

# JAPAN

**Global Innovation Partner**



## Japan is the first Global Innovation Partner in IFA NEXT 2019.

Artificial intelligence, IoT, big data, and robotics - the world ahead will achieve advanced convergence between cyberspace and physical space, giving rise to the demand for human-machine interfaces.

The Japan Pavilion presents new user interfaces developed by various innovators from major corporations to start-ups. These user interfaces embody high reliability and Japan's unique sensibility to create natural comfort.

Interfaces that augment a variety of human actions and create new value – as IFA NEXT's first partner country, Japan invites you to experience tomorrow's user interfaces created by Japanese tech culture.



## J-Startup

### ABOUT

Over 10,000 Japanese startups are tackling new challenges with innovative ideas. Some dream of bringing their creative products to the world stage. Now, with the support of the Ministry of Economy, Trade, and Industry (METI), those dreams become a reality for Japan's passionate startups. This is the premier program guiding Japan's startup scene globally: "J-Startup"

**Next Growth for Japan's Startups. Next Innovation for the World.**

for more information

<https://www.j-startup.go.jp/en>

### GO GLOBAL

**Japan to overseas** Startup tour

Supporting startups for the global tech conference entry from Japan.

**Overseas to Japan** Startup visa

Easing overseas entrepreneurs' visa application to enter Japan.

Issue a work visa for startups 6 months earlier than currently provided.

**JETRO Global acceleration hub**

More than 10 offices around the world providing Japanese startups in overseas with local information, mentoring program, and help to create a local community.

"Are there startups in Japan?" is a frequently asked question. And the answer is "Yes!", there are quite a number of them. Japan actually has a great environment for startup companies and here are some data to support.



**- Fund raising**

- Fund raised in 2017 was about 2.5 billion USD (+21.7% from previous year), which was the highest in the past decade.
- Average fund raised per company was 2.6 million USD and 60 companies raised more than 8.9 million USD each in the same year.
- Approximately 1,000 tie-up deals involved Japan-based startups. (Rate 1USD = 112JPY )



**- Sophisticated and huge market place**

- Japan's GDP is about 4.45 trillion USD which ranks 3rd in the world. It is one of the leading economic powers of the world.
- Japanese market is also attractive to the overseas companies for investment. 86% out of 197 overseas companies find Japan's strength is its own market.



**- Human resource for the innovation hub**

- Japan ranks 1st in G7 on "Percentage of research expense against GDP" and "Number of researchers per 10,000 people"
- There are 25 Nobel Prize recipients from Japan.



**- Superb business infrastructure**

- Japan ranks 2nd worldwide and 1st in Asia for "Easy to start business".
- 80% of 197 overseas companies find Japan's infrastructure at the top of the class such as transportation, delivery services, information / communication, and energy.
- Tokyo ranks 1st and Osaka ranks 3rd for "Safeness of central city".



URL <https://aeronext.com>  
MAIL [contact@aeronext.com](mailto:contact@aeronext.com)



Aeronext, a drone architecture research lab, invented and license its original gravity control technology that improves drone's stability.



**Center of Gravity Control Technology "4D GRAVITY®"**

Aeronext invented "4D GRAVITY®", the center of gravity control technology, that dramatically improves drone's stability and productivity and conducts its license business globally. Aeronext has announced several concept models for specific industrial use cases, "Next" series, such as for delivery, inspection and aerial photography.



URL <https://dfree.biz/en>  
MAIL [euro@www-biz.co](mailto:euro@www-biz.co)



DFree is the first toilet timing predicting device, which helps people who have urinary problem by notifying when they need to go to toilet.



**DFree**

The toilet timing predicting device, DFree helps people who have urinary problem. DFree sensors use ultrasound to continuously monitor the bladder size, and it will show via an app and notify the timing for urination. DFree has been used by more than 2000 users and 200 nursing home in Japan, US and France.

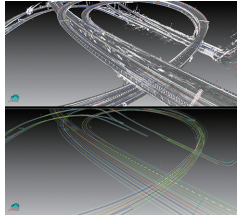


## Dynamic Map Platform Co., Ltd.

URL <https://www.dynamic-maps.co.jp/en/index.html>  
 MAIL [info@dynamic-maps.co.jp](mailto:info@dynamic-maps.co.jp)



Dynamic Map Platform Co., Ltd. was founded on June 13, 2017 as a business company that provides high-precision three-dimensional map data.



### high-precision 3D map data

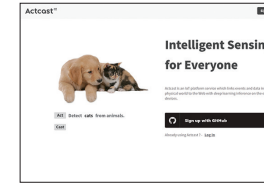
Introducing the high-precision 3-dimensional location information platform that uses advanced positioning technology, measurement technology, mapping technology, and data integration technology, and boasts centimeter-class precision. Our high-precision fundamental maps already cover 29,205 km of expressways and motorways in Japan.

## Idein Inc.

URL <https://actcast.io>  
 MAIL [info@idein.jp](mailto:info@idein.jp)



Idein is developing an IoT platform which links various physical events and data to the web by deep learning inference on low-price devices.



### Actcast

Actcast is an IoT platform service which links events and data in the physical world to the Web with deep learning inference on edge devices. It utilizes the concept of edge computing which can significantly reduce costs for data transfer and servers and decrease leakage risk of privacy and confidential information.

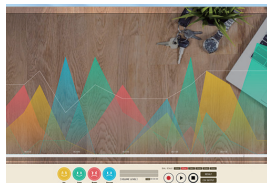


## Empath Inc.

URL <https://webempath.com>  
 MAIL [info@webempath.com](mailto:info@webempath.com)



Empath develops emotion AI, which can identify emotion from the voice in real-time regardless of the language.



### Empath

Empath develops emotion AI, which can identify emotion from the voice in real-time regardless of the language. Empath SDK and API have been adopted by more than 1,700 customers over 50 countries in various business fields such as call center, robotics, automobiles and mental health.



## INDETAIL Co., Ltd.

URL <https://www.indetail.co.jp/en>  
 MAIL [pankov-olg@indetail.co.jp](mailto:pankov-olg@indetail.co.jp)



Blockchain company with an international developers team. We are promoting practical applications of blockchain technology to businesses.



### RISO ENERGY

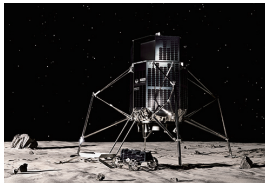
The main goal of this project is to create an ecosystem where customers can track, be rewarded for the electricity they produce in their homes and use the rewarded tokens for charging electric vehicles at the charging stations.



URL <https://ispace-inc.com>  
 MAIL [info@ispace-inc.com](mailto:info@ispace-inc.com)



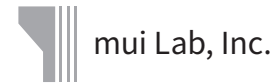
ispace is a lunar exploration company developing lunar rovers and lunar landers to map and collect data about the Moon's surface. In 2021, the company will attempt its first lunar landing.



### Lunar rover

Our rover is the world's smallest and most lightweight planetary exploration rover. The rover is capable of resisting the strong vibration during launch, generating energy using solar panels, maintaining communication link between Earth and the Moon, and detecting surrounding obstacles with its sophisticated camera system.

J-Startup



URL <https://mui.jp>  
 MAIL [press@muilab.com](mailto:press@muilab.com)

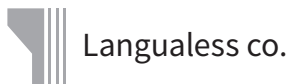


mui Lab is an IoT design startup that develops "calm" interfaces for peaceful digital living.



### Height Marking in Wood

"Hashira no Kioku (Height Marking in Wood)" is an art system consisting of a wooden column and a digital pen. When Wacom's digital pen is used to mark a child's height on the post, the system automatically displays the measurement in the form of a line on the post and in numerical value on an adjacent box.



URL <http://inupathy.com>  
 MAIL [sales@inupathy.com](mailto:sales@inupathy.com)



Langualess develops human-animal communication through HRV analysis and bio-feedback. We call this "Language-less Communication".



### INUPATHY dog mood sensor

Human-dog communication hadn't improved for 30,000 years. INUPATHY is a product that makes a change. INUPATHY helps owners understand their dog more accurately, through HRV analysis and bio-feedback. INUPATHY supports life with dog, by providing insight on dogs condition.



URL <http://www.neu-brains.com>  
 MAIL [info@neu-brains.com](mailto:info@neu-brains.com)



NeU, a Brain Science company, has developed a range of wearable optical topography devices using NIRS technology to measure brain activity.



### ExBrain XB-01

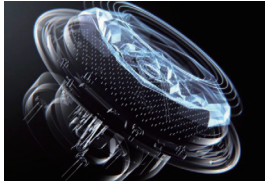
The XB-01: the world's SMALLEST & LIGHTEST wearable brain activity measuring device! Weighing only 30 grams (battery included) + Bluetooth 4.1LE to transfer data to smartphones, the XB-01 is a "neuro-feedback solution" that can be used for brain training while visualizing brain activity in real-time by ANYONE, ANYTIME, ANYWHERE.

## Pixie Dust Technologies, Inc.

URL <http://pixiedusttech.com>  
MAIL [kuroda@pixiedusttech.com](mailto:kuroda@pixiedusttech.com)

 Pixie Dust Technologies, Inc.

Pixie Dust Technologies is promoting research and development to solve social issues based on our Hagen technology (wave control technology).



### Holographic Whisper

The product presented here is a speaker that delivers sound to a target person by controlling ultrasonic waves. The audible sound sources are generated in air by high-amplitude ultrasound modulated by audible sound. This technology avoids fusion of sound environments directed for different persons in a public space.

 J-Startup

## QD Laser, Inc.

URL <https://www.qdlaser.com/en>  
MAIL [retissa@qdlaser.com](mailto:retissa@qdlaser.com)

  
QD LASER

QD Laser is a pioneer in quantum dot semiconductor laser technology and has developed various products and applications.



### RETISSA Display

RETISSA Display is a wearable displaying device that has a miniature projector to draw images directly onto the retina. The projected images are always focused and free from accommodation of the eyes, resulting in perfect augmented reality.

## Shiftall Inc.

URL <https://shiftall.net>  
MAIL [info-global@shiftall.net](mailto:info-global@shiftall.net)

 Shiftall

Shiftall is specializing in agile mass-production, which launches IoT products rapidly from planning by developing HW, SW and APP in-house.



### DrinkShift

DrinkShift is a service that delivers a new beer experience to your home. Create custom beer arrangements that allow you to discover new favorites, and never run out of old ones. The DrinkShift refrigerator understands your drinking lifestyle and automatically schedules delivery to suit your pace.

## SkyDrive Inc.

URL <https://en-skydrive.amebaownd.com>  
MAIL [info@skydrive.co.jp](mailto:info@skydrive.co.jp)

SKYDRIVE

SkyDrive Inc. is democratizing air travel through making affordable, reliable, and safe flying cars for the mass market.



### SkyDrive

- Concept  
The world's smallest Flying car "SkyDrive" from Japan.
- Features
  1. VTOL enabled vehicle.
  2. No larger than most cars.
  3. Able to both fly and drive down the street.
  4. Highly reliable with safety record.
- Roadmap
  - 2020 - Initial test unit production and demo flights.
  - 2023 - Commercialization & consumer availability.



Toppan is a global provider of integrated solutions for printing, communications, security, packaging, décor materials, and electronics.

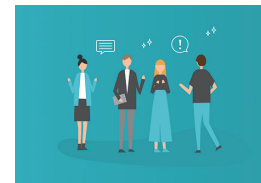


### Immersive Bon-Dance

The system captures the movements of dance teachers in remote locations and converts them into data. The data is transmitted together with the "Japan" space reproduced by the Hi-Vision VR. It appears on the display as an avatar in a realistic reproduction of Japan. Avatars of users are also created to allow them to dance with the remote teachers.



Unipos helps business leaders address crucial organisational issues like cross-team engagement, employee retention, and inclusion.



J-Startup

### Unipos

Unipos helps business leaders address crucial organisational issues like cross-team engagement, employee retention, and inclusion. We don't dictate or evaluate your company culture, instead we focus on the most basic human emotion - gratitude. We've helped 250+ companies globally win on their people and culture to date.



UniFa has been a leading babytech start-up in Japan since 2013. More than 4000 child care centers use its IoT products & services.



### LookMee Nap Check

"LookMee Nap Check" is the first IoT system dedicated to afternoon sleep check in childcare centers. In order to secure babies sleep, when they are sleeping on their stomach or if there is less motion we send an alert on tablet application. Also, babies' body directions are monitored and recorded automatically.



Xenoma develops the next-generation smart apparel 'e-skin' to provide well-being and happiness in your daily life.



### Smart Apparel Technology 'e-skin'

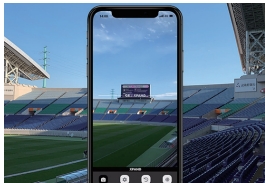
'e-skin' is the next-generation smart apparel which is a comfortable, highly durable, well-insulated and machine washable man-machine interface for connecting humans with the internet. Since everyone wears clothes everyday, e-skin is one of the most ideal interfaces to monitor our activities and vital signs.

XPAND K.K.



URL <https://xpand.codes/en>  
MAIL [info@xpand.co.jp](mailto:info@xpand.co.jp)

We develop and operate "XPAND Code", new barcodes for spatial links, and related services.



XPAND Code

"XPAND Code" is a new barcode for spatial links. It has a slim horizontal form that blends in with its surroundings for a more efficient use of space than the squared QR Code. It can be used jointly with "QR Code for close-ups", "XPAND Code for distance" without disrupting the scenery for better space usage.

Yukai Engineering

URL <https://www.ux-xu.com/en>  
MAIL [contact\\_en@ux-xu.com](mailto:contact_en@ux-xu.com)

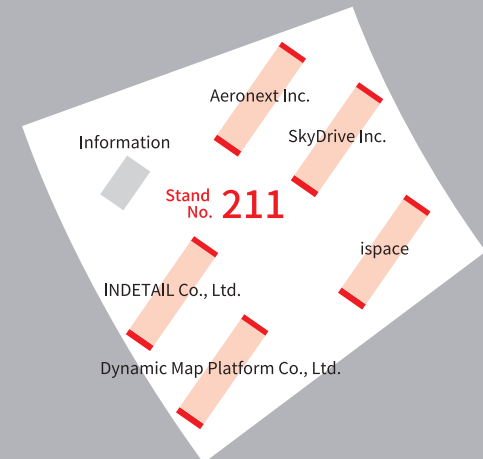
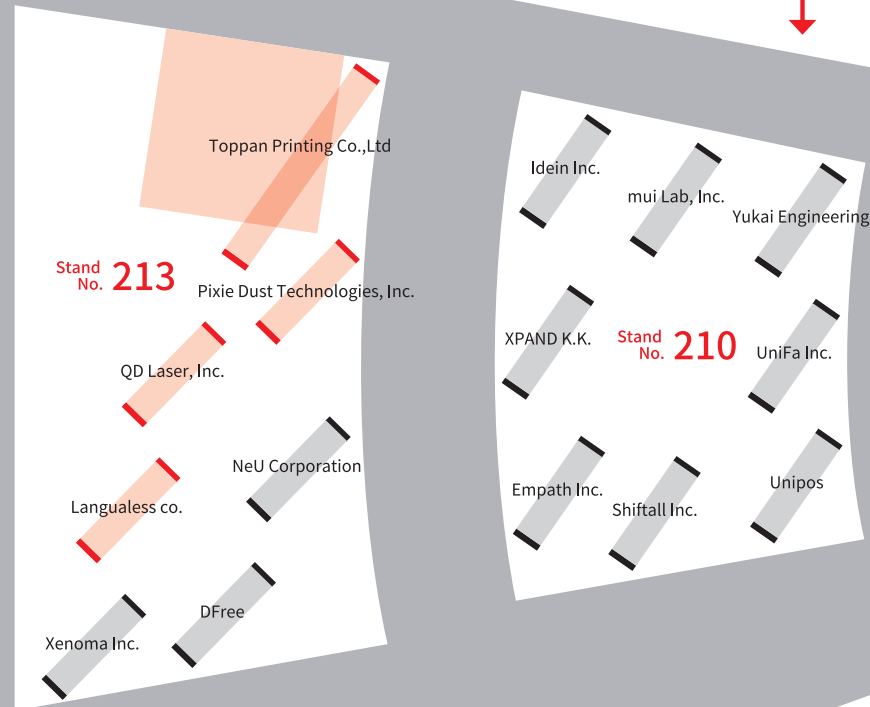
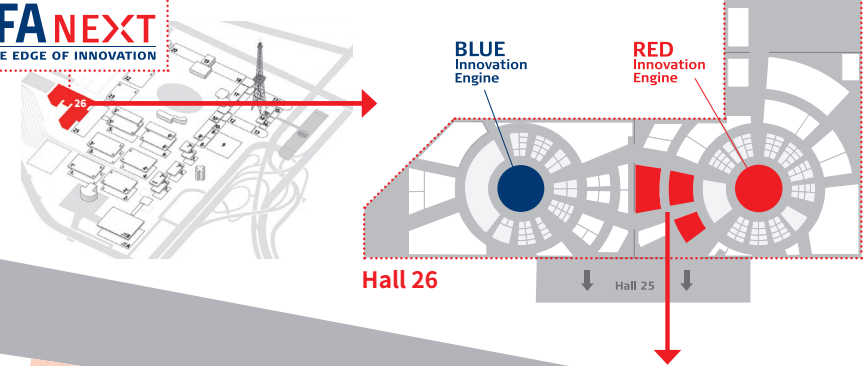
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Yukai Engineering is a robotics startup that develops and sells products that make the world more "yukai" (fun) place to live.



Qoobo

Qoobo is a robotic cushion with a tail that wags to the user's touch. Intended for people who cannot own a pet because of allergies and various other reasons, Qoobo uses tail wagging, a form of nonverbal communication, to tap into the user's imagination to provide a sense of bonding and comfort.



Information stand  
3D holographic display provided by  
Asukanet Co., Ltd.

