



SoftBank IoT Strategy

SoftBank Corp.

Vice President, Deputy Head of Smart IoT & AI Division

Masamitsu Kuwahara

SoftBank Vision Fund 1

A stylized graphic of a human brain, composed of intricate white circuitry lines on a blue background. The brain is centered and occupies a significant portion of the frame. Behind the brain, there are several concentric white circles that create a sense of depth and focus. The overall aesthetic is technological and futuristic.

SoftBank Vision Fund 1

82社



(注) 2019年8月7日時点

AI

交通

Uber
DiDi
Grab
nauto
NURO
AUTO1
GROUP
REEF
CRUISE
fair
瓜子 二手车直卖网
Guzi.com
Getaround

物流

DELIVERY
Small World
flexport.
GROFERS
满帮
DOORDASH
Loggi
Alibaba Local Services
ZUME
Rappi

医療

GUARDANT
ROIVANT
SCIENCES
VIR
医健通 HEALTHCONNECT
平安好医生
爱健康上平安好医生
10X
GENOMICS
RELAY
Collective Health

不動産

wework
Opendoor
COMPASS
KATERRA
Clutter
view

金融

paytm
policybazaar
OakNorth
众安保险
ZhongAn Insurance
金融壹账通
ONECONNECT
Greensill
Kabbage
creditas

法人 サービス

slack
osi soft.
mapbox
COHESITY
CAMBRIDGE
MOBILE TELEMATICS
Gympass
Globality
AUTOMATION
ANYWHERE

コンシュー マー サービス

OYO
coupang
Fanatics
字节跳动
作业帮
Wag!
plenty
KLOOK
BRANDLESS
tokopedia
firstcry
GET YOUR GUIDE

最先端 テクノロジー

arm
brain corp
IMPROBABLE
Petuum
light
FUNGIBLE
CloudMinds
Zymogen

mapbox

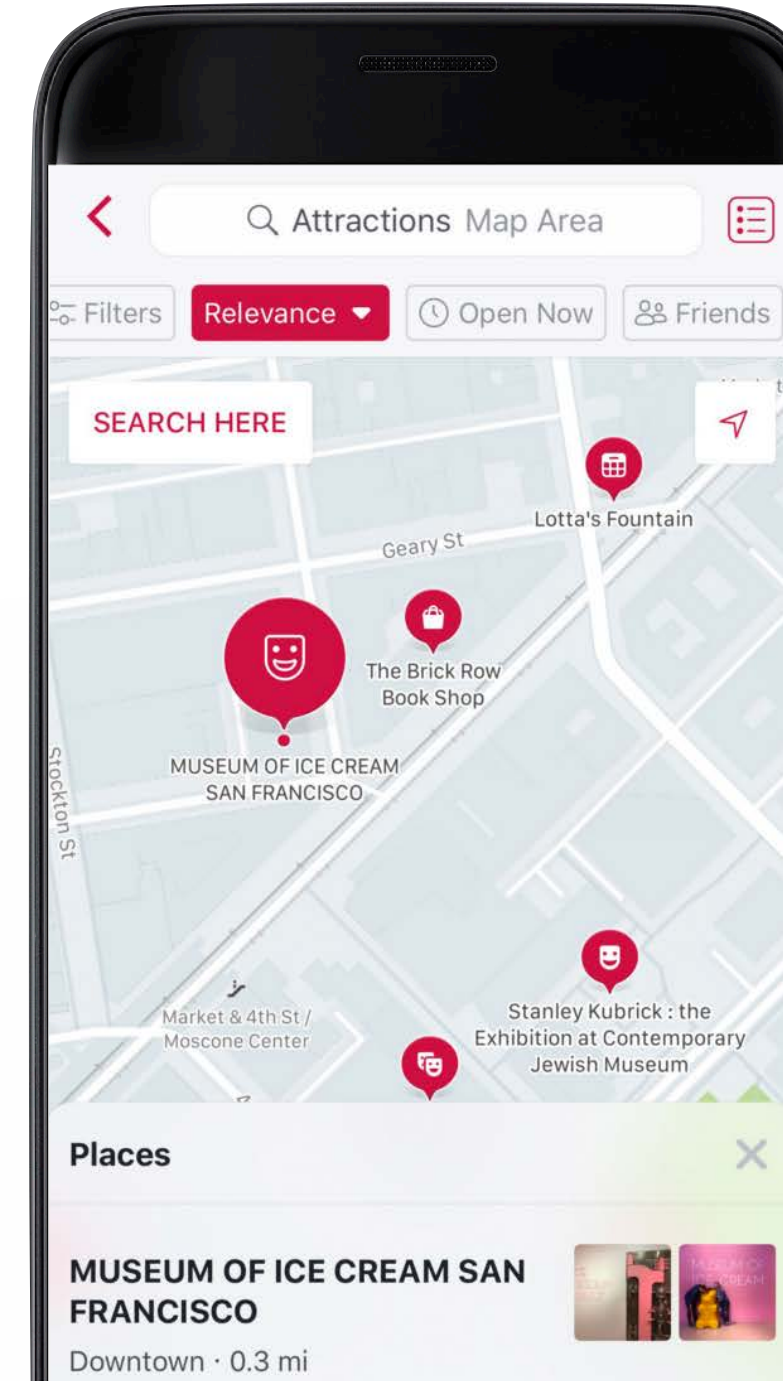
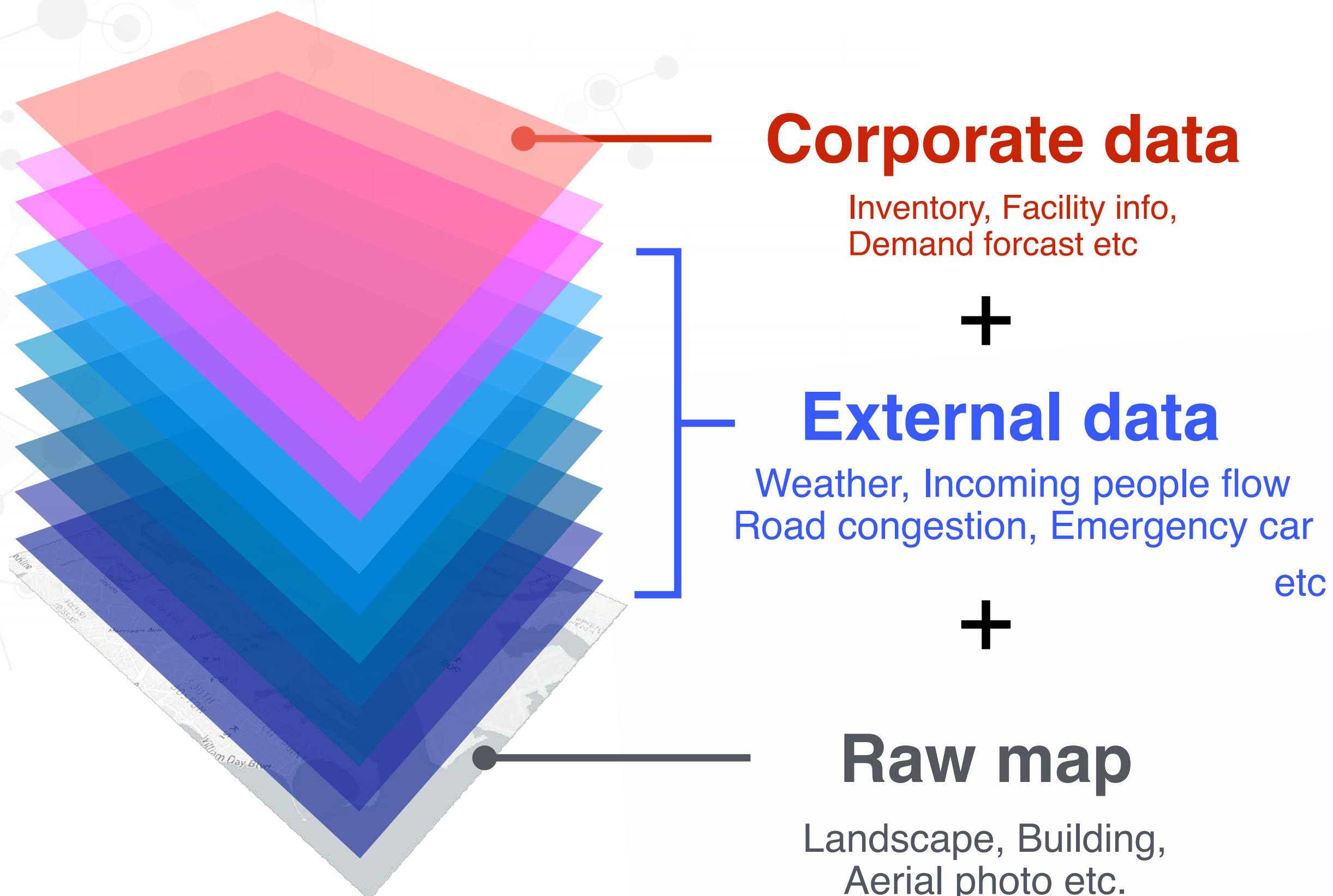
Map platform

Entered into Japanese market

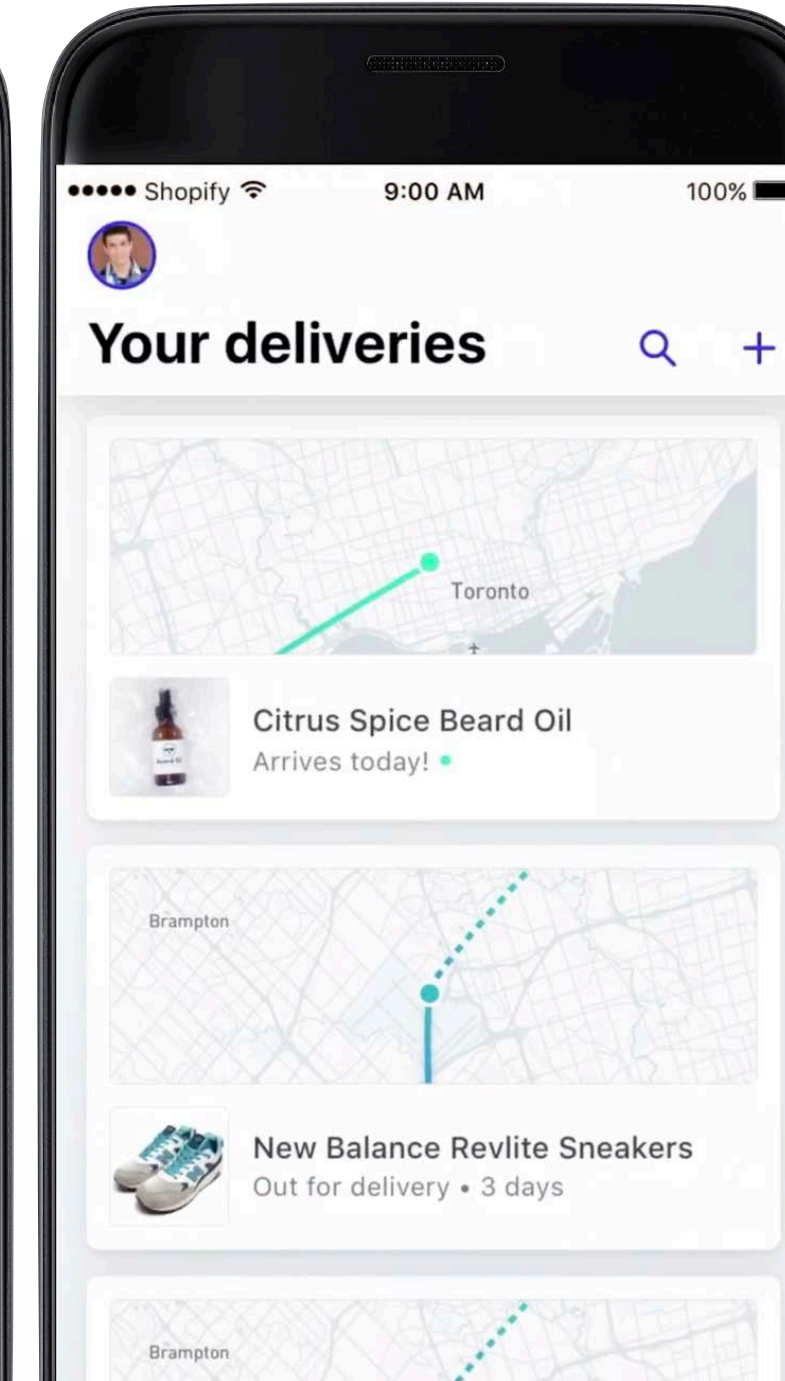


Integrate with customer data

Customizable map to meet each business users



facebook



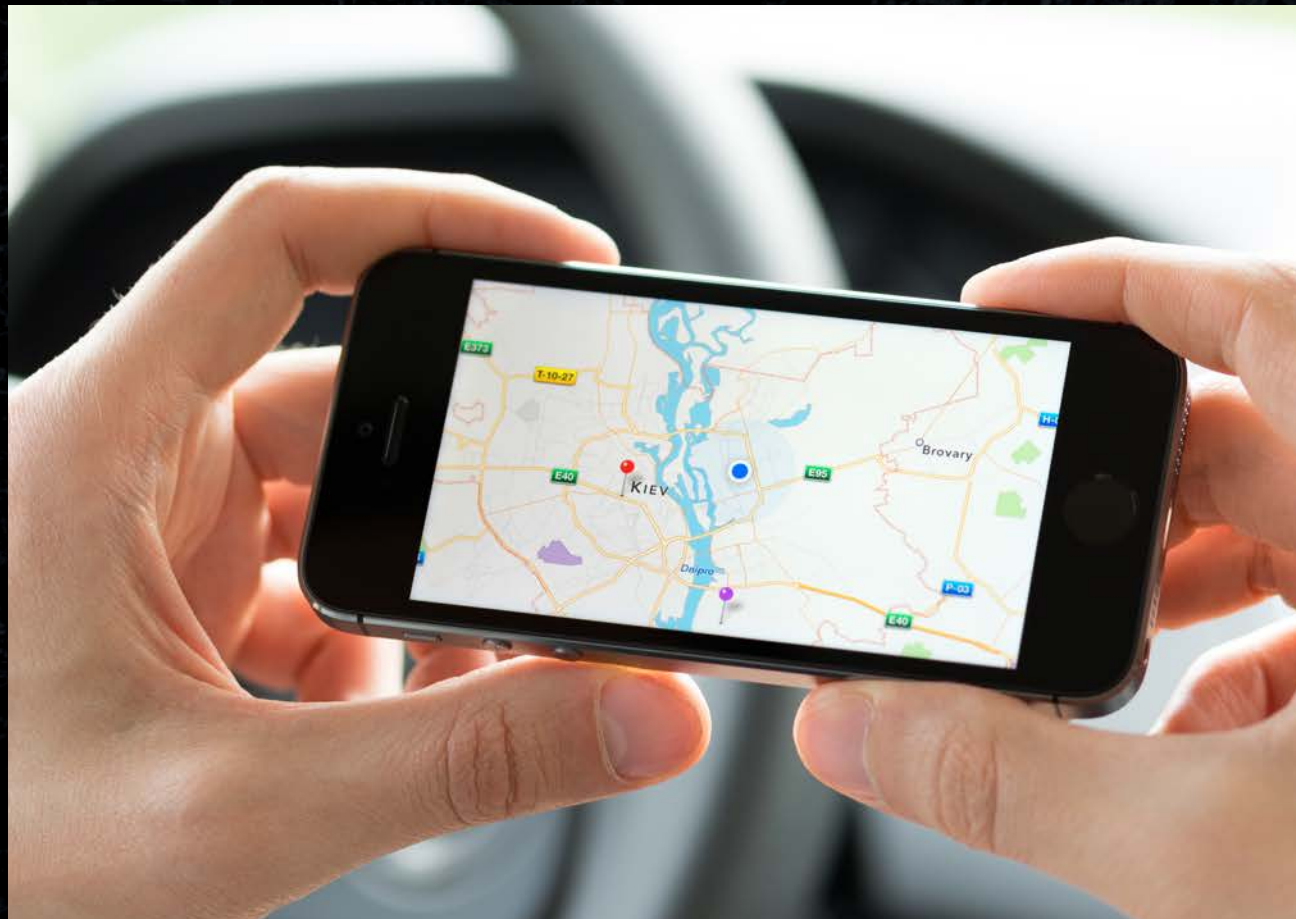
shopify



The Weather Company

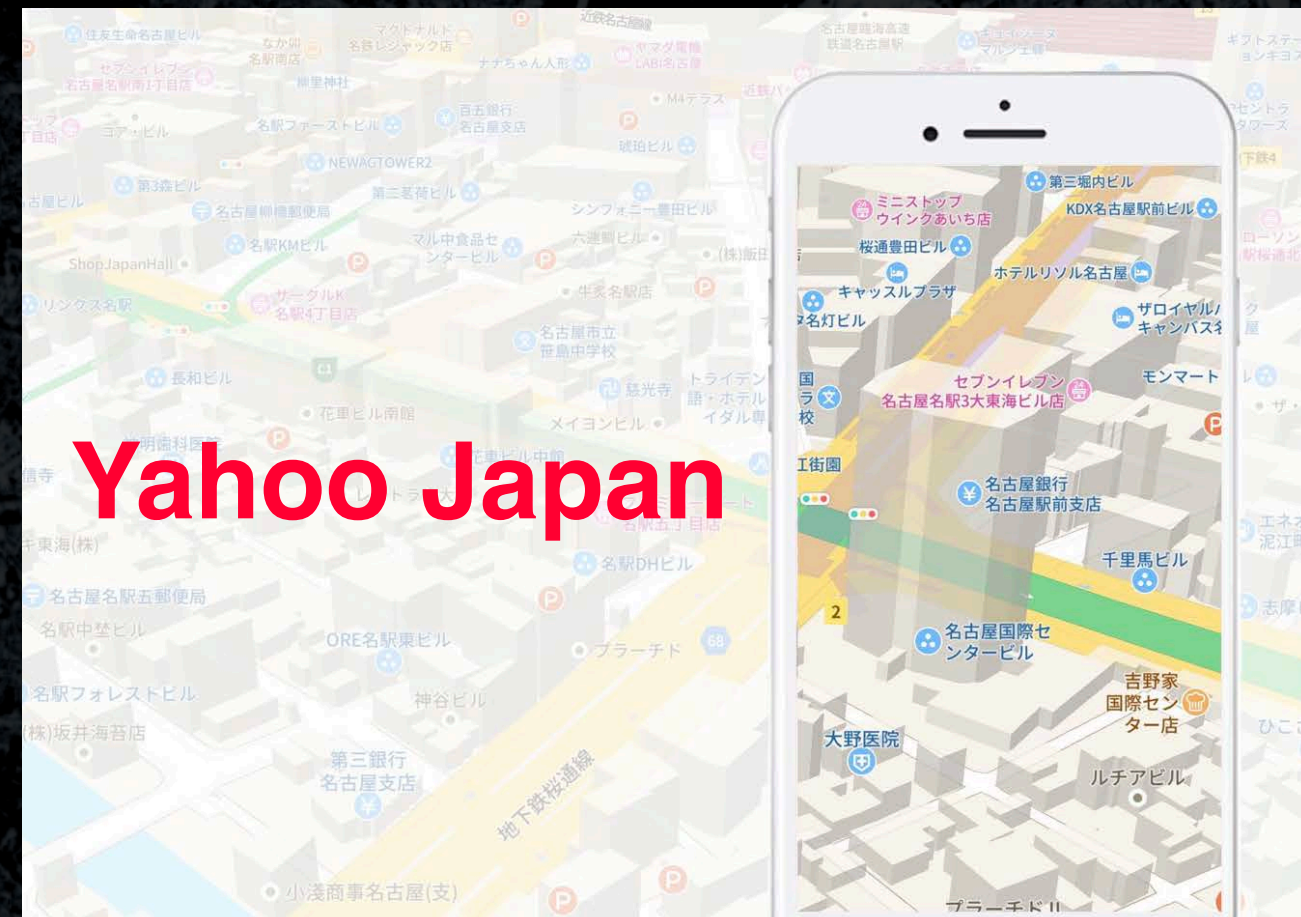
mapbox

Integrate with Zenrin



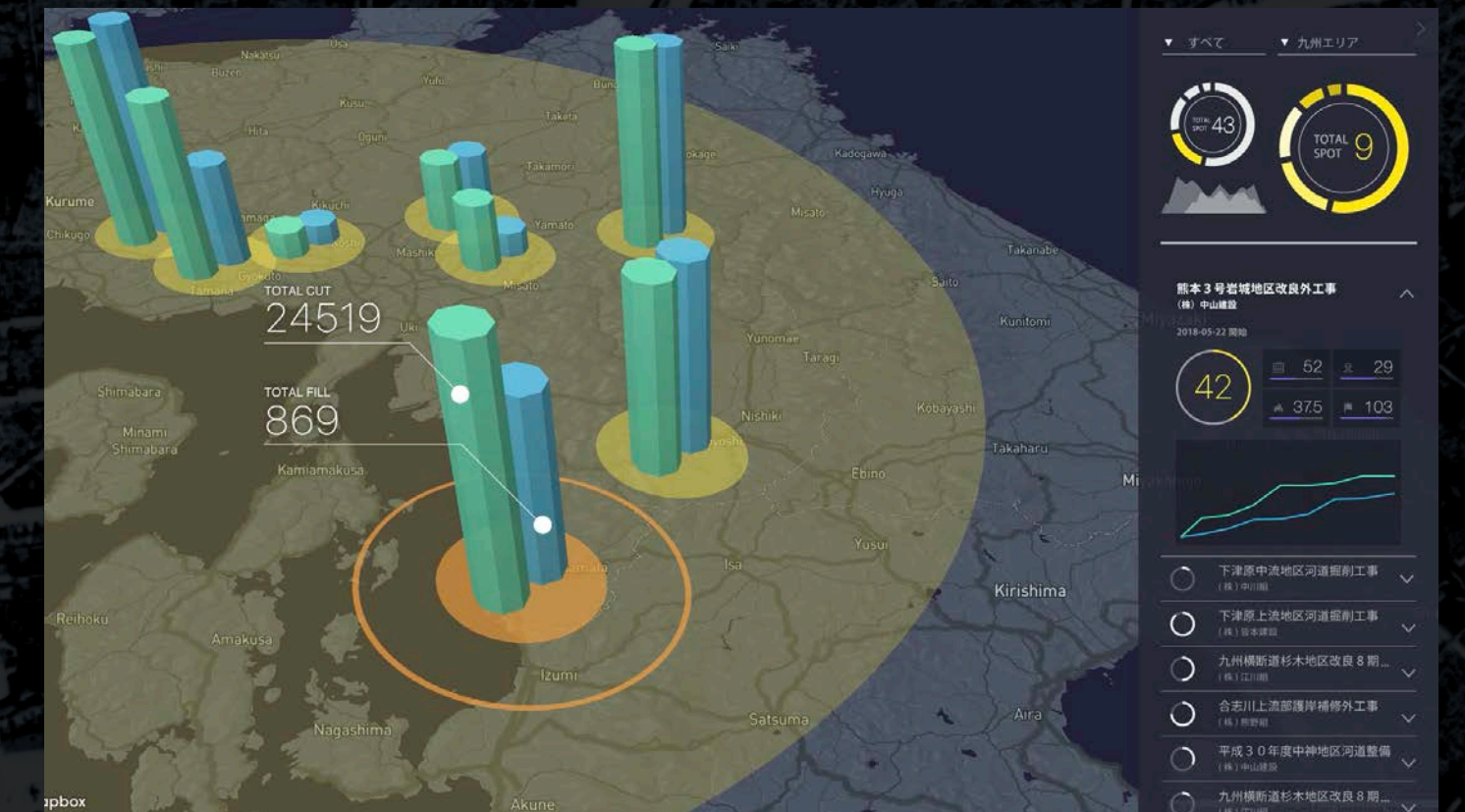
Growing coverage

Yahoo adopted



From this fall

Komatsu adopted



Business tool



arm TREASURE DATA

No.1 share in Japan
Data integrated CDP

Data processing 50 trillion per day

Data integration/analysis platform

Ingestion

Aggregate · Analysis

Use

Customer data



External data



Softbank own data



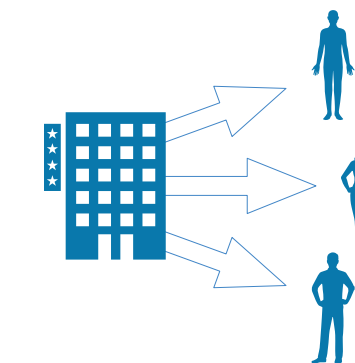
arm TREASURE DATA



CDP
(Customer Data Platform)



Marketing
measure



One to One
Marketing



Result review
after measure

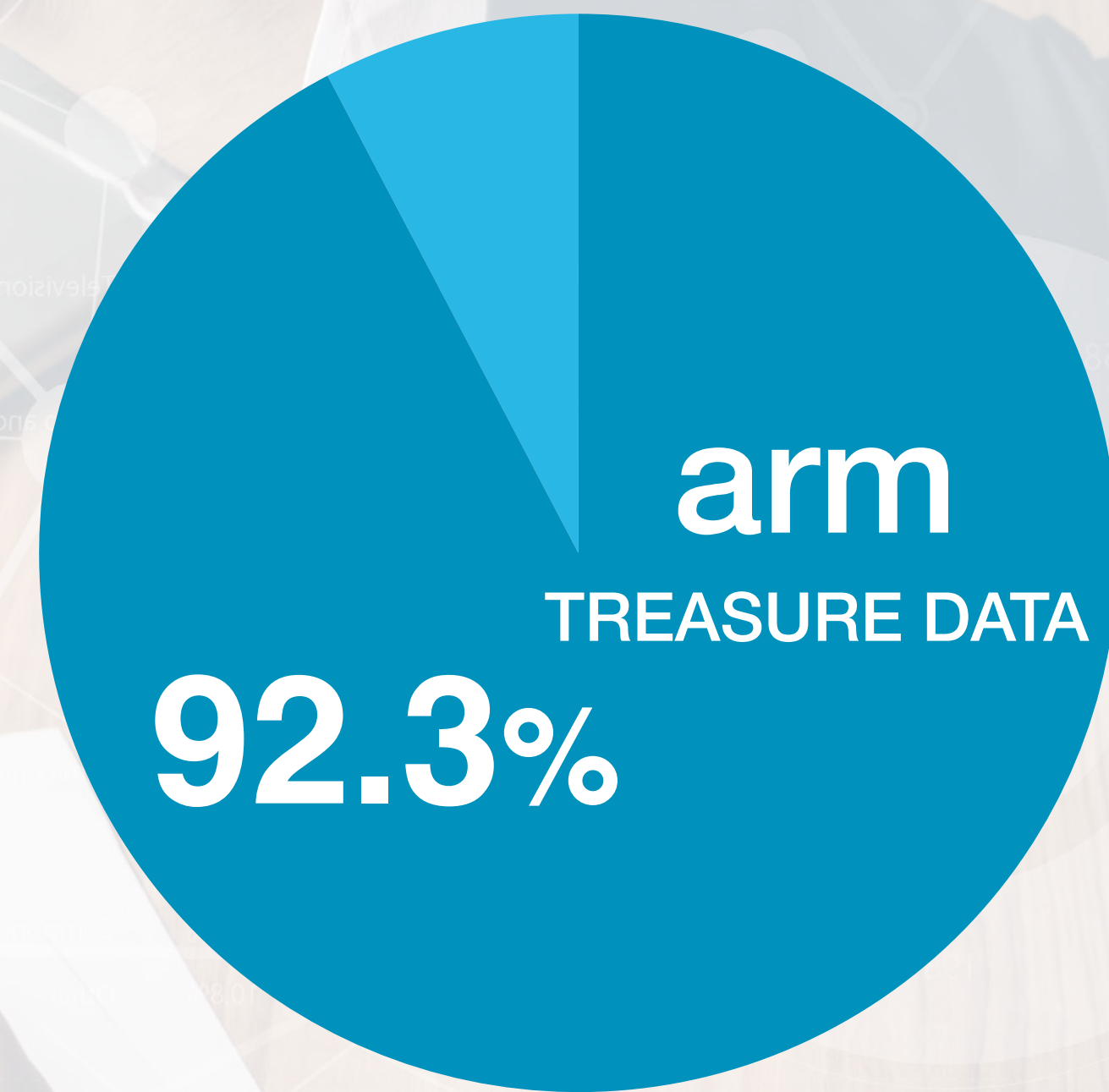
arm TREASURE DATA

「Best CDP 2019」 Award

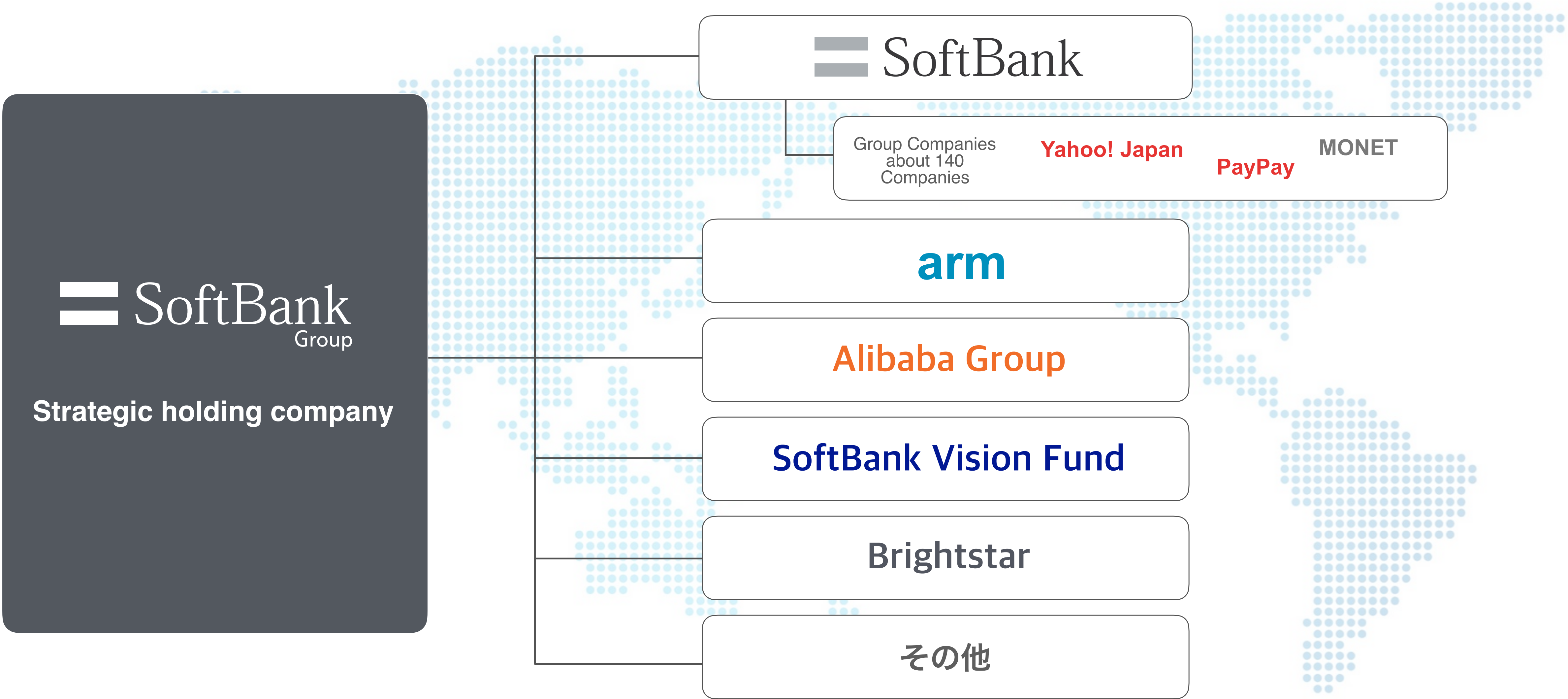


※The Marketing technology AWARDS

No1 Share in Japan



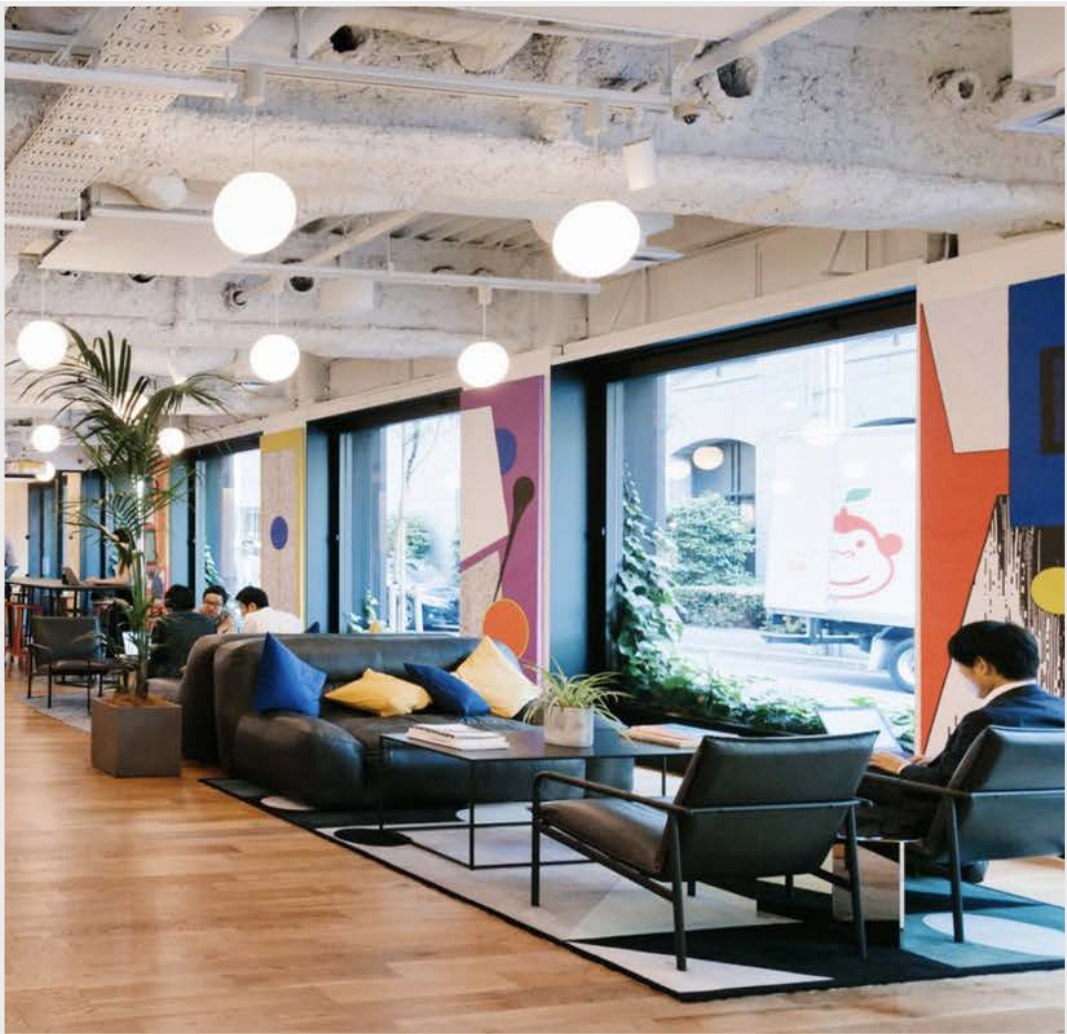
Center of business operation in Japan



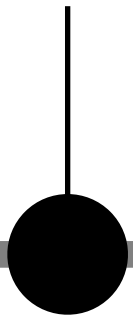
Mission ~①SVF investees Japan business development

Business development/commercialization of advanced technologies/business models in Japan

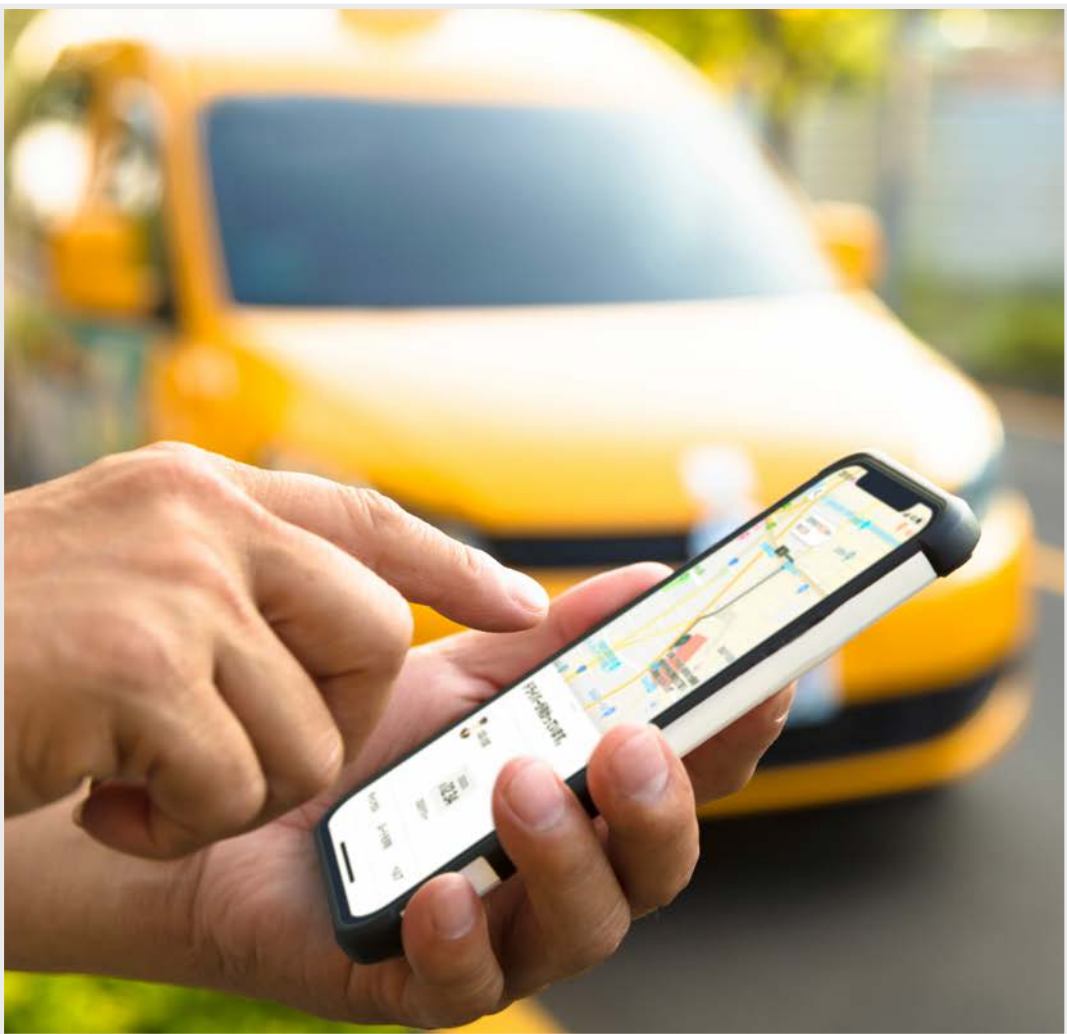
wework



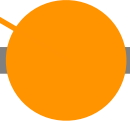
Jan, 2018



DiDi



Sep, 2018



PayPay



Oct, 2018



OYO



Summer, 2019





QR Code Payment



12 months from the service launch

Over 15M users

New business creation with partners in various industries

Pacific Consultants

Disaster preventive infra.
Using IoT sensors



MITSUBISHI ESTATE

New city development using data



SUMITOMO LIFE

IoT Insurance



Ministry of Land, Infrastructure, Transport and Tourism

Infra maintenance with less people



NIKKEN

Smartbuilding

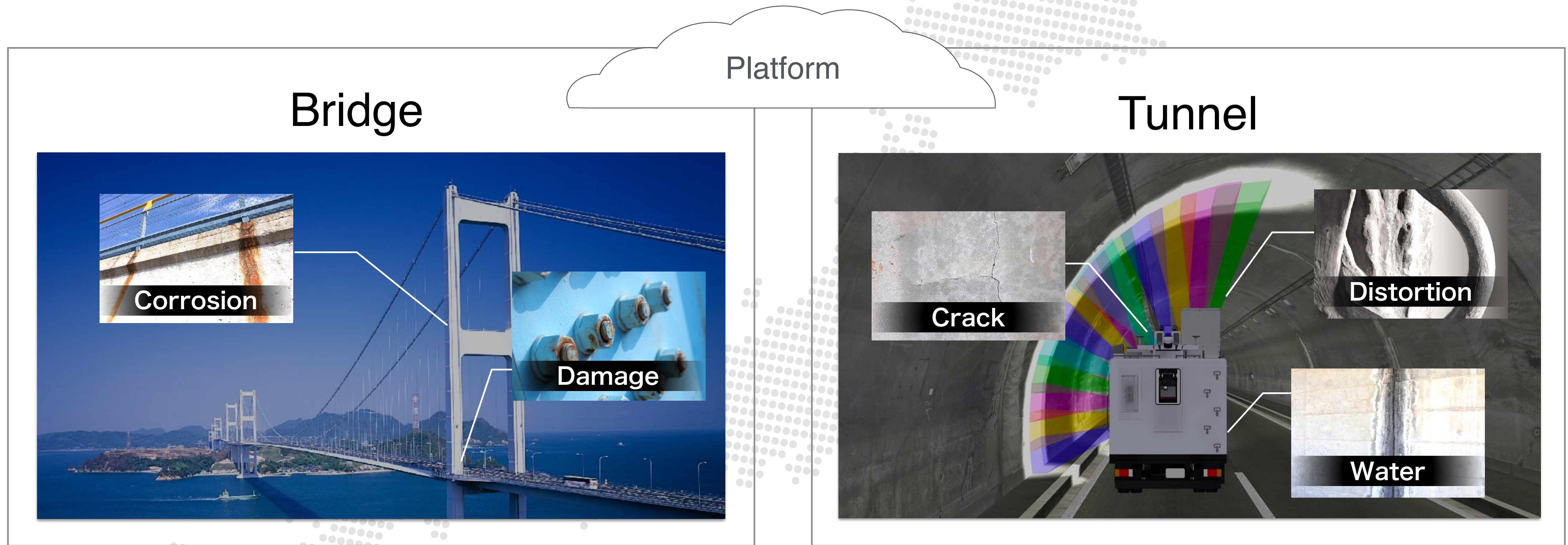


Regional & Local Gov

Better service of regional government
and education

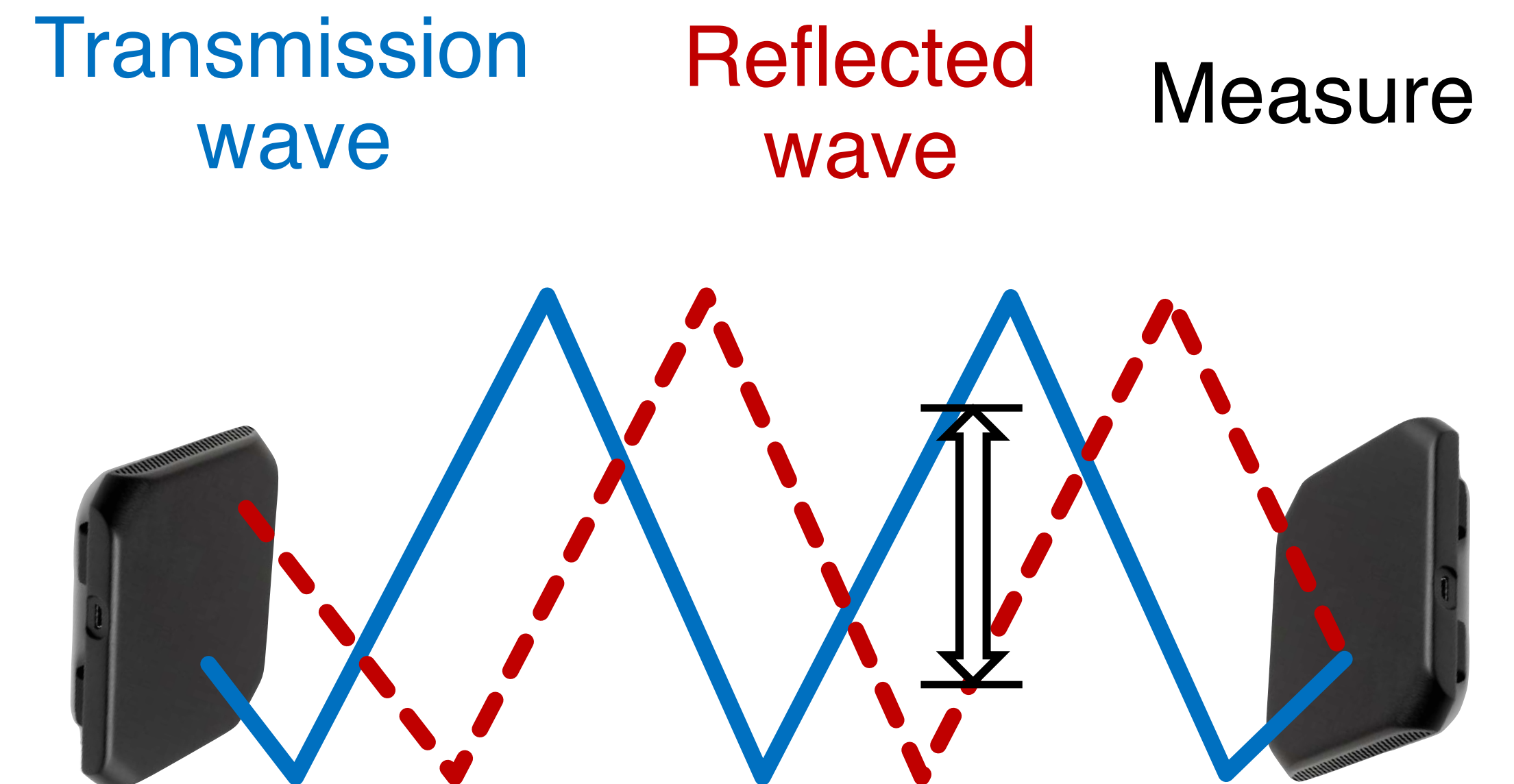
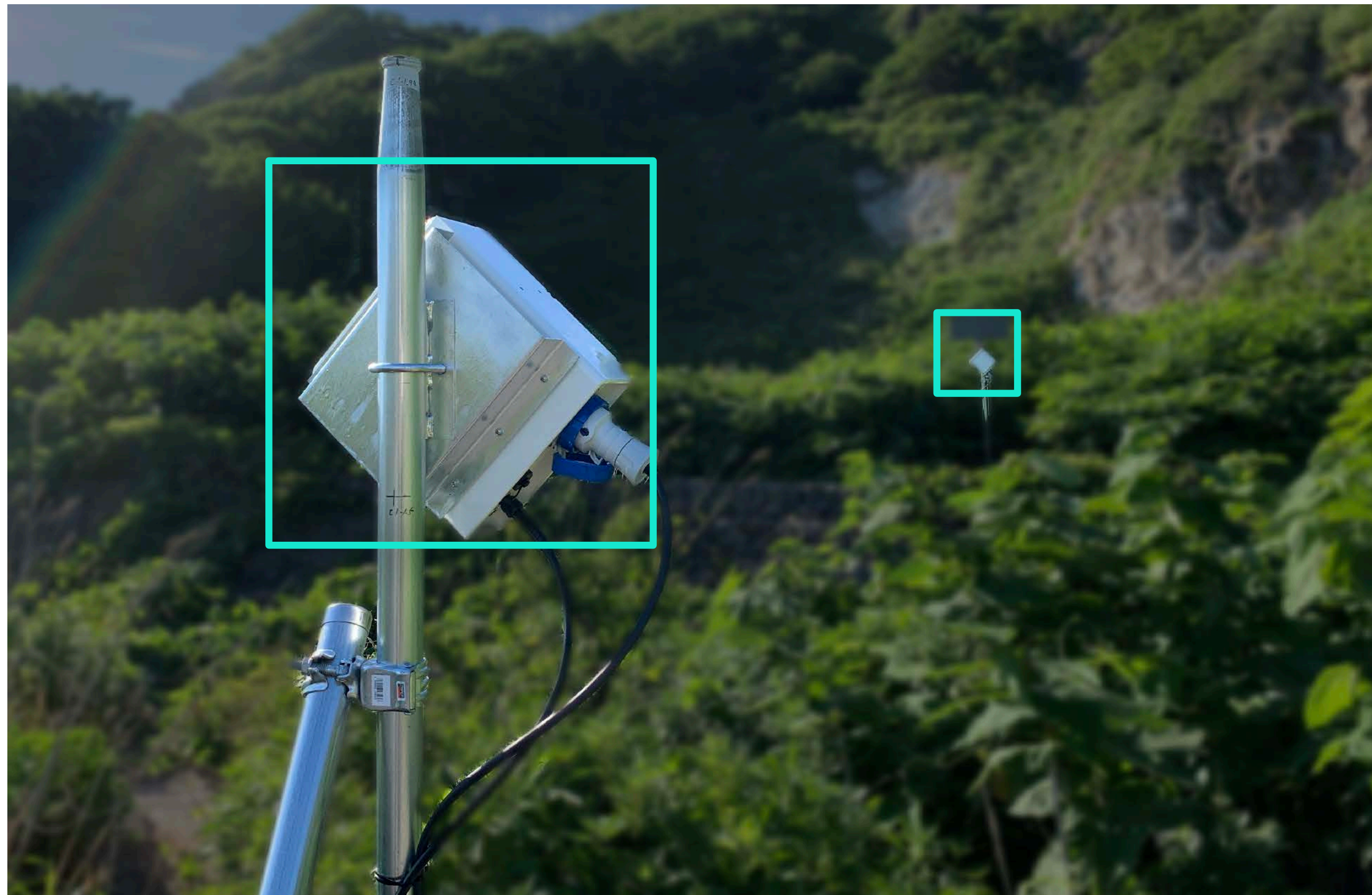


Technology support for AI utilization on infra maintenance promoted by the government



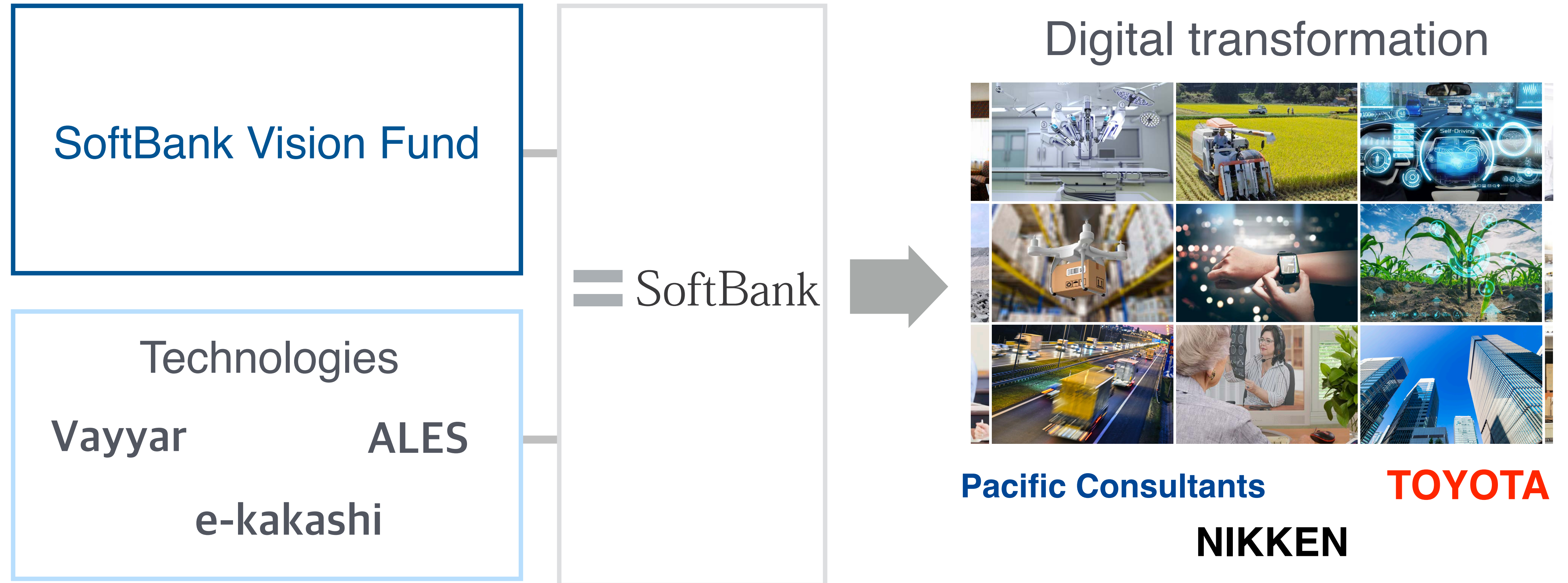
Ingest image data at inspection, aggregate, AI analysis

Detect landslide in an accuracy at several mm



➡ Translate into distance

SoftBank Corp. Role



“Glue” technologies together

SoftBank IoT Platform

Applications



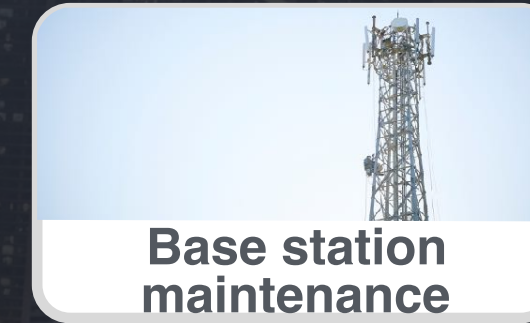
Ease traffic congestion



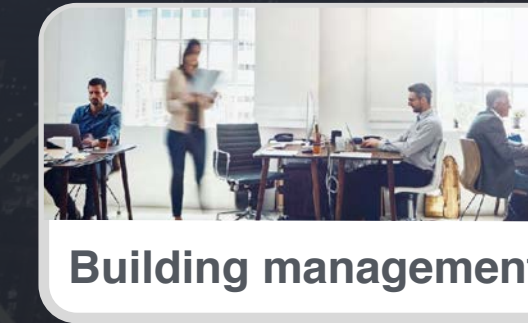
Infra management



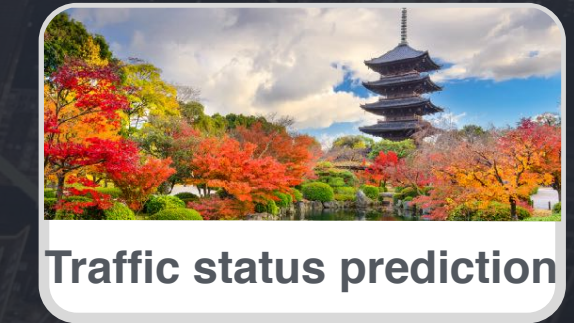
MaaS system



Base station
maintenance



Building management



Traffic status prediction

API

Device data

Network

Analysis
Recognition

Base station
Human flow data

Message

Authentication
Payment

Opendata

Application
development

VANTIQ

Data analysis

arm TREASURE DATA

Cloud

Connectivity

Network
management

Device
management

FOTA

Protocol conversion

Network

Closed

NB-IoT

NIDD

Cat.M1

Wi-Fi

LoRaWAN

LTE

5G

OneWeb

Bluetooth

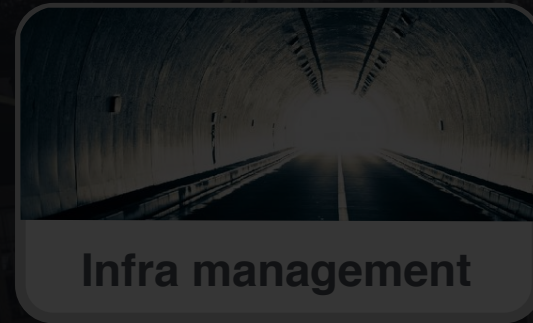
Total business development depending on project needs

Network Management

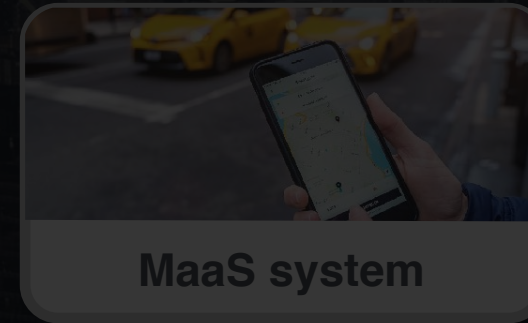
Applications



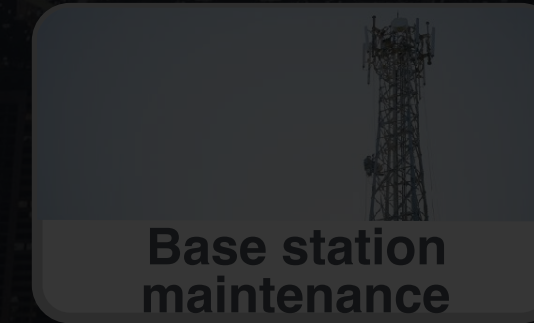
Ease traffic congestion



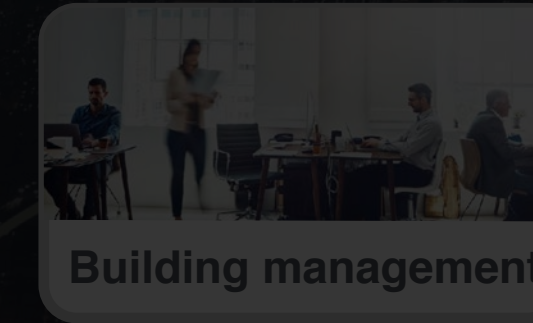
Infra management



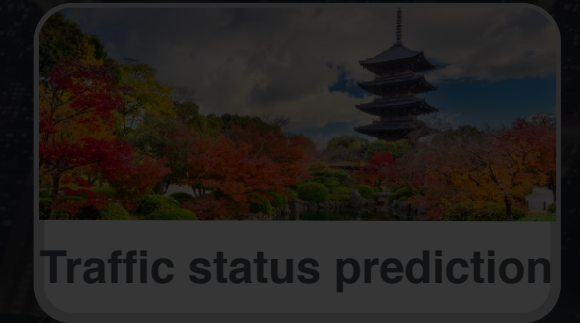
MaaS system



Base station maintenance



Building management



Traffic status prediction

API

Device data

Network

Analysis
Recognition

Base station
Human flow data

Message

Authentication
Payment

Opendata

アプリ開発

VANTIQ

Data Stores

arm TREASURE DATA

Cloud

Connectivity

Network
management

Device
management

FOTA

Protocol conversion

Network

Closed

NB-IoT

NIDD

Cat.M1

Wi-Fi

LoRaWAN

LTE

5G

OneWeb

Bluetooth

Heterogenous network management

Connectivity Management

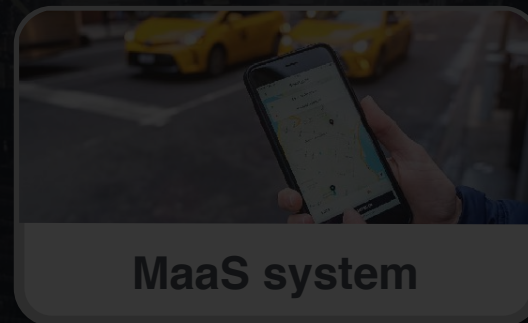
Applications



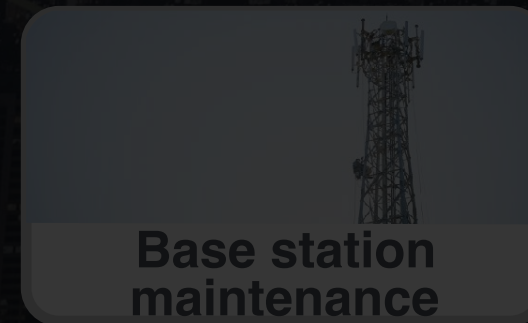
Ease traffic congestion



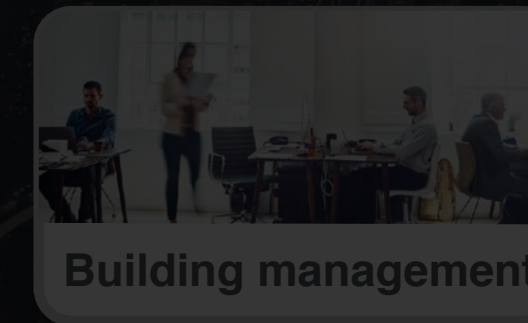
Infra management



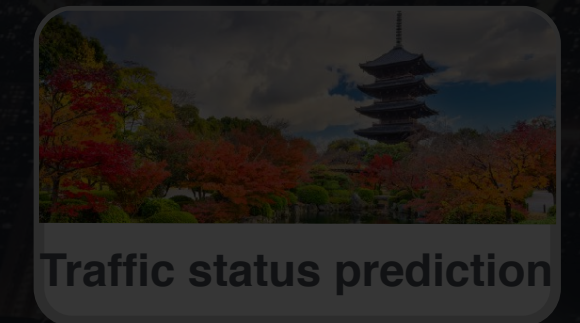
MaaS system



Base station maintenance



Building management



Traffic status prediction

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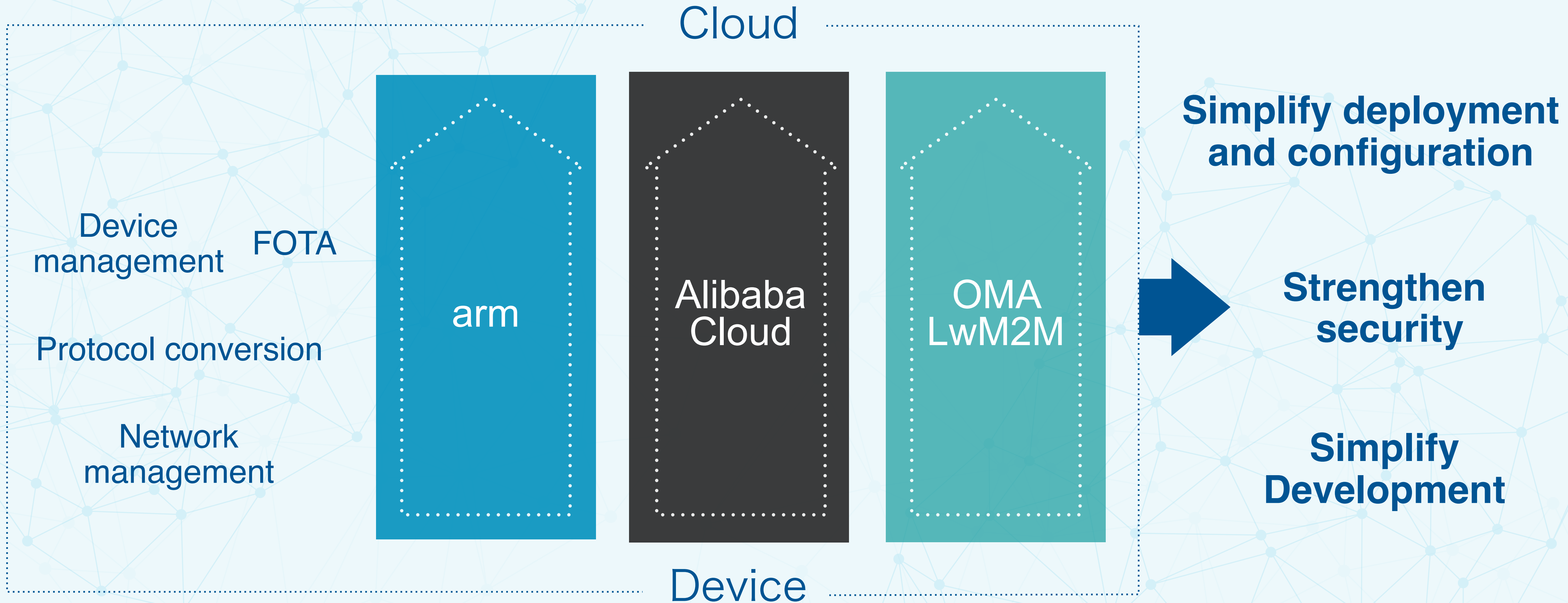
5G

OneWeb

Bluetooth

Efficient management of huge number of devices, data

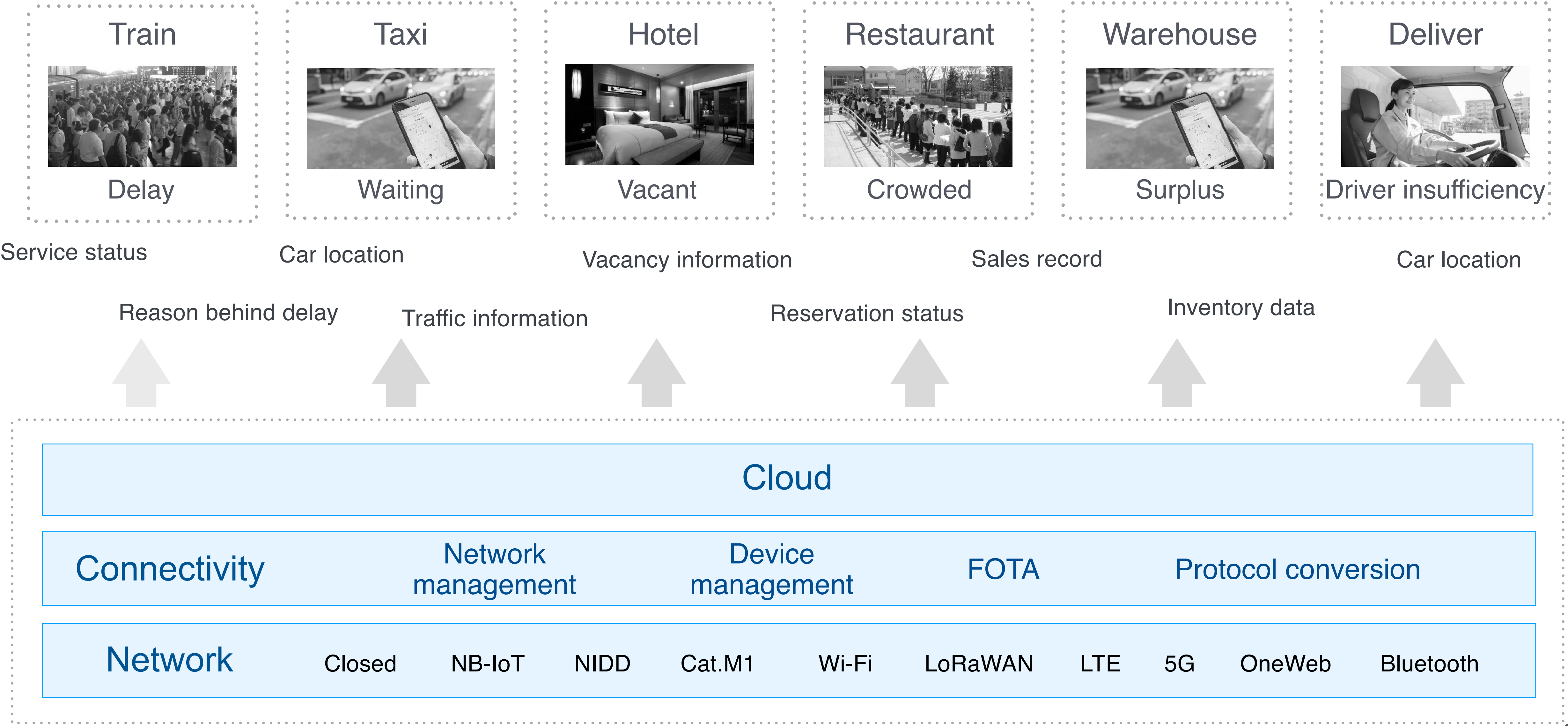
Connectivity ~Eco System Strategy



Drive IoT by building the environment connecting various kinds of devices and cloud platforms

Strategic Alliance with VANTIQ

Until now, data utilization is limited



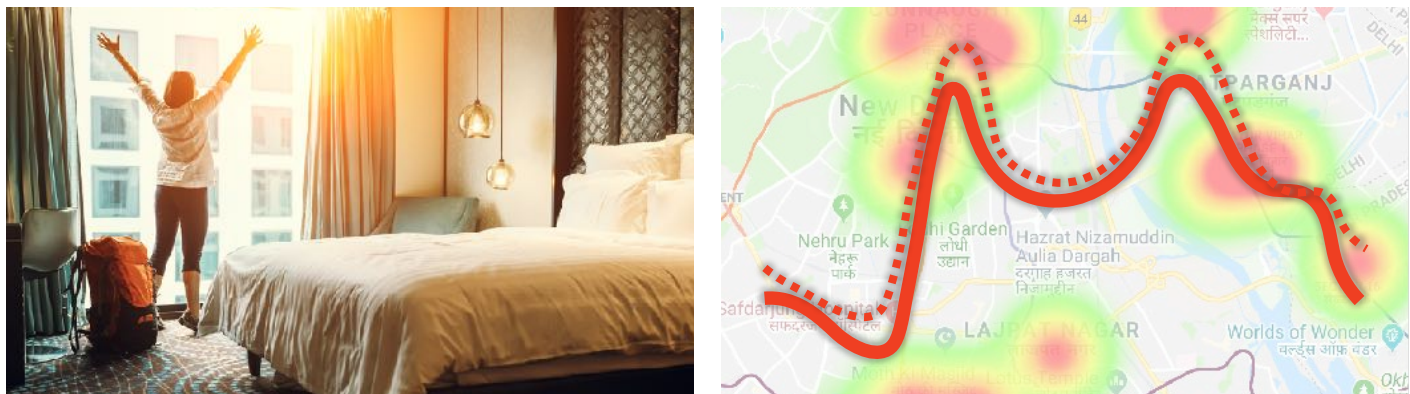
Now, use events horizontally across applications using VANTIQ

MaaS



Demand prediction / AI auto delivery

Smartcity (Hotel · Restaurant)

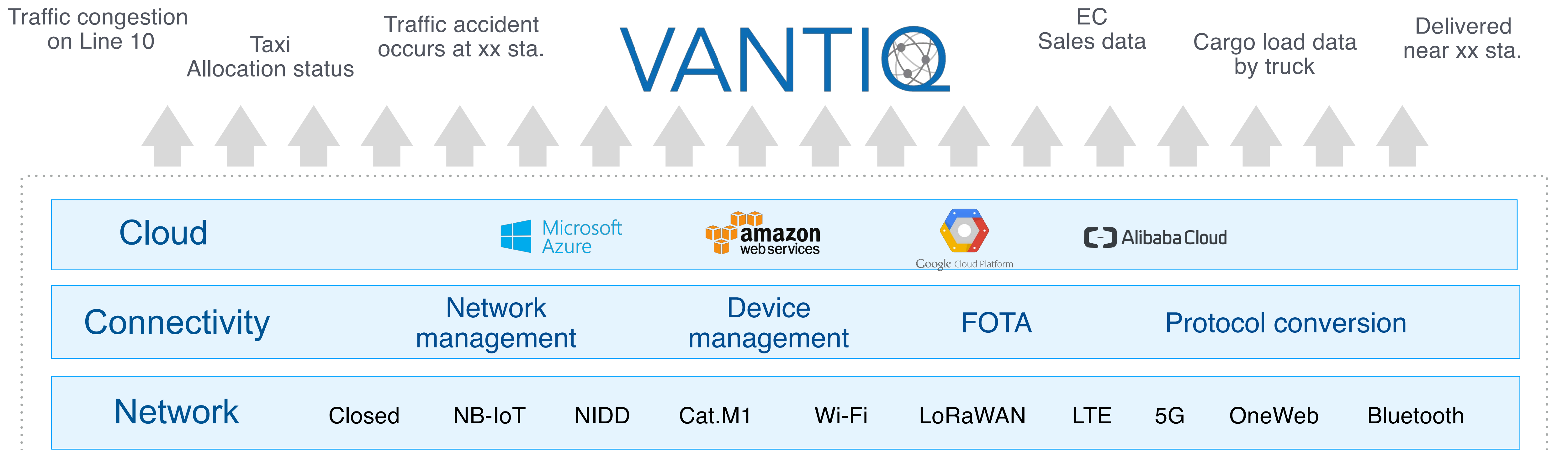


Dynamic pricing / Vacancy filled

Supply chain



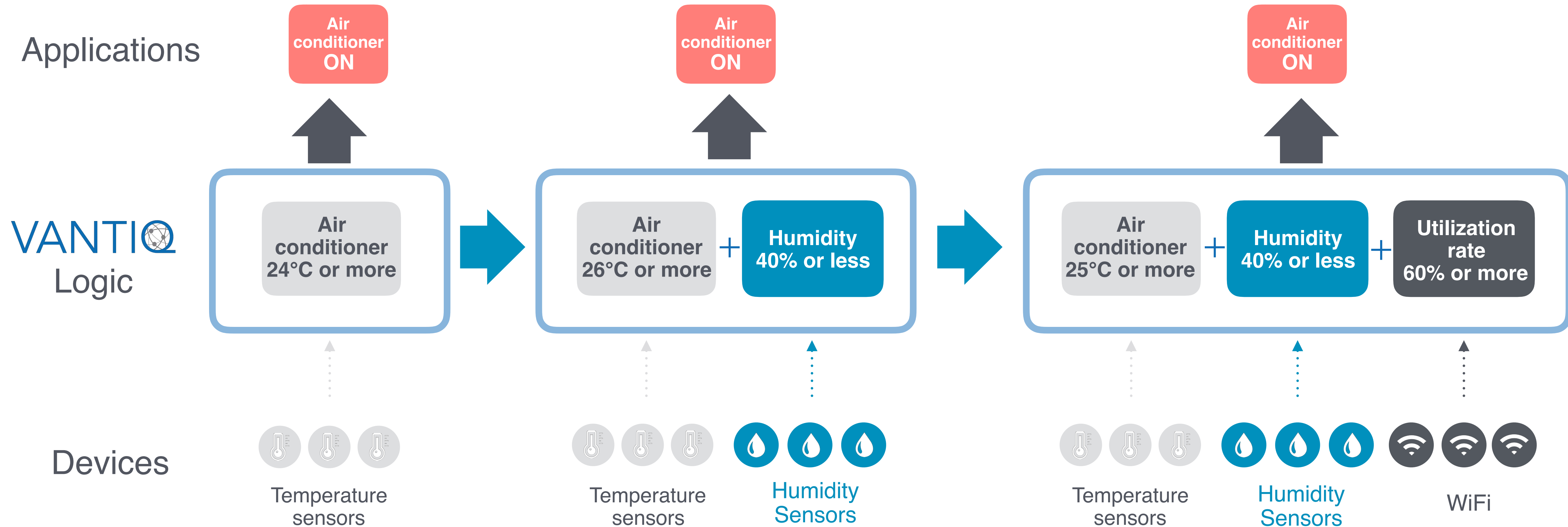
Order prediction / Delivery matching



Improve Application DevOps Efficiency

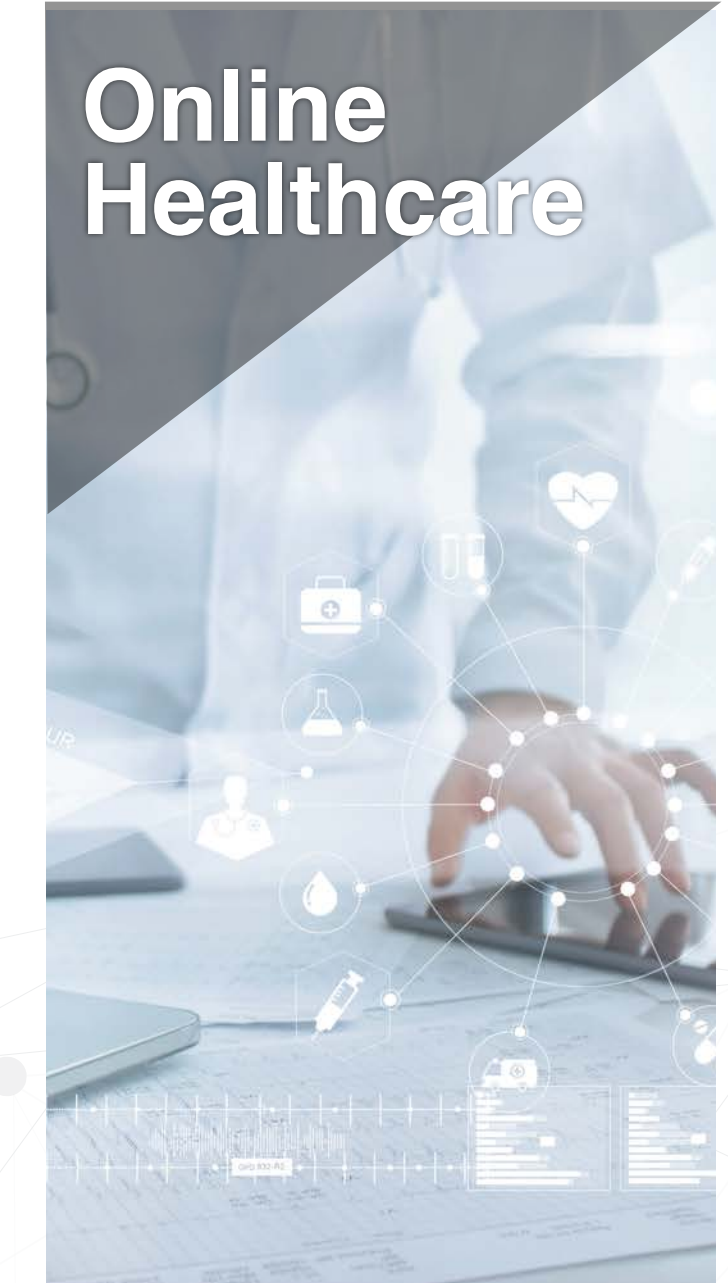
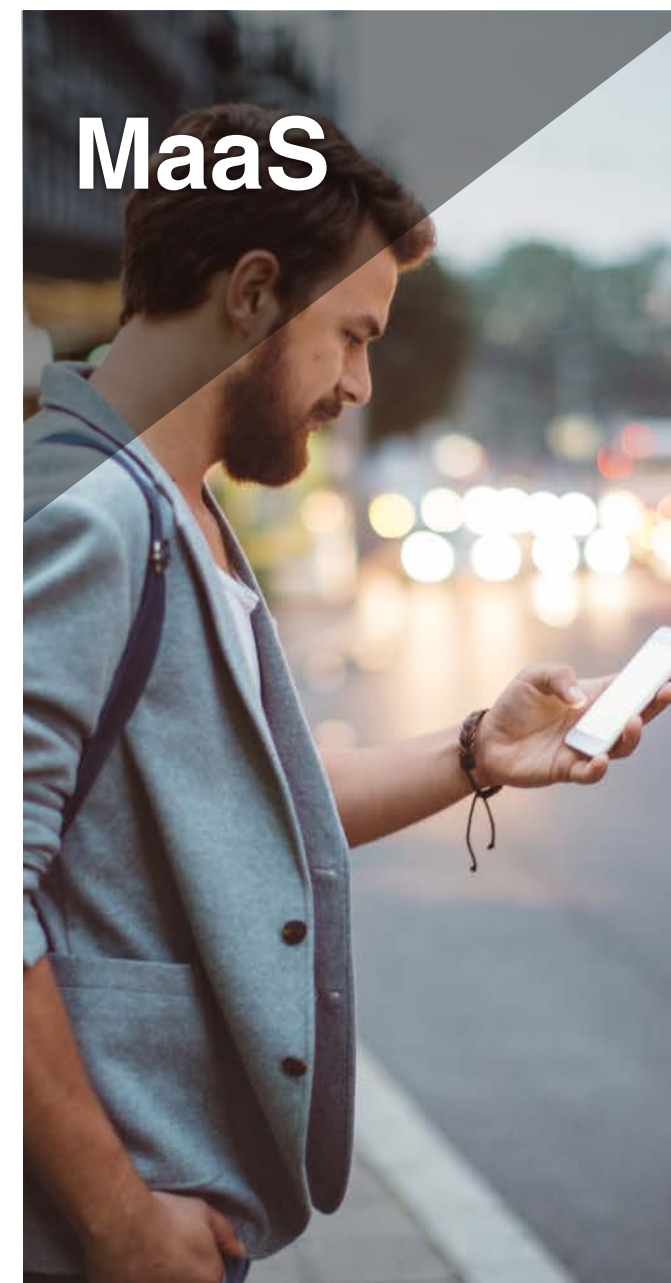
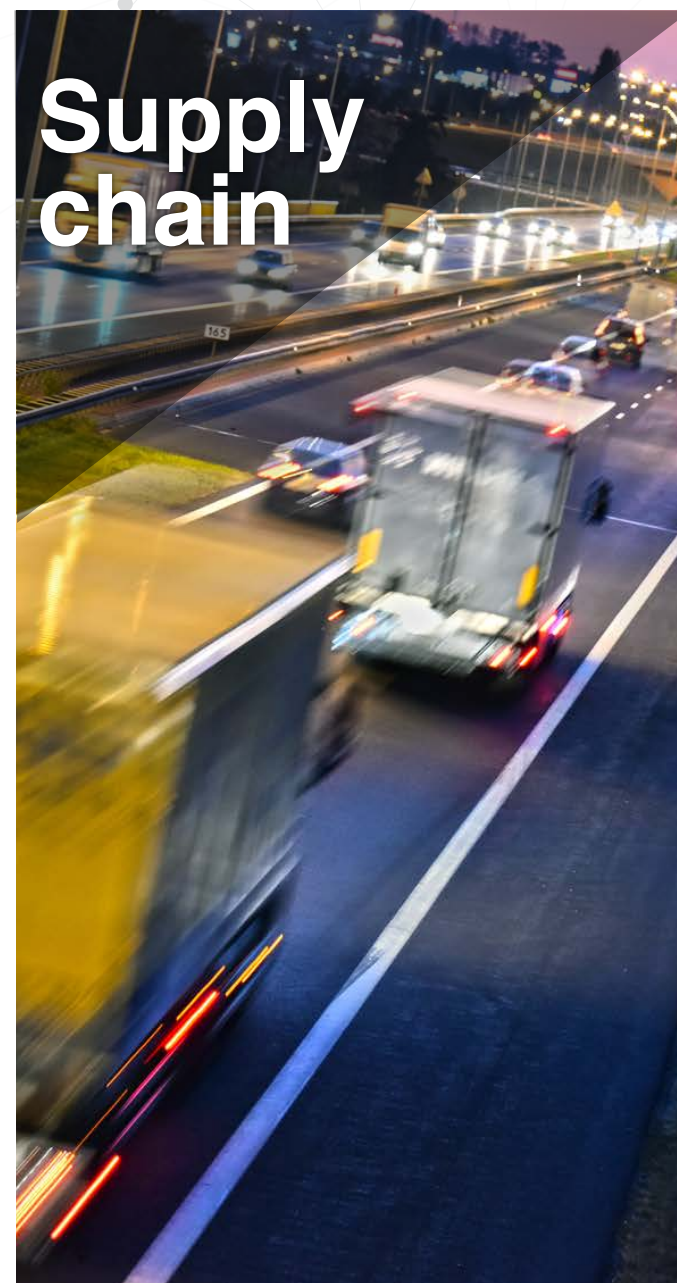
Control logic using VANTIQ

No change required for application when a device is added



Suitable for Smartcity-type projects with huge number of devices

Toward the Foundation of Digital transformation



SoftBank

VANTIQ



Takeshiba Area Smartcity/building project



SoftBank

東急不動産

Verification on advanced technologies in collaboration with companies

(National Strategic Special Zone)

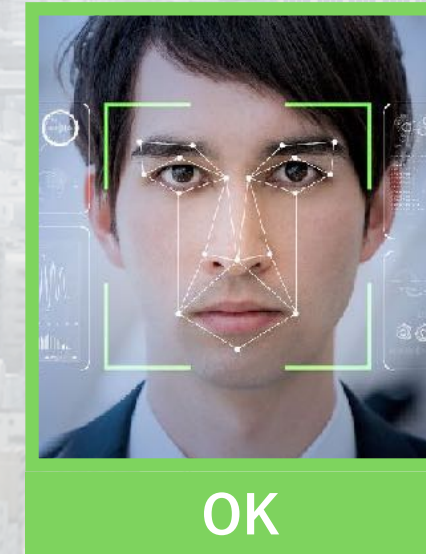
Drone

Urban type drone delivery



Face recognition

In-coming Security



Robot

Office autonomous cleaning



MaaS

MONET service



3D Sensor

Visual congestion at EV hall



SoftBank Corp. Role

Collect, analyze, utilize data
from buildings and cities in an integrated fashion

Smart City Platform
= SoftBank VANTIQ

Lighting

Congestion

Restroom

Energy

Sensor

Camera

Face recognition

Airconditioner

Robot

People flow

Traffic condition

Weather information

Shop status

Event

Use case ~①Traffic

Realtime monitoring traffic status and guide how to go home

Bus



Congestion on Route 3

25 min delay

Train



Accident occurs at xx sta.

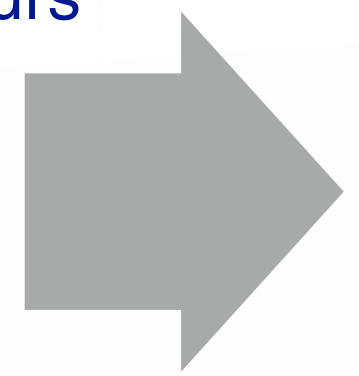
Resume service in 30min.

Taxi



Car location data

Assign car near xx sta.



smart city TAKESHIBA

⚠️ 重要なお知らせ

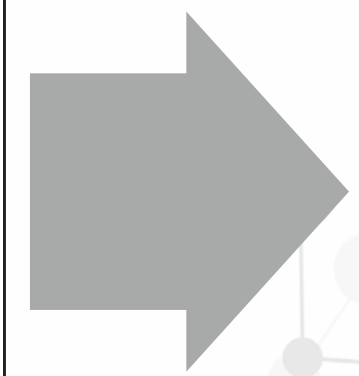
強風によりゆりかもめが運行停止中です。竹芝駅は入場規制位中です。現在、他の交通機関への振替輸送を実施しています。

Mobility Service

現在地に最短で **10** 分で到着

Show optimal way

Taxi reservation



Users

Use case ~②Retail store

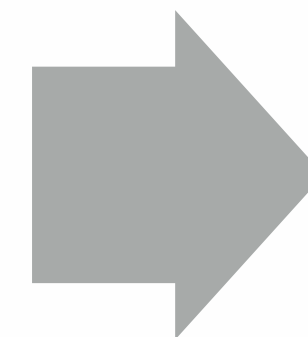
Show vacancy information on digital signage before going to a store



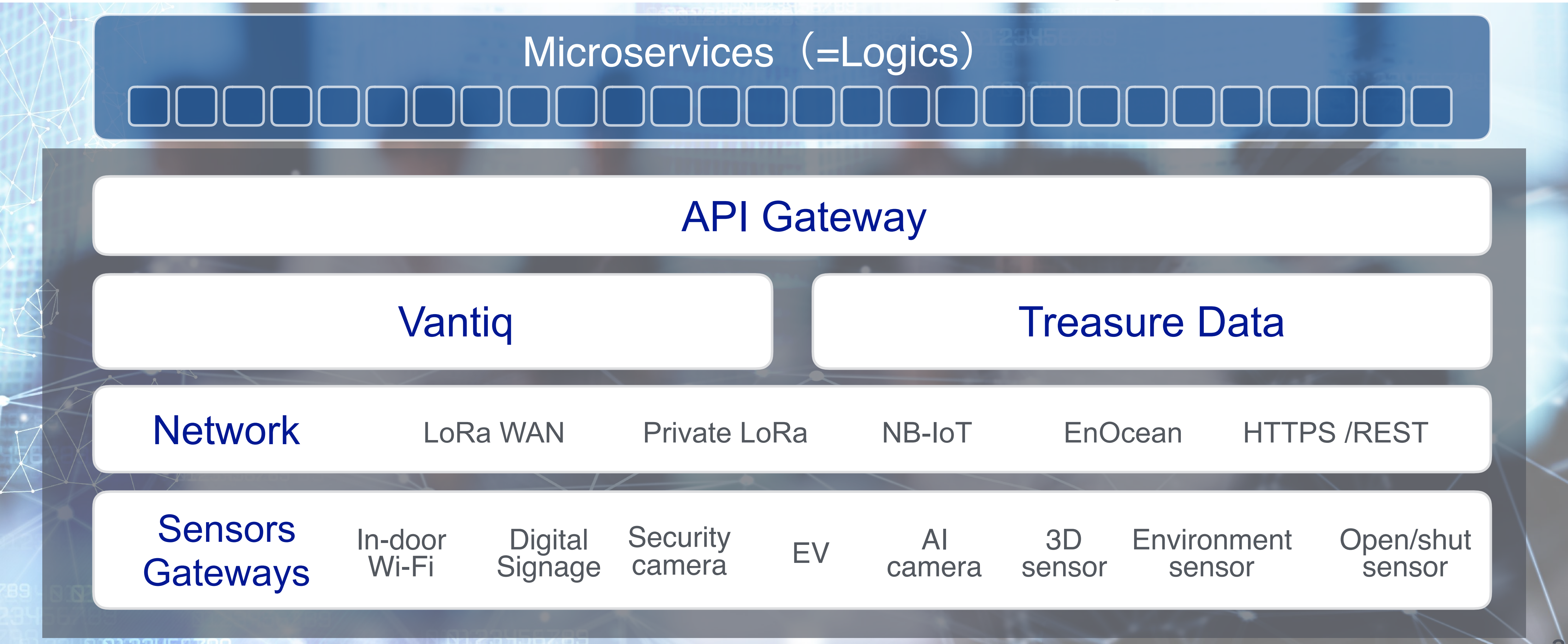
Use case ～③ Security

When non-employees enter company closed area

AI detects incident / Automatic notification to the nearest security staff



Provide total solution including
API / Application dev environment Package under study



Produce VANTIQ logics in large quantity

Shared and used to other services as a Micro-service



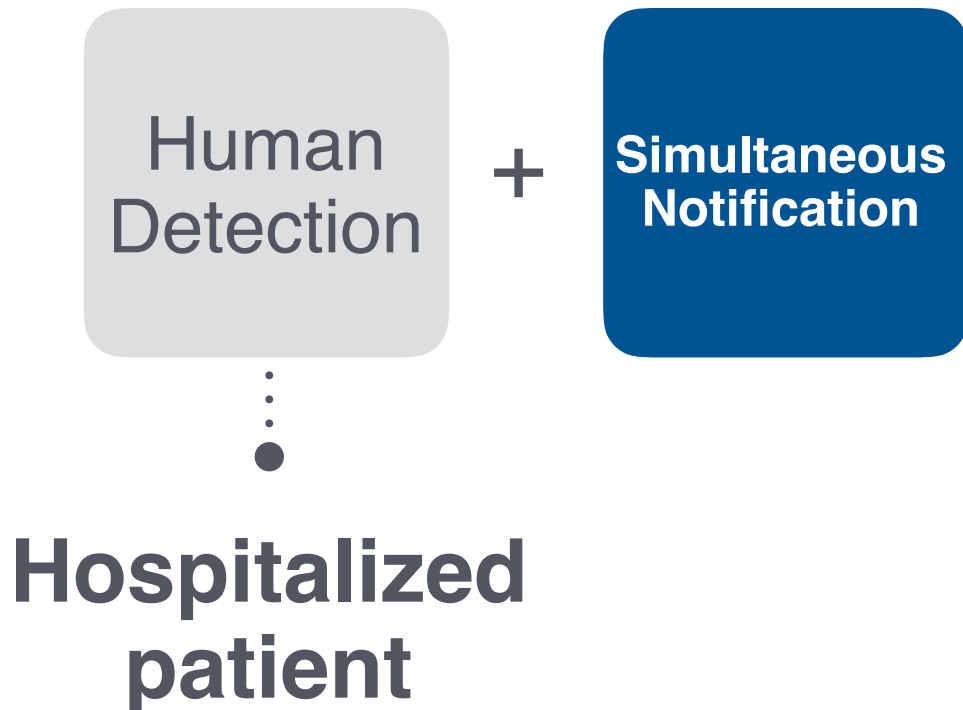
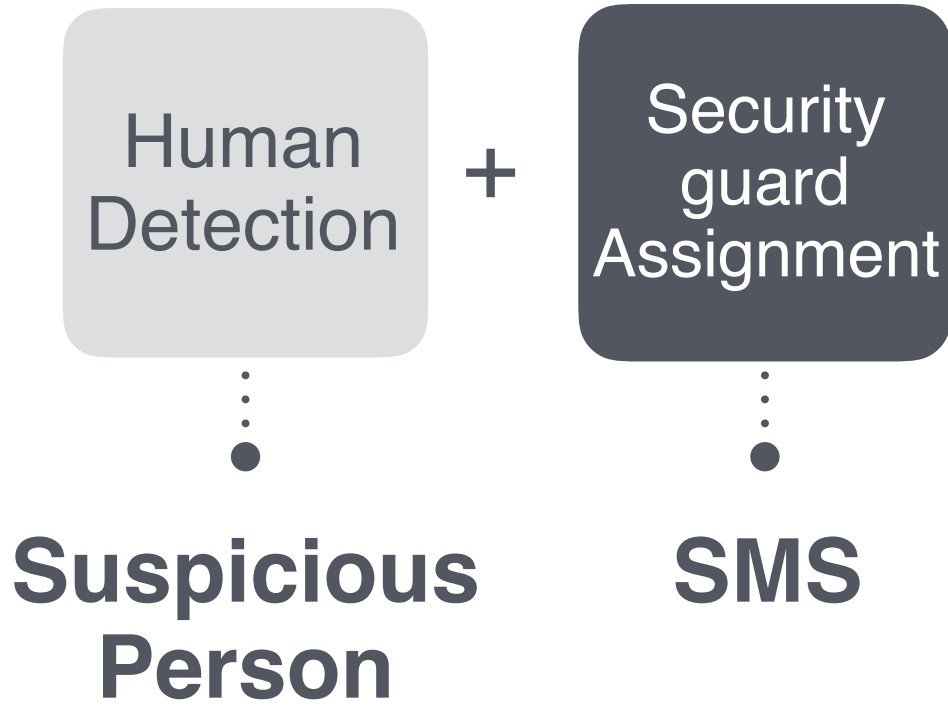
Security staff in buildings
Notify suspicion person



Hospitals
Patient monitoring



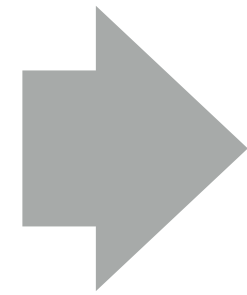
Stadium security
Notify suspicious person



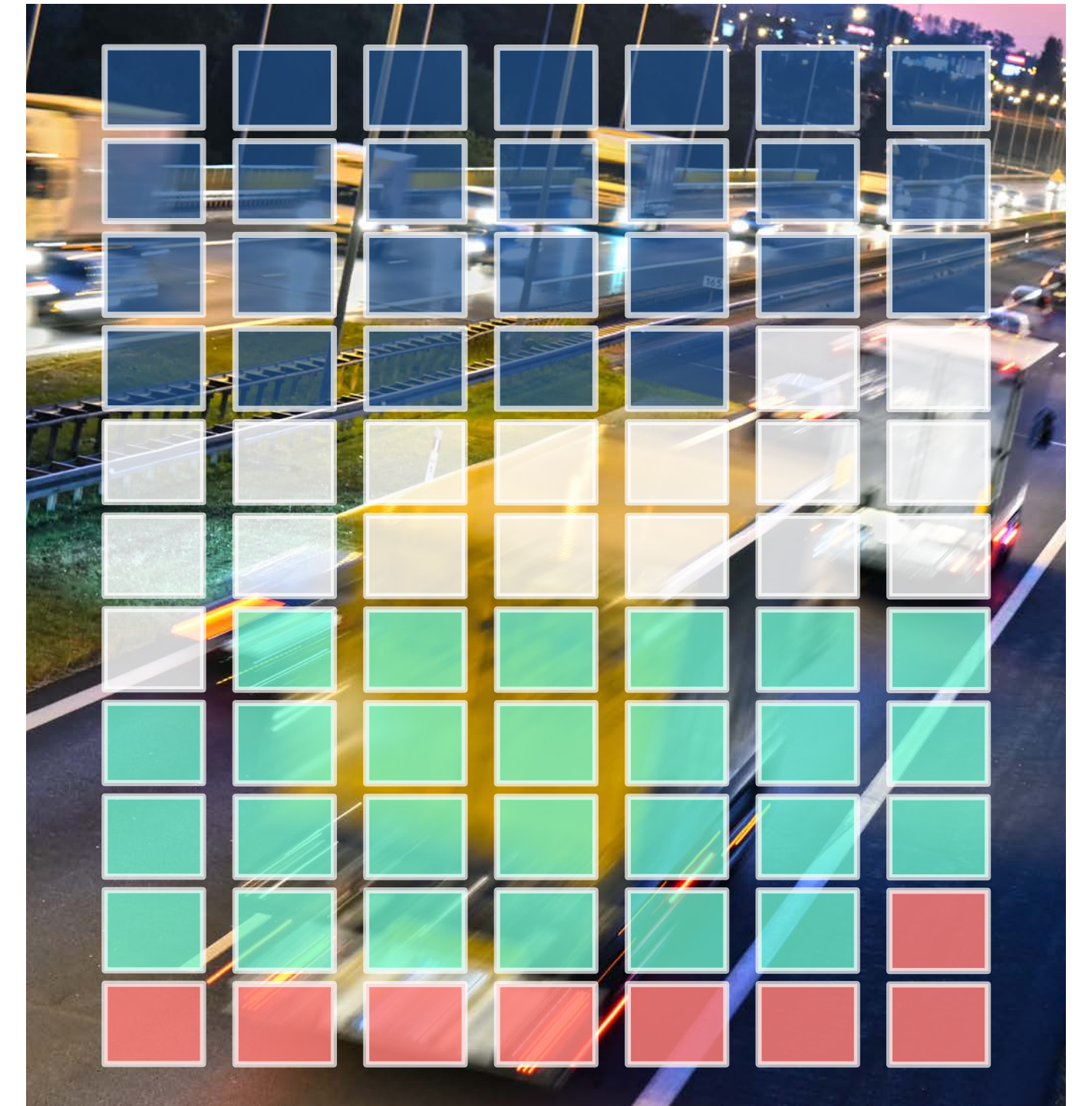
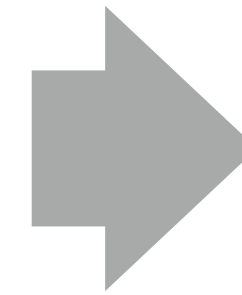
Expanding into various industries with VANTIQ



Smartcity



Construction



Logistic

Together with SIs and Partners

Digital transformation



 SoftBank

VANTIO 

SIs and Partners