and support improved safety and security at offices, shopping malls, and other facilities, and prevent accidents utilizing AI to detect dangerous activity at construction sites.

Startup	Leela AI Inc. (https://www.leela.ai/)
Description	Boston-based Leela AI Inc. is an AI startup that has created the "Constructive Learning Engine (LACLE)," an AI engine that goes beyond current Machine Learning to understand concepts. LACLE can recognize and analyze causes and effects of human actions based on data from video cameras and other sensors, and provide clear explanations, supporting the decision making process.

Verifying the performance of person identification and contact tracing technologies that do not require facial recognition and confirming the use cases

This project will verify performance, produce use cases, and verify issues for implementation regarding "People Search," which can identify and track people in a short period of time across multiple cameras without relying on facial recognition data.

Startup	Traces Inc. (https://traces.ai/)
Description	Traces Inc. is a leading American AI research and development company working on state of the art computer vision algorithms with a strong focus on privacy. We address a wide range of real world challenges by designing AI systems that outperform humans and help create a safe and secure environment for everyone. Our algorithms are pushing the boundaries of what is possible by extracting valuable business insights from millions of videos every day. Being at the forefront of innovation, we believe that it is our responsibility to democratize AI adoption and to make sure that this technology becomes a force for good.

Demonstrating a fully wireless electric power supply technology for office spaces

To realize power supply using a fully wireless electric power supply technology, it will operate environmental sensors that measure temperature, humidity, carbon dioxide concentration, and other measurements inside office spaces using fully wireless power supply. This project will extract issues for actual implementation and consider use cases by researching wireless electric power supply efficiency and exchanging views with partner companies.

Startup	Aeterlink, Inc. (https://aeterlink.jp/)
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December 8, 2020 Digital Garage, Inc.

NEWS RELEASE

Desc	rip	tion

Aeterlink, Inc. is a startup from Stanford University that aims to create a world without wires by utilizing long-distance wireless power supply technology. It has developed products in the biomedical implant field, including the world's smallest pacemakers, and has published papers in *Nature* and other mediums. It also applies these component technologies outside of the bio field, such as factory automation, building management, and IoT devices.

A committee on implementing DX and connected workers in construction and real estate site

This project will discuss with our partner companies the use cases of connected workers using "THINKLET®," solutions to site issues and retrofit implementation methods. We will examine the DX image of construction and real estate sites, which are in need of change due to human resource shortages and the impact of the COVID-19.

Startup	Fairy Devices Inc. (https://fairydevices.jp/)
Description	Connected Worker Solution "THINKLET®" will digitize workers and artisans on site using the company's own wearable devices, voice AI and image analysis AI to provide 1) remote support, 2) process management, 3) visualization of artisan skills, and 4) safety management. In addition, a "remote VR tourism experience" using a "foreign language guide" is planned for tourism in the Kansai region.

A committee on creating drone air routes

With an eye to the coming future in which deregulation will bring drones into more widespread usage, this project is aimed at creating a world with drones that is safe and pleasant for consumers. Through measures such as exchanging views with partner companies, efforts will be made to establish urban development and Smart City models that support drone air routes.

Startup	TrueBizon, Ltd. (https://www.truebizon.com/)
Description	"sora:share" is an airspace sharing service that connects landowners with drone business operators. Upcoming revisions to the Civil Aeronautics Act will enable drone flying in airspaces above urban areas, but arrangements will have to be made with developers and consumers while establishing air routes. With "sora:share," TrueBizon, Ltd. is striving to increase social acceptance of drone operation and build Smart Cities that allow for air routes.

Verifying community augmentability, starting from the management side

"station," a community design tool, will be implemented for community management at multiple partner companies. In addition to resolving community management challenges, efforts will be made to build communities that function more energetically and are valuable to both managers and members.

Startup	station, Inc (https://www.station.space/company)
Description	Based on its vision of "Updating community building and designing mechanisms in which everyone can freely choose communities that suits their lifestyle," station, Inc develops and offers "station," a community design tool that helps achieve goals in individual community management. These include visualizing community assets and values that were previously difficult to see, attracting customers, vitalization, and improving member LTV.









Verifying the creation of distributed network-based urban development methods utilizing MaaS

This project will confirm the validity of "distributed network-based urban development" to visualize resident and user experiential values through data, and to design overall experiential value (including mobility) and the organic connections between areas that produce this value.

Startup	scheme verge, Inc. (https://www.schemeverge.com/)
Description	scheme verge, Inc. is a startup that enables "distributed network-based urban development" through data-driven area management that enhances the value of the local residential experience through MaaS and DX. The Seto Inland Sea City Vision Council, of which scheme verge, Inc. is the secretariat, has been selected by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) for the second consecutive year as the Japanese version of the MaaS promotion project. The company has been working on urban development projects in cooperation with industry, academia and government.