



# Financial Results Briefing Material

## FY2020 (ended Dec 31, 2020)

Neural Pocket Inc.  
February 12, 2021



- **Business overview**

- FY2020 performance
- Business highlights
- FY2021 forecast

## Company information

**Company** Neural Pocket Inc.

**Established** January 22, 2018



**Location** Headquarters  
Tokyo Midtown Hibiya, Hibiya Mitsui Tower 32F,  
1-1-2, Yurakucho, Chiyoda-ku, Tokyo, Japan

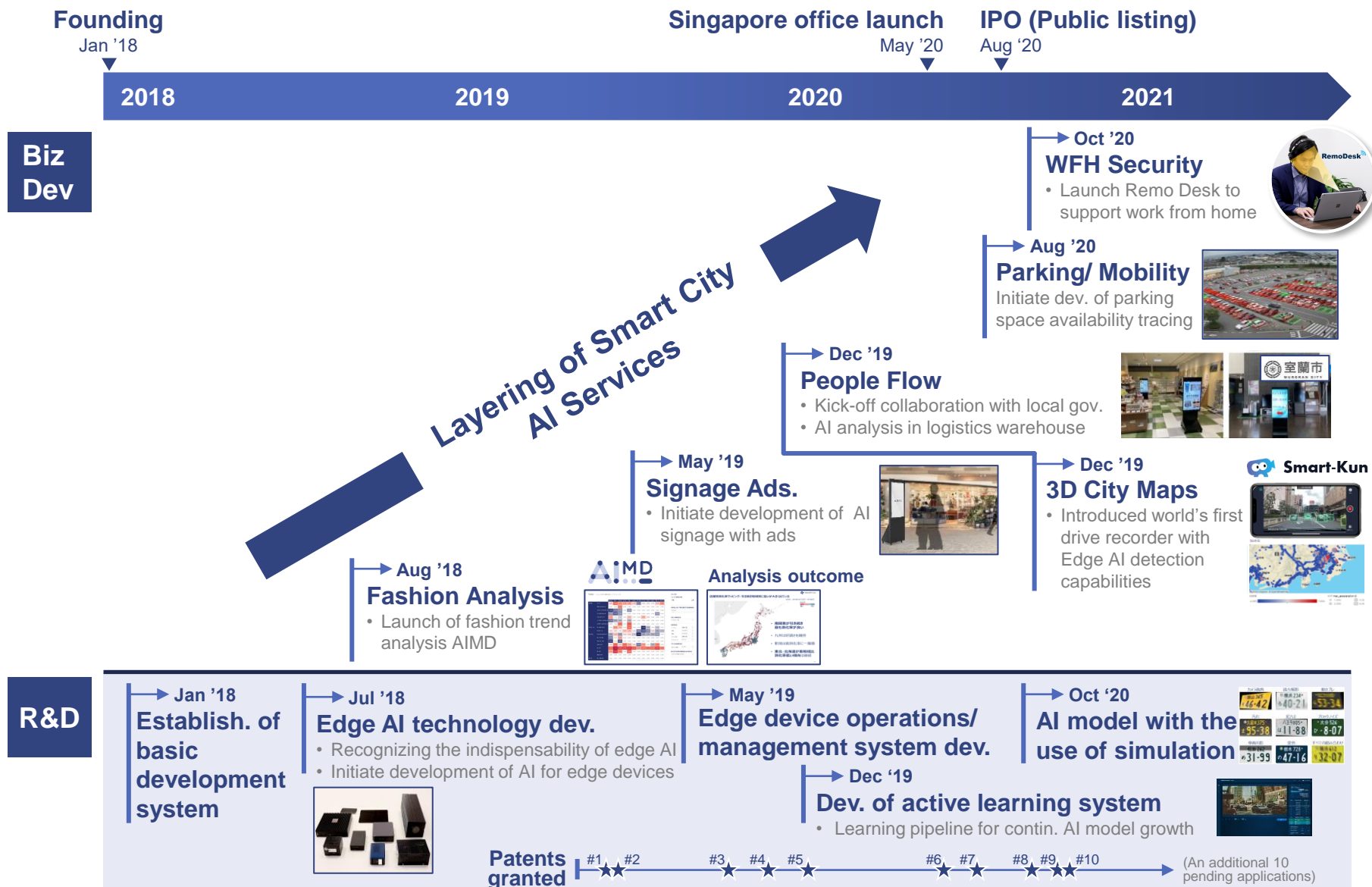
Singapore branch  
9 Straits View, Marina One West Tower, #06-07,  
Singapore 018937

**Representative** Roi Shigematsu

**Employees** 38 (as of Dec 2020 end)

**Capital** 18.5 million JPY (as of Dec 2020 end)

# History of Neural Pocket



# What Neural Pocket is trying to achieve

Neural Pocket provides digital services for physical spaces to enhance our real world experiences through introducing intelligent AI cameras

# “AI Smart City Revolution”





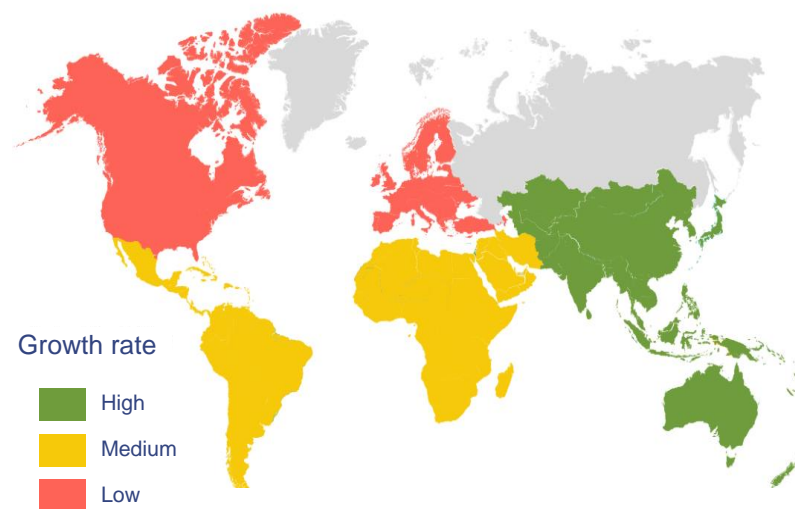
# A new major market is being created in the field of smart cities

**Global Smart City market size is approx. 100-200 trillion yen**

**Asia is the source of growth for smart cities**

Research Company / Report Name	Global Market Size*1
<b>Allied Market Research</b> Smart Cities Market by Functional Area : Global Opportunity Analysis and Industry Forecast, 2018 – 2025	In 2025 <b>2.4T USD</b>
<b>Mordor Intelligence</b> Smart Cities Market - Growth, Trends, and Forecast (2020 - 2025)	In 2025 <b>1.7T USD</b>
<b>IMARC</b> Smart Cities Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2020-2025	In 2025 <b>1.0T USD</b>
<b>Markets And Markets</b> Smart Cities Market by Smart Transportation, Smart Buildings, Smart Utilities, Smart Citizen Services - Global Forecast to 2023	In 2023 <b>0.7T USD</b>

Smart City Market Growth Rate by Region (2019-2024)

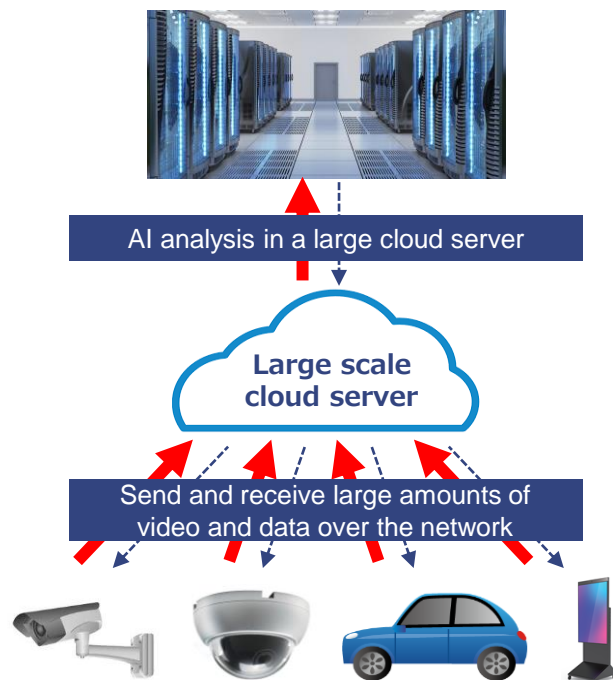


Source: Mordor Intelligence

# Edge AI is a technology that solves many of the problems traditional Cloud AI faces

## Cloud AI

Conventional approach

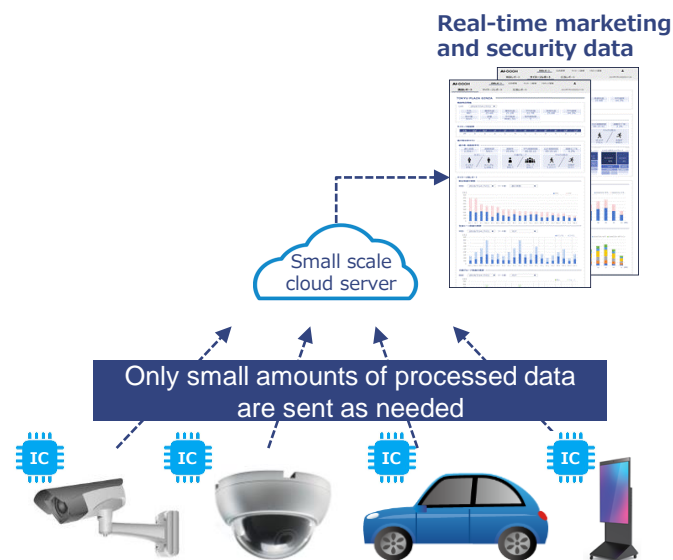


- **High costs** (Communication and maintenance)
- **High latency** (High network load)
- **High elect. consumption** (Large amount of power consumption for cooling)

## Edge AI

Our approach

- Original data (video, etc.) before AI analysis
- - - - - Metadata after AI analysis (text data)



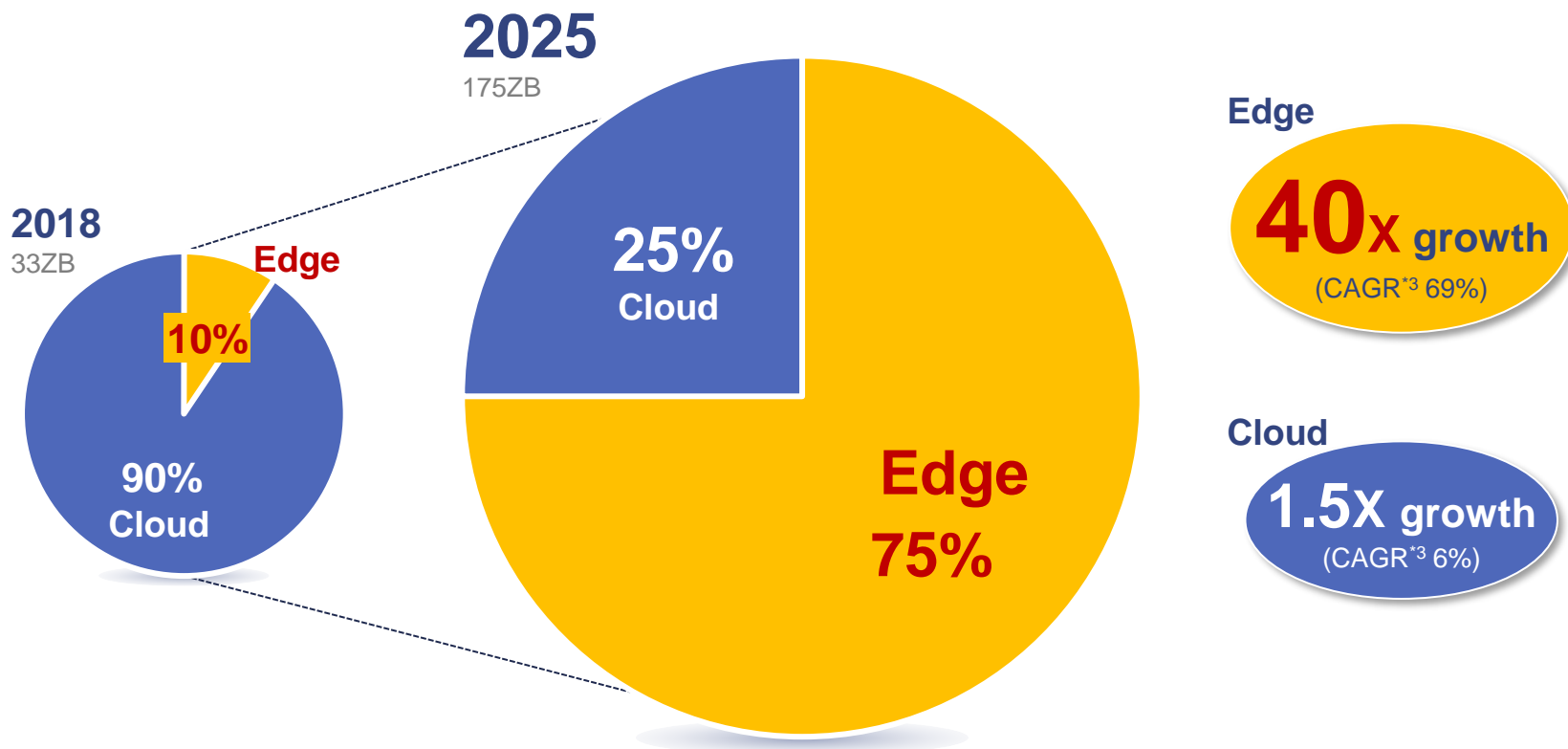
- **Low costs**
- **Low latency**
- **Green/ Low elect. consumption**

**Also contributes to privacy protection**

# The world is undergoing a large shift from the Cloud to the Edge

## Edge vs Cloud share forecast <sup>\*1\*2</sup>

## Growth forecast (2018→2025)



- Data created and processed at the edge today is limited, accounting for only 10% of all data
- However Edge is expected to expand rapidly by a factor of 40 due to the squared effect of "growth in total data volume" x "increase in Edge share," equivalent to a CAGR of 69%
- Cloud computing will be limited to a moderate expansion of 1.5x, as its share within all data will decline

\*1 Source for Edge share: What Edge Computing Means for Infrastructure and Operations Leaders, Gartner (Oct 2018).

\*2 Source for amount of data: Data Age 2025 Whitepaper, IDC (Nov 2018), accounts for all data created, captured, and replicated globally

\*3 Compound annual growth rate



# Data volume will grow rapidly in smart cities, accelerating the migration from the Cloud to the Edge

**Gartner®**

**Cloud becomes inefficient as data volume increases**

**Computer power will become distributed through Edge processing**

**Smart city developments will accelerate Edge computing**

ANDRESSEN  
HOROWITZ



Peter Levine  
(General Partner)

**Data explosion associated with IoT will cause the end of Cloud computing**

**The role the Cloud will play is limited in the future**

**Machine learning will be pushed to the Edge, whilst the Cloud will store data**

# We have developed and provide six smart city-related services

People Flow, Crime Prevention



Parking and Mobility



3D City Maps



Signage Advertisements



WFH Security



Fashion Analysis



# People flow and crime prevention services are essential for smart cities

## Face recognition for security and lost child detection

The diagram illustrates a face recognition system. On the left, a person's face is overlaid with a green wireframe mesh. Below this, a monitor displays a photo of the same person with the text "NEURAL POCKET Face-Track card". To the right, a person is shown holding a smartphone. Text above the phone reads "スマートフォンの写真から迷い子さがし" (Search for lost children from smartphone photos). A central monitor displays "人物データ登録" (Person data registration) and "人物データ登録" (Person data registration). Below the monitor, a red box labeled "人物検知" (Person detection) points to a smartphone icon labeled "AI通報" (AI reporting).

## Measurement of people flow in outdoor public spaces

The diagram shows a street scene with red rectangular markers indicating pedestrian flow. Below the scene is a bar chart titled "Average number of pedestrians per hour". The x-axis represents hours from 0 to 23, and the y-axis represents the number of pedestrians from 0 to 4000. A red dashed horizontal line is drawn at approximately 2000 pedestrians per hour.

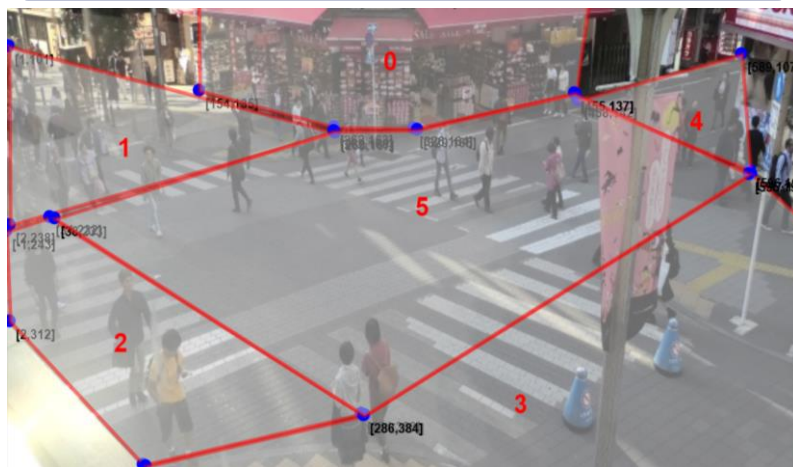
Hour	Average number of pedestrians per hour
0	1000
1	200
2	300
3	400
4	500
5	600
6	700
7	1500
8	2500
9	3000
10	3200
11	3300
12	3400
13	3500
14	3600
15	3700
16	3800
17	3900
18	3800
19	3500
20	3000
21	2500
22	2000
23	1500

## Identification of people flow with temperature detection



People flow detection is the most basic technology in urban smart cities and is used across all services

## Monocular camera for people flow and depth detection (patented)



## Human flow and density detection in large facilities

A dashboard for human flow and density detection in large facilities. It includes a top bar with "ソーシャルディスタンス検知" (Social distance detection), "Home", "ICS", and "Config", and a counter "3132-6888". The main area is divided into four panels: "カメラ1" (Camera 1), "カメラ2" (Camera 2), "カメラ3" (Camera 3), and "カメラ4" (Camera 4), each showing a different camera view. To the right is a "ソーシャルディスタンス検知マップ" (Social distance detection map) showing a floor plan with red dots indicating detected people. At the bottom right is a "人流計画グラフ" (People flow plan graph) showing a bar chart of pedestrian flow over time, with the x-axis labeled from 15 to 0.



# Parking and mobility services are universal across countries

## Real-time occupancy detection using AI cameras



Commercial parking SMART Isesaki operated by Tokyo Tatemono (left: daytime, right: nighttime)



Logistics facilities managed by Prologis

## Parking management system screen

**Smart Parking** | Parking status: NP Parking | Area Setting: LIVE | Facility Registration: NP Parking | User: User A | Date: 18:23 Apr 23rd, 2020

**Parking area information**

**Area analysis summary**

Area selection: Site A, Site B, Site C, Site D, Site E, Site F

Site	Availability	Total spaces
Site A	~100% Full	24
Site B	~70% Congested	120
Site C	~50% Available	130
Site D	~30% Open	80
Site E	~30% Open	110
Site F	~30% Open	70

**Entry/ Exit analysis summary**

Area selection: Site A, Site B, Site C, Site D, Site E, Site F

Site	Queue length
Site A	23
Site B	17
Site C	10
Site D	3
Site E	1
Site F	2

**Select period**  
Date: Apr 23rd, 2020

**Exit/ Entry report**  
Parking status per site

Area selection: Site A, Site B, Site C, Site D, Site E, Site F

**Entry/ Exit queue status (average queue length)**

Area selection: Site A, Site B, Site C, Site D, Site E, Site F

Proprietary parking management system software

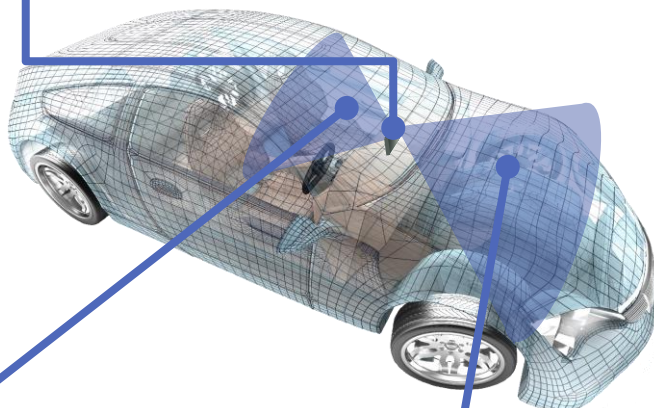
## Automatic generation of license plate learning data through computer graphics

Camera angle 	Long distance 	Motion blur 
Dirt 	Mud spatter 	Block noise 
Vehicle shadow 	Color fade 	Combination of all 

# 3D city mapping services accelerate mobility services



Collects anonymized data from 100,000+ users on a daily basis, to then be provided to customers

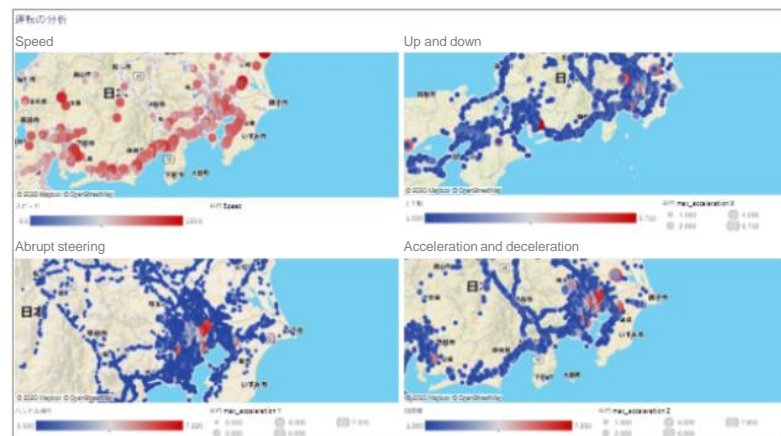
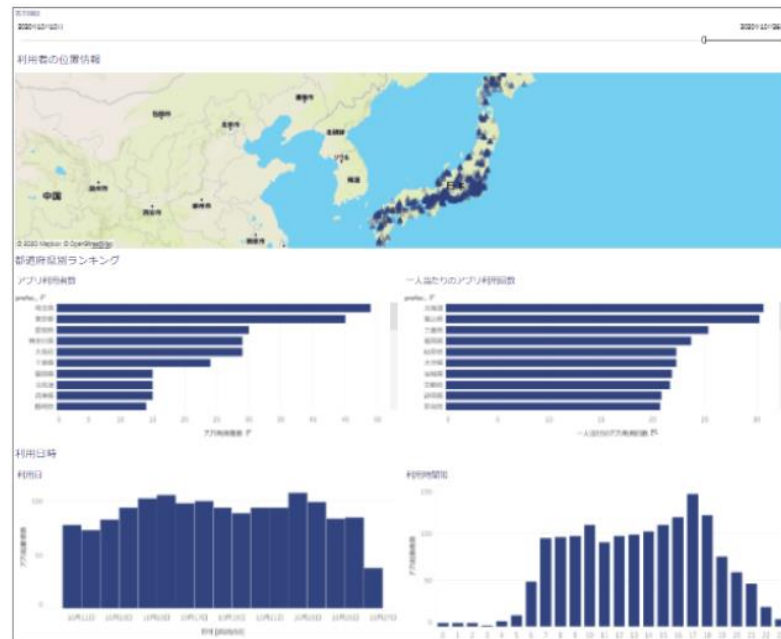


### Sensors built into smartphone

- GPS (Latitude and longitude)
- Speed
- Acceleration:
  - X-axis: Depressions and holes in the road
  - Y-axis: Sudden steering
  - Z-axis: Sudden acceleration and braking
- Altitude
- Slopes

### AI analysis through external camera info <sup>1)</sup>

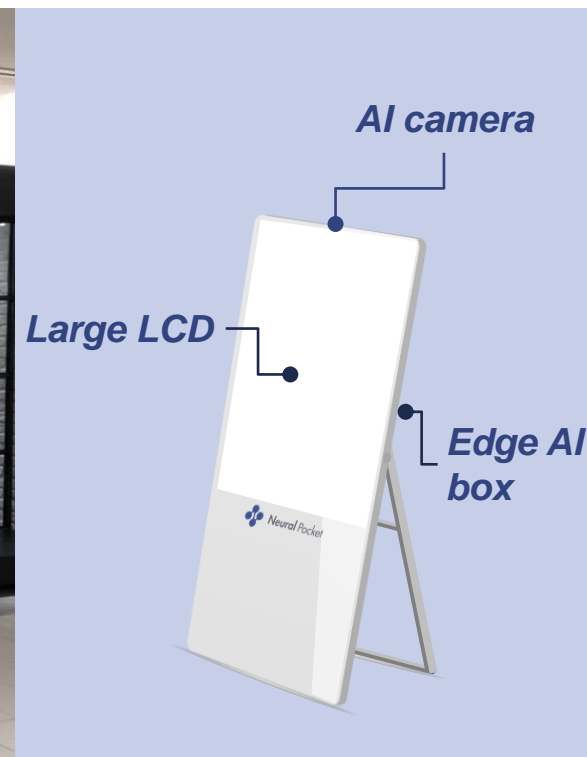
- **Information on surrounding objects :** Cars/trucks/buses (license plates, colors, distances, size), bicycles, motorcycles, traffic lights, signs, pedestrians, railroad crossings, parking lots, parking prices, gasoline prices
- **Road information:** Missing traffic lines, road widths, and other falling objects
- **Weather information:** Wiper behavior and raindrops



1: Includes functions which are not yet implemented



# Our AI signage connects real advertisements to the Internet



## Original advertising and content management system (CMS)



## Guest traffic analysis conducted within signage



Edge computing enables automatic data collection w/o obtaining personal information



# RemoDesk ensures safety and security for WFH operations

## Utilize built-in PC camera

Built-in camera



## Utilize external camera

External camera



## Remote monitoring to ensure WFH governance

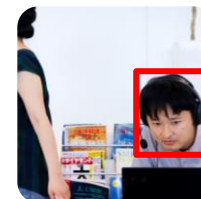


## Examples of detection items

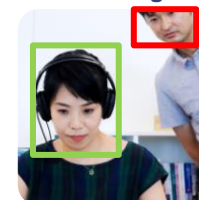
Absence



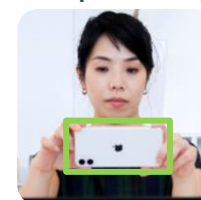
Spoofing



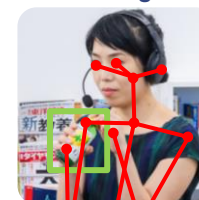
Peeking



Smart phone usage



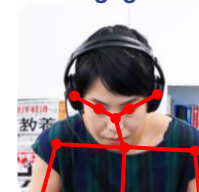
Eating



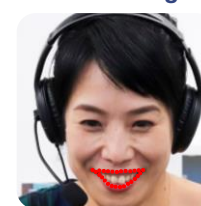
Raising hand



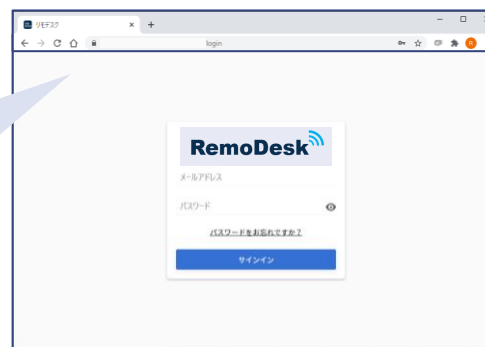
Concentrated, engaged



Smile vs fatigue

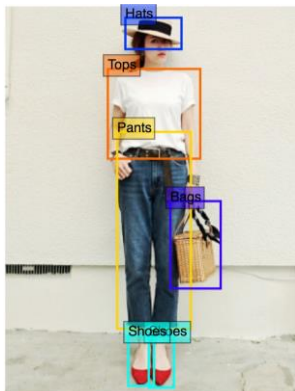


- By simply **logging into the link** from a web browser, the user's **PC's camera access is obtained**, and the AI detection is operated at the **edge within the PC** utilizing the user's PC CPU, **maintaining user privacy**.
- No footage shared outside of PC



# Fashion analysis enables product planning, EC marketing, and O2O\*

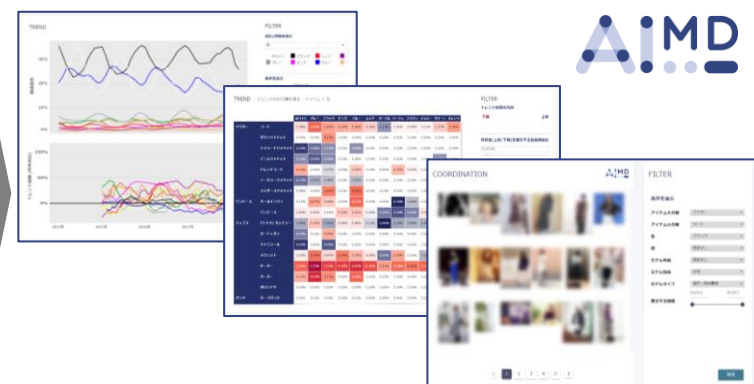
## Item detection from social media



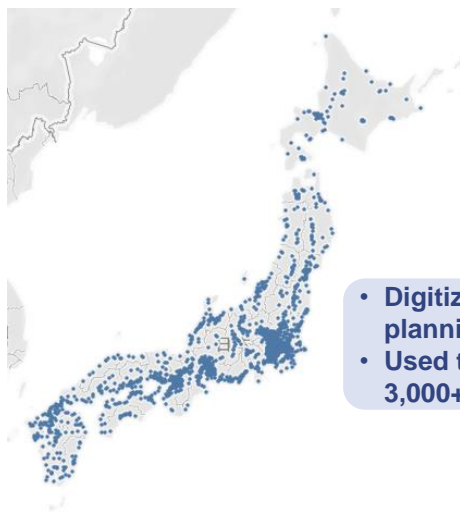
## Automatic classification of detected items

モデルプロフィール	アイテム分類	色彩分類
コレクションから一般消費者までのカテゴリ分類	<b>トップス</b> シャツ フラワス 肌出しシャツ セーター パーカー Tシャツ/カットソー スウェット カーディガン タンクトップ キャミソール <b>アウター</b> デニムジャケット ノーカラージャケット デニムジャケット ライダースジャケット ブルゾン タウガン コート レンタコート <b>ボトムス</b> デニムパンツ カーゴパンツ ムギパン スラックス <b>ワンピース/スカート</b> スカート ワンピース オールインワン	ホワイト ブラック グレー ブラウン ベージュ グリーン ブルー パープル アイボリー ピンク レッド オレンジ
10代 20代 30代 40代以上 年齢区分		<b>模様分類</b> 無地 ボーダー ドット ストライプ チェック 花柄

## Trends over seasons and years



## Contributions across the country



- Digitizing apparel product planning
- Used to plan products for 3,000+ stores nationwide

## Winner of Deep Learning Business Award

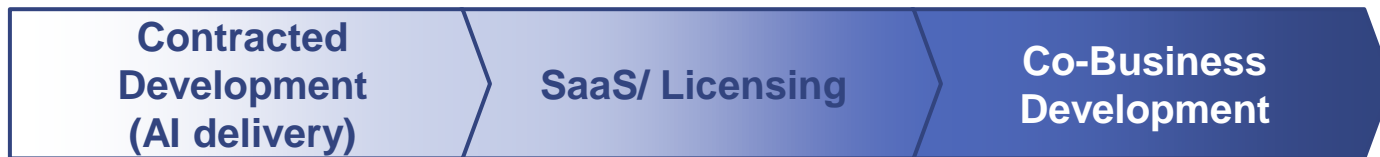


Awarded for contribution to the reduction of incinerated clothing waste and improvement of gross profit margins at apparel co. (contribution to ESG)

AI MD engine also used to analyze consumer personas (business vs casual) in public spaces

\* An abbreviation for Online to Offline, a marketing strategy that links online and offline to promote purchasing activities.

# Our business model



## Business model description

- Develop solutions based on customer requirements
  - Submission of software, including intellectual property
  - Need to continuously propose and receive orders for new projects
- Providing solutions through a subscription model
  - Number of new subscribers and retention rate are measures of business growth
- Share sales by developing medium-to-long term, large-scale businesses jointly with multiple companies
  - Leverage the strengths of each company's different assets to create synergies

## Our services



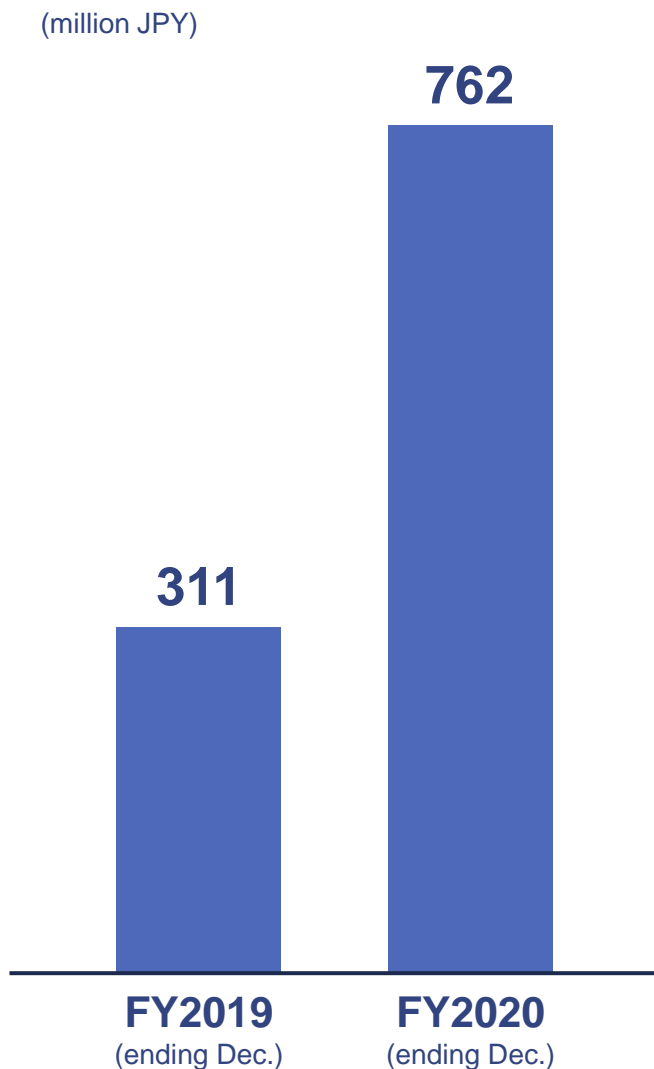
## Value provided by AI companies

As a result, the durability and scale of sales



- Business overview
- **FY2020 performance**
- Business highlights
- FY2021 forecast

## Net sales grew by 144.9%



# 144.9% growth

Despite the rapid changes in social conditions caused by the new coronavirus, the company has achieved sales growth largely in line with its business plan, thanks to its strong customer base and diversification of services.

# The impact of Covid-19 has varied across services, but the overall impact is balanced

## Impact of Covid-19 across businesses in FY2020



**Signage Advertisement**



**3D City Maps**



**People Flow**



**WFH Security**



**Parking/ Mobility**



**Fashion Analysis**



Impact of refraining from going out and shortening of business hours.

As companies respond to the rapid shift to EC, the need for EC-related services is increasing.

With the spread of telecommuting, the way we work is being reconsidered.



# FY2020 ending Dec. Statement of Income

(million JPY)	<u>FY2019 ended Dec.</u>	<u>FY2020 ended Dec.</u>	<u>Increase (amount)</u>	<u>Increase (percentage)</u>
<b>Net sales</b>	<b>311</b>	<b>762</b>	<b>+451</b>	<b>+144.9%</b>
<b>Operating profit</b> <small>% of net sales</small>	<b>-133</b>	<b>170</b> <small>22.4%</small>	<b>+303</b>	<b>Turned profitable</b>
<b>Ordinary profit</b> <small>% of net sales</small>	<b>-139</b>	<b>148</b> <small>19.4%</small>	<b>+287</b>	<b>Turned profitable</b>
<b>Net profit</b> <small>% of net sales</small>	<b>-139</b>	<b>147</b> <small>19.3%</small>	<b>+286</b>	<b>Turned profitable</b>

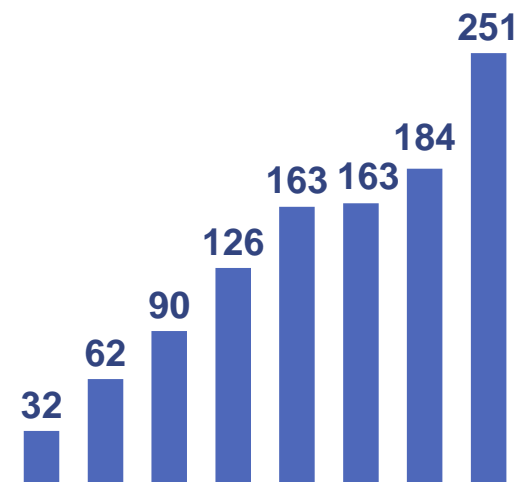
## FY2020 ending Dec. difference from forecast

(million JPY)	<b>FY2020 ended Dec. forecast</b>	<b>FY2020 ended Dec. results</b>	<b>Difference (amount)</b>	<b>Difference (percentage)</b>
<b>Net sales</b>	<b>776</b>	<b>762</b>	<b>-13</b>	<b>-1.7%</b>
<b>Operating profit</b> <small>% of net sales</small>	<b>165</b> <small>21.3%</small>	<b>170</b> <small>22.4%</small>	<b>+5</b>	<b>+3.0%</b>
<b>Ordinary profit</b> <small>% of net sales</small>	<b>139</b> <small>17.9%</small>	<b>148</b> <small>19.4%</small>	<b>+9</b>	<b>+6.5%</b>
<b>Net profit</b> <small>% of net sales</small>	<b>115</b> <small>14.8%</small>	<b>147</b> <small>19.3%</small>	<b>+32</b>	<b>+27.8%</b>

# FY2020 ending Dec. quarterly results

## Net Sales

(millions JPY)



Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

**FY2019**

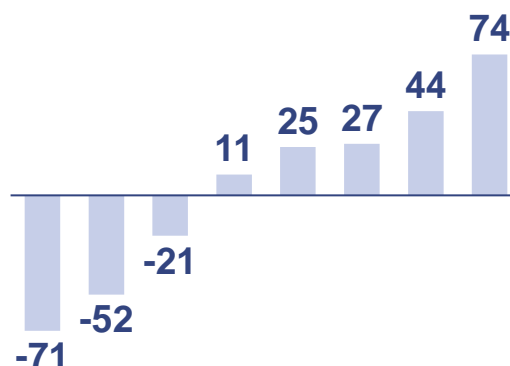
(ended Dec 2019)

**FY2020**

(ended Dec 2020)

## Operating Profit

(millions JPY)



Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

**FY2019**

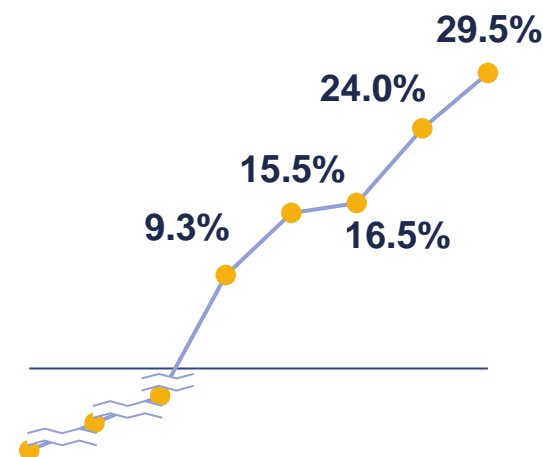
(ended Dec 2019)

**FY2020**

(ended Dec 2020)

## Operating Profit Margin

(percentage)



Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

**FY2019**

(ended Dec 2019)

**FY2020**

(ended Dec 2020)

**8 consecutive quarters of net sales and operating income growth**

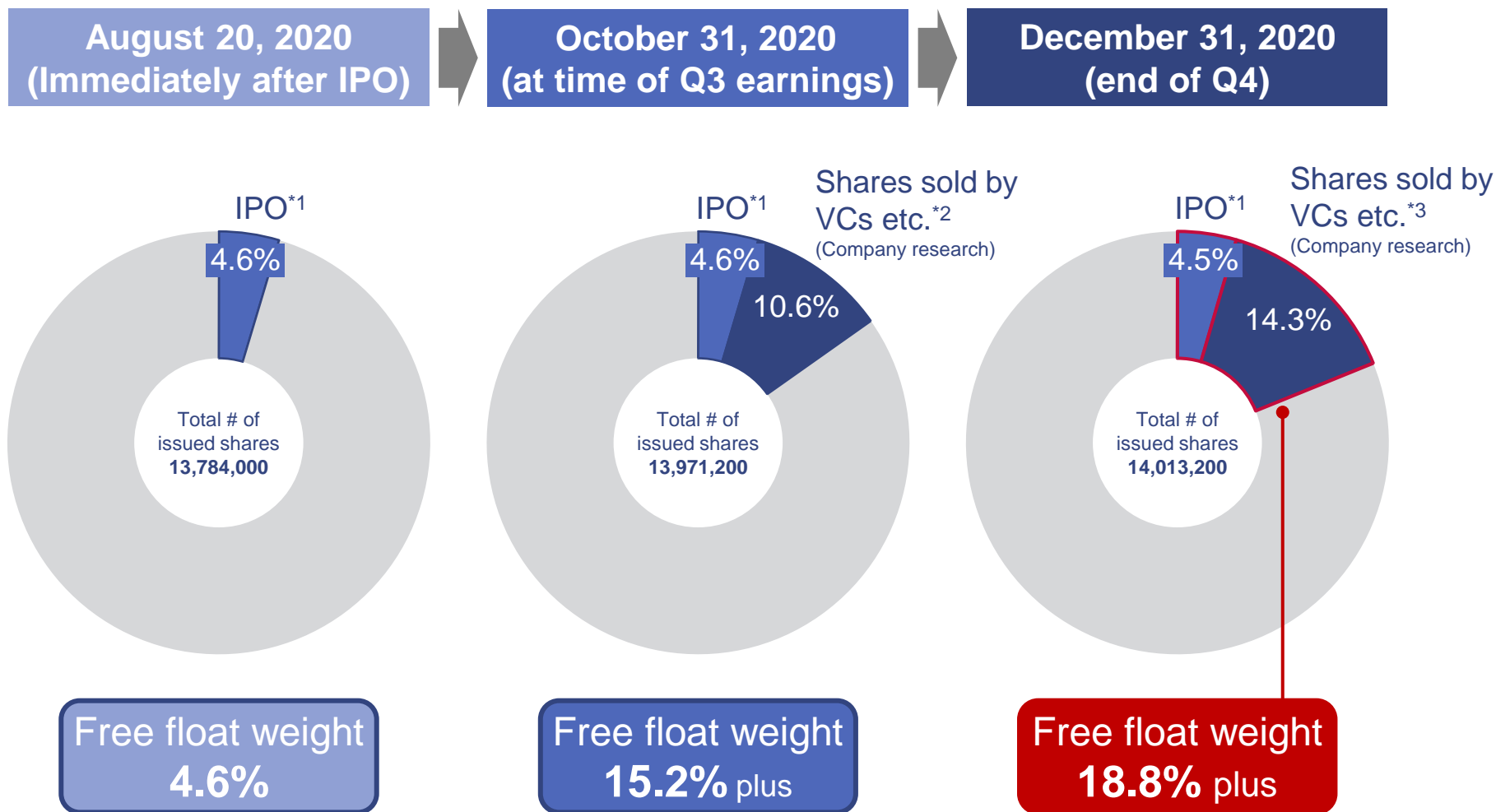
# FY2020 ending Dec. Balance Sheet

(million JPY)	<u>FY2019 ended Dec.</u>	<u>FY2020 ended Dec.</u>	<u>Increase (amount)</u>
<b>Total current assets</b>	<b>919</b>	<b>1,673</b>	<b>+753</b>
Cash and cash deposits	825	1,424	+599
<b>Total non-current assets</b>	<b>137</b>	<b>247</b>	<b>+110</b>
<b>Total assets</b>	<b>1,056</b>	<b>1,920</b>	<b>+864</b>
<b>Total liabilities</b>	<b>431</b>	<b>714</b>	<b>+283</b>
Interest bearing debt*1	378	564	+186
<b>Total net assets</b>	<b>625</b>	<b>1,206</b>	<b>+580</b>

## FY2020 ending Dec. Cash Flows

(million JPY)	<u>FY2019 ended Dec.</u>	<u>FY2020 ended Dec.</u>
<b>Cash flows from operating activities</b>	△198	138
<b>Cash flows from investing activities</b>	△46	△142
<b>Cash flows from financing activities</b>	860	603
<b>Increase of cash and cash equivalents</b>	615	599
<b>Cash and cash equivalents at the end of period</b>	825	1,424

# Increase in free float weight



\*1 Total 415,000 shares offered and 215,800 shares sold (including over-allotment) as a percentage of the 13,784,000 shares outstanding as of August 20.

\*2 Company has confirmed 1,488,600 shares sold by major shareholders as of Oct 31, 2020. \*3 Company has confirmed 2,009,300 shares sold by major shareholders as of Dec 31, 2020.



- Business overview
- FY2020 performance
- **Business highlights**
- FY2021 forecast

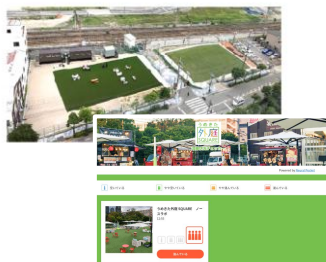


# Urban development and smart city activities

## Japan Domestic

### Osaka City Umekita 2nd Phase Development

People flow, attributes, and specific behavior detection in outdoor spaces



**Tawara-motocho, Nara Pref.**  
Tourism promotion through visualization of usage of tourism facilities



**Muroran City**  
Regional revitalization through AI-based urban planning and tourism



Local development and regional revitalization through ICT smart city initiative

Promoting smart city through city block/ mobility interlinking through edge AI

Automation and optimization of boarding surveys on public buses

Smart compact city through AI-based security and monitoring system

Congestion visualization in government operated large venue halls

Urban redevelopment through transportation visualization

Smart building and smart city development in central Tokyo

**Kamakura City**  
Preventing over-tourism and overcrowding by visualizing congestion and traffic



Kamakura



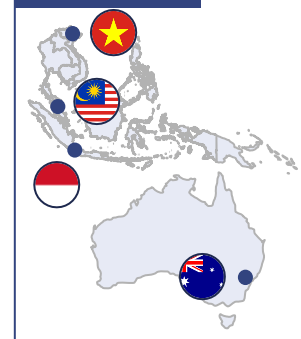
**Anjo City**  
Visualization of road info on 3D city maps



Ministry of Land, Infrastructure and Transport and Tourism

Optimization of facility operations at roadside station by identifying parking space availability and analyzing vehicle data

## Overseas





# Public Sector: Participating in "Japan 3D City Model" led by the Ministry of Land, Infrastructure, Transport and Tourism



## Map the New World.

Until now, information on cities has been divided among different sectors, and there has been a limit to the information that can be obtained. However, in the future, the same approach will not be enough to keep up with the speed of change. Sustainable urban development, disaster preparedness, and pandemic preparedness.

In order to solve the problems that abound in society and maximize the potential of cities we need to integrate and visualize urban information in a cross-disciplinary manner. It is necessary to promote the digital transformation of urban management.

The construction of a world-class 3D city model, which will serve as the foundation for this transformation, is now underway. In 2021, under the leadership of the Ministry of Land, Infrastructure, Transport and Tourism, the construction of a world-class 3D city model will finally be realized.

Layers of information on urban activities can be layered on top of the virtual urban space. The scalability of the model will make it a platform for the accumulation of knowledge from all fields, both public and private. Furthermore, this information and knowledge will be made available as open data, and can be used by anyone.

The 3D city model will be the foundation for the coming Society 5.0. By integrating and visualizing urban information, it will become more than just numerical information. It will become meaningful information for the future society.

I believe that this is a big step toward a sustainable and livable society for everyone.

Map the New World.

This experiment will create a new world.



## People and traffic flow monitoring by AI analysis of images collected from existing cameras



In order to implement the human flow analysis technology in society, it is considered to be effective to use the existing cameras installed in the city for crime prevention purposes, etc. from the viewpoint of cost, however, the existing cameras do not always provide a suitable sensing environment for human flow analysis due to the angle of view and other issues. In this verification experiment, we will conduct a technical verification to see if it is possible to measure the human flow in the entire area by utilizing the video analysis technology based on AI, even if the existing cameras in the city were installed for other purposes.

Company name: Neural Pocket Corporation

Location: Around Mikawa-Anjo Station and Shin-Anjo Station

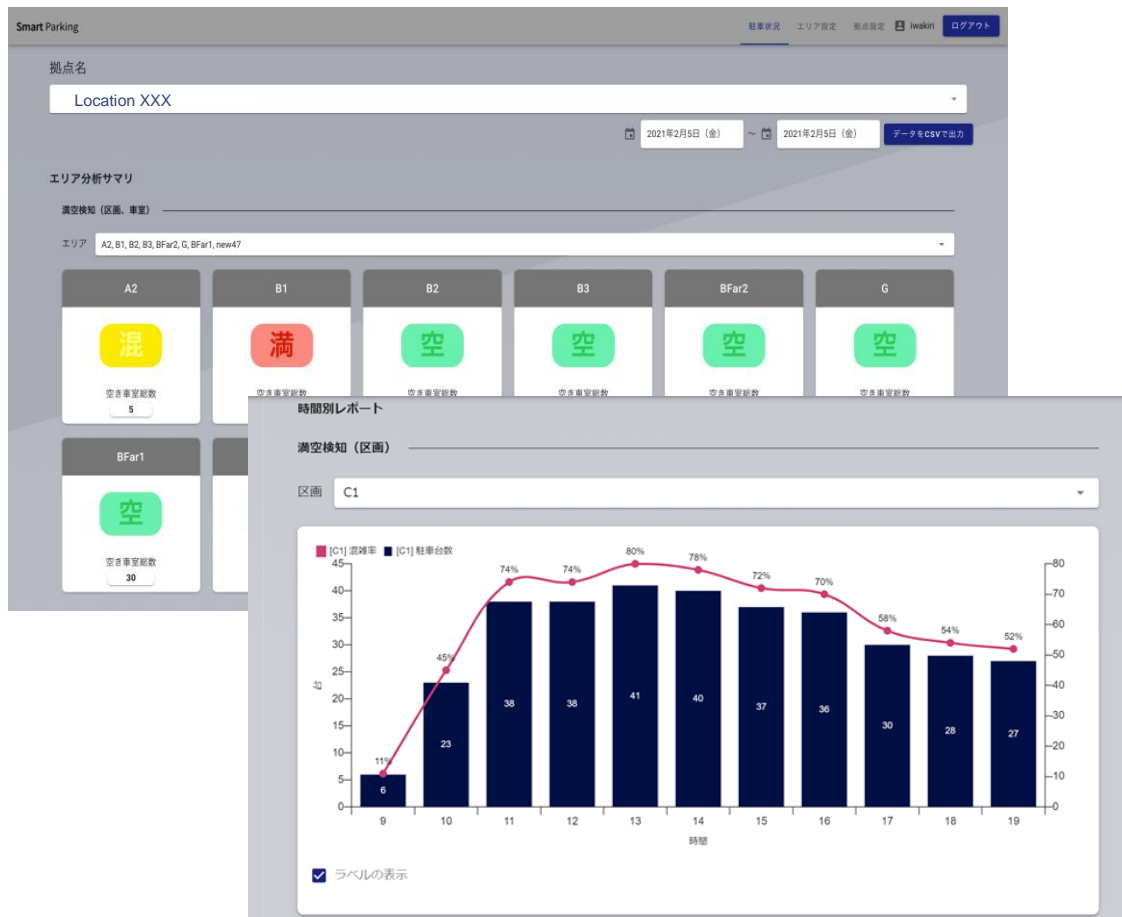


# Private Sector: Deepening collaboration with real estate developers for parking lot control solutions

## Example of initial installation



## Live visualization of parking status





# Private sector: Collaboration with major real estate developer across multiple applications for people flow analysis



## Collaboration in the area of logistics



- At the end of 2019, a demonstration was conducted at Logi-Cross Nagoya Kasadera, owned by Mitsubishi Estate
- From 2020, we are accelerating our efforts and promoting collaboration to develop AI analysis and consultation services for tenants

## Collaboration in urban development



- Collaboration in “Umekita Phase 2,” a large-scale redevelopment project in Osaka City
- Starting in 2020, collaboration has begun with the demonstration of people flow analysis in the predevelopment area, in which the Ministry of Land, Infrastructure, Transport and Tourism and other developers are participating





# RemoDesk: Launched commercial provision of WFH call center support system



<h2>Function 1 Security</h2>	Absence	Smart phone usage	Peeking	Spoofing
	Raising hand	Apology	Escalated	Concentrated
	Smiling	Fatigue	Loss of focus	Troubled
	Unengaged	Taking a break	Drinking	Eating

**Commercial introduction underway**



# Fashion Apparel: Realizing O2O\*<sup>1</sup> experiences using AI tech

## AI-based demand forecasting and product planning

AIMD



Trend/ product information

Trend/ product information

Analysis of visitors and information broadcasting in physical stores through AI signages

Apparel EC engine utilizing AI MD

The trinity  
New O2O experience

EC Recommend



Digital Signage

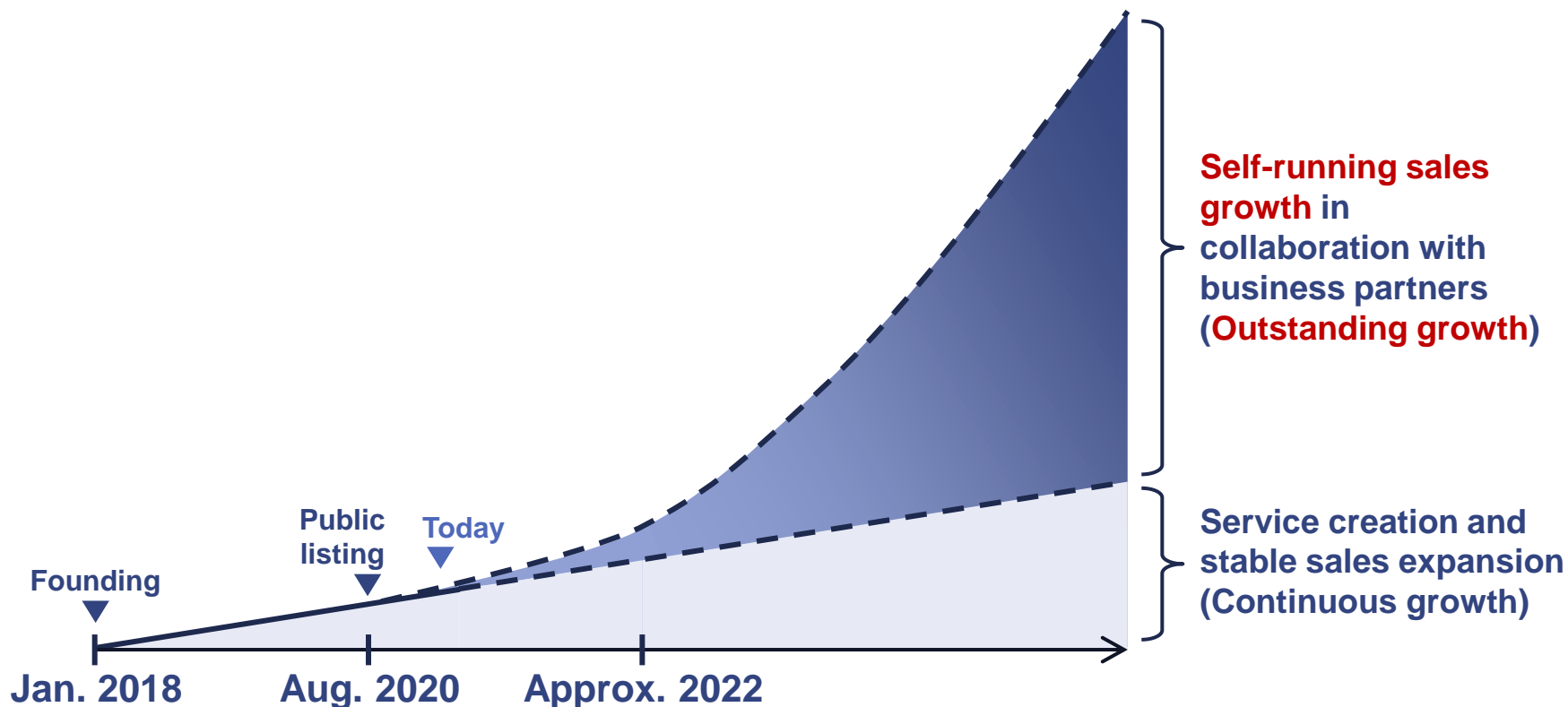


Linking consumer information across both EC and stores

\*1 An abbreviation for Online to Offline, a marketing strategy that links online and offline to promote purchasing activities.

- Business overview
- FY2020 performance
- Business highlights
- **FY2021 forecast**

# Future growth strategy (Illustration of business growth)



## Business Creation

- Build corporate platform
- Identify value proposition
- Develop services

## Deepening of Business Model

- Commercialize services
- Extend business partnerships
- Define business segments and KPIs

## Business Expansion with Scale

- Announce mid-long term management plan
- Disclose business segments and start monitoring KPIs

# FY2021 ending Dec. forecast

(million JPY)	<b>FY2020 ended Dec. results</b>	<b>FY2021 ending Dec. forecast</b>	<b>Difference (amount)</b>	<b>Difference (percentage)</b>
<b>Net sales</b>	<b>762</b>	<b>1,256</b>	<b>493</b>	<b>+64.7%</b>
<b>Operating profit</b> % of net sales	<b>170</b> 22.3%	<b>380</b> 30.3%	<b>209</b> +7.9pt	<b>+122.5%</b>
<b>Ordinary profit</b> % of net sales	<b>148</b> 19.4%	<b>370</b> 29.5%	<b>221</b> +10.1pt	<b>+149.5%</b>
<b>Net profit</b> % of net sales	<b>147</b> 19.3%	<b>280</b> 22.4%	<b>132</b> +3.0pt	<b>+90.0%</b>

**FY2020 Q4 run-rate net sales  
1,004 million JPY\*1**

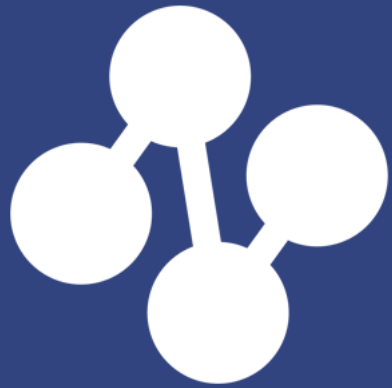
\*1 Calculated by multiplying FY2020 Q4 (Oct through Dec 2020) net sales of 251 million JPY by 4 to annualize



# Disclaimer

## **Handling of the material**

This document contains forward-looking statements. These statements are based solely on the information available at the time the statements were made. Furthermore, such statements are not guarantees of future results and are subject to risks and uncertainties. Actual results may differ materially from those projected in the future due to changes in the environment and other factors. Factors that may affect the actual results described above include, but are not limited to, domestic and international economic conditions and trends in relevant industries. We are under no obligation to update or revise any of the future information contained in these materials in the event that new information comes to light or future events occur. The information contained in these materials relating to matters other than the Neural Pocket is quoted from public information and Neural Pocket has not verified and does not guarantee the accuracy or appropriateness of such information.



**Neural Pocket**