



Financial Results Briefing Material

FY2021 Q1 (ended Mar 31st, 2021)

Neural Pocket Inc.
May 14th, 2021



- **Business Overview**
- FY2021 Q1 Business Progress
- Performance Highlights and Growth Strategy

The future we envision

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

“AI Smart City Revolution”



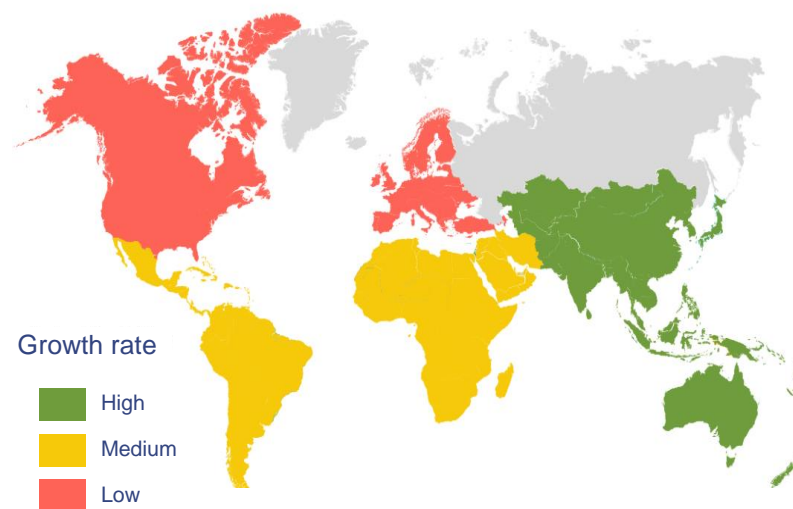
A large new Smart City market is being created

Global Smart City market size is approx. \$1-2 trillion USD

Asia is the source of growth for smart cities

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

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

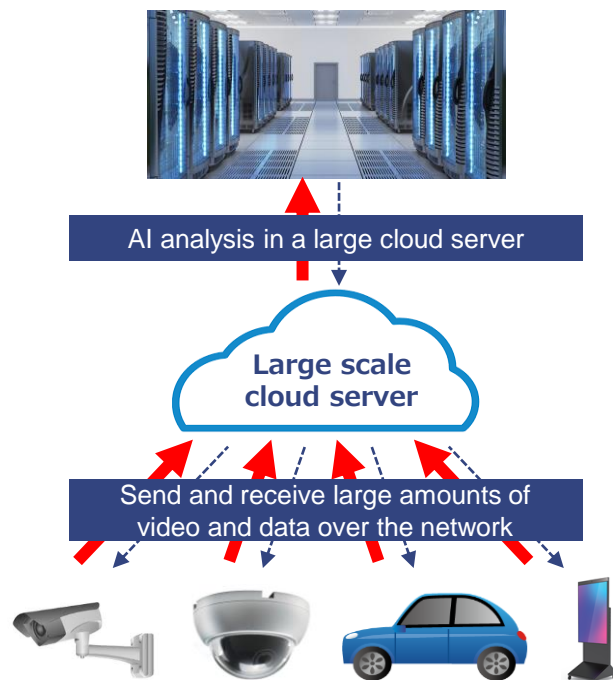


Source: Mordor Intelligence

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



Cloud AI

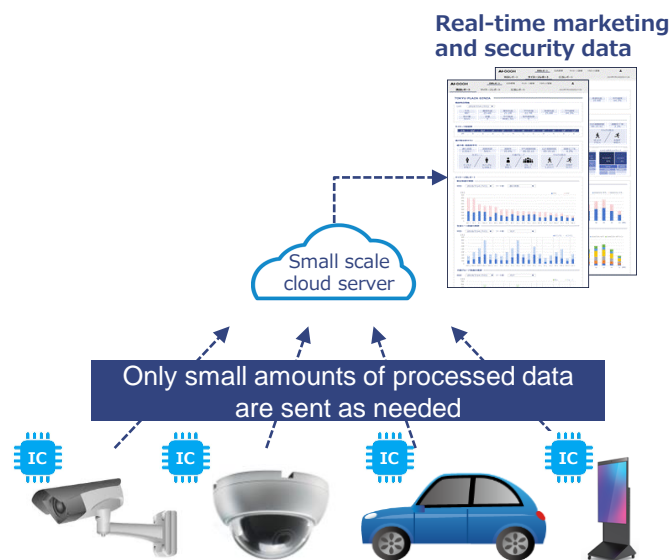
Conventional approach



Edge AI

Our approach

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



- **High costs** (Communication and maintenance)
- **High latency** (High network load)
- **High electricity consumption**

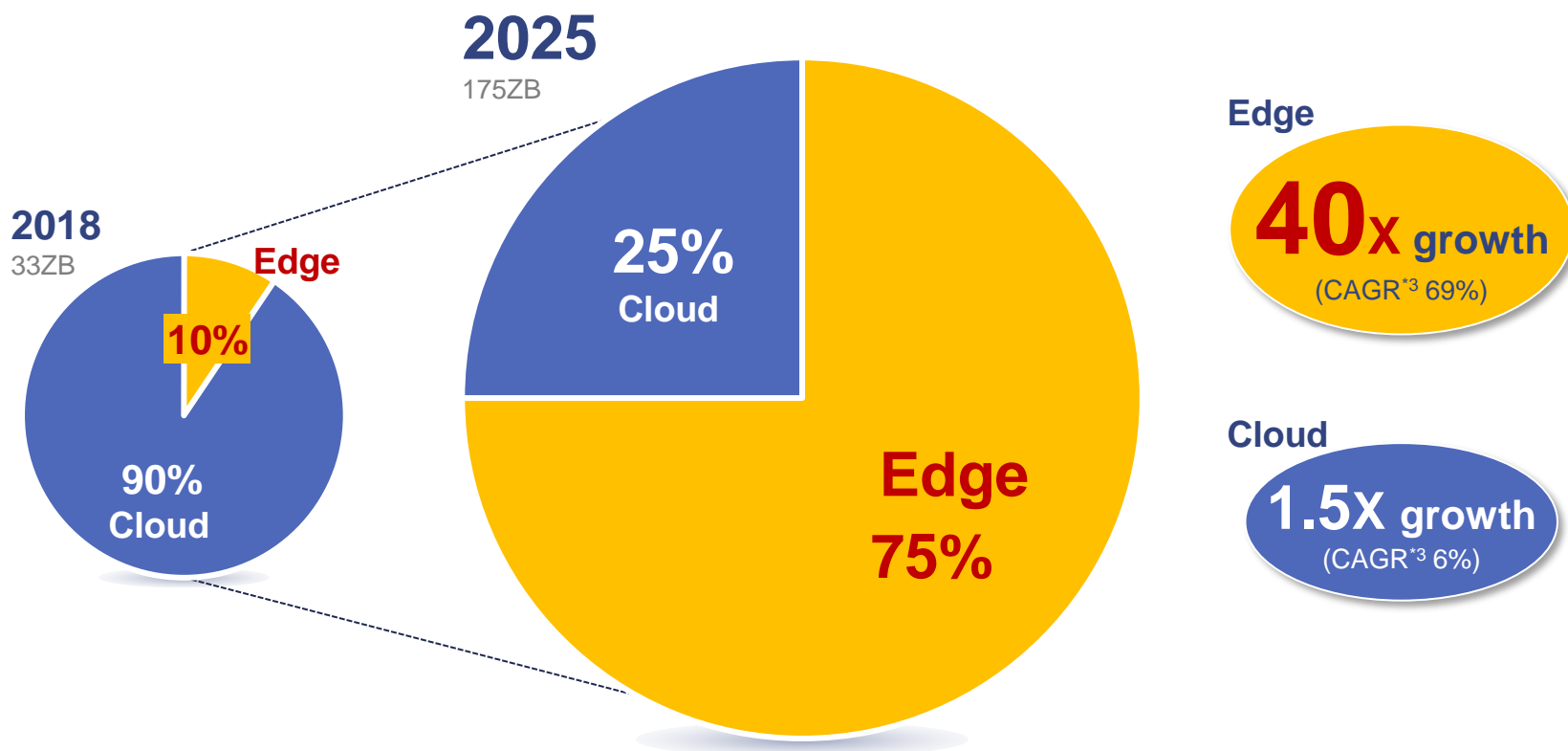
- **Low costs**
- **Low latency**
- **Green/ Low electricity consumption**

Also greatly contributes to privacy protection

A large macro trend from the Cloud to the Edge is expected

Edge vs Cloud share forecast ^{*1*2}

Growth forecast (2018→2025)



- As data volumes explode, processing data in the cloud becomes more and more inefficient
- In response, computer power is being rapidly pushed from the Cloud onto the Edge

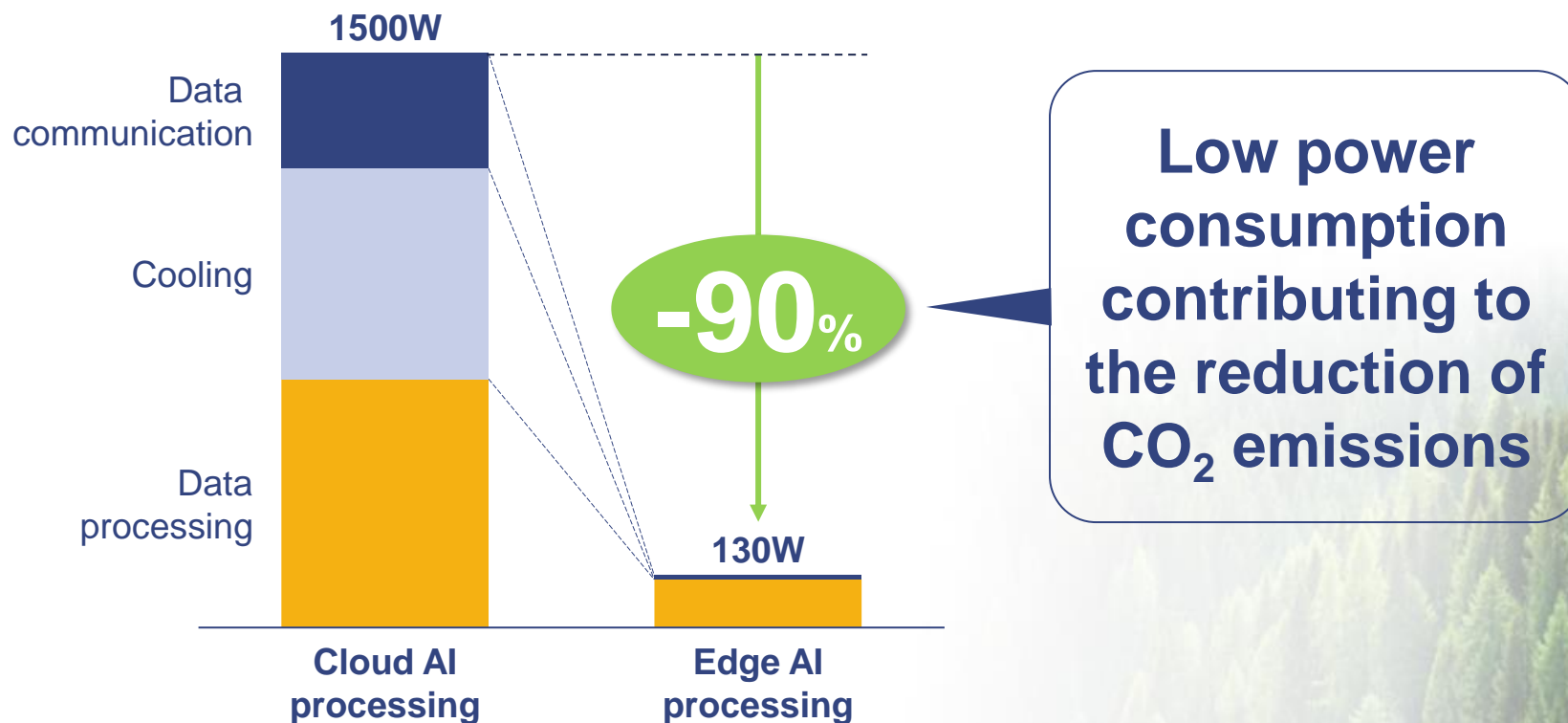
*1 Source for Edge share: What Edge Computing Means for Infrastructure and Operations Leaders, Gartner (Oct 2018).

*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`

Edge AI technology contributes to carbon neutrality and SDGs

Power consumption for AI processing per 100 cameras*1



Comparison of power consumption when AI processing (object detection) for 100 cameras is performed in a cloud vs edge system, respectively. Company research.

Cloud AI : Object detection at 4FPS on NVIDIA V100 (112 TFLOPS, 8 GPUs), parallel processing 679 cameras, which is the theoretical limit calculated assuming a 20% GPU utilization efficiency. Video data transfer rate per camera is assumed to be 450MB per hour.

Edge AI : Object detection at 4FPS with NVIDIA JetsonTX2, parallel processing 12 cameras, which is the theoretical limit calculated assuming a 20% GPU utilization efficiency. Metadata transfer per camera is assumed to be 3.6MB per hour.

Total power consumption is converted to a value per 100 cameras to compare the two methods.

We provide AI enabled services that contribute to the reduction of CO₂ emissions and the pursuit of SDGs



Awarded for contribution to the reduction of waste of clothes and improvement of gross profit margin of apparel companies (contribution to SDGs)

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

People Flow, Crime Prevention



Parking and Mobility



3D City Maps



Signage Advertisements



WFH Security



Fashion Analysis



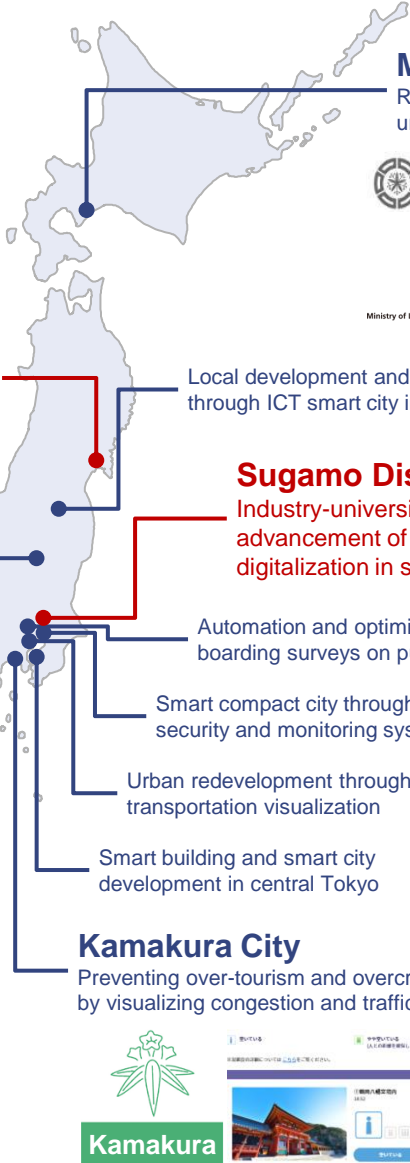
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Domestic and overseas smart city-related engagements

Domestic



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



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



Ministry of Land, Infrastructure and Transport and Tourism



Osaka City Umekita 2nd Phase Development
 Outdoor people flow, attributes, and behavior detection

New Analyzing people flow in a city center shopping arcade

Enabling smart city through city block/ mobility interlinking with edge AI

Local development and regional revitalization through ICT smart city initiative

Sugamo District
 Industry-university collaboration for the advancement of education and digitalization in surrounding area



Automation and optimization of boarding surveys on public buses

Smart compact city through AI-based security and monitoring system

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



Congestion visualization in government operated large venue halls

Anjo City
 Visualization of live road info onto 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



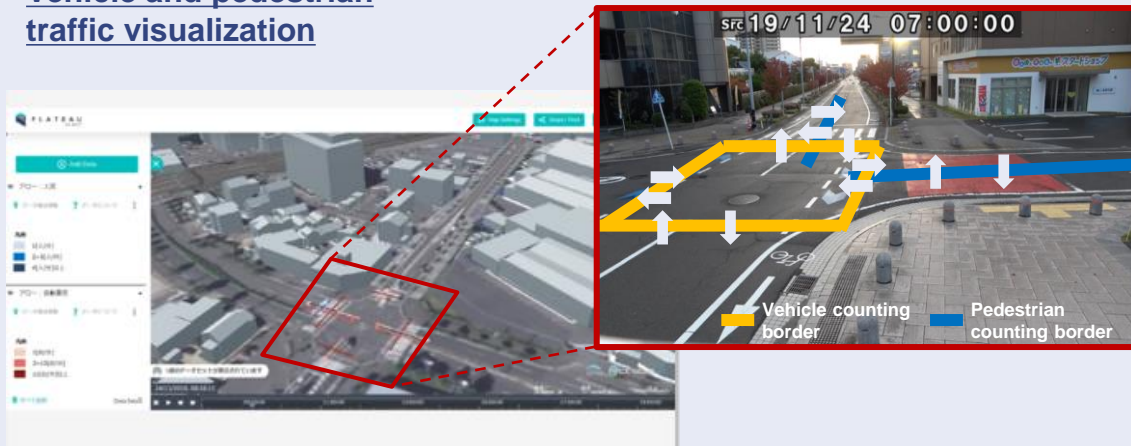
Joined 3D city model project promoted by the Ministry of LITT*1



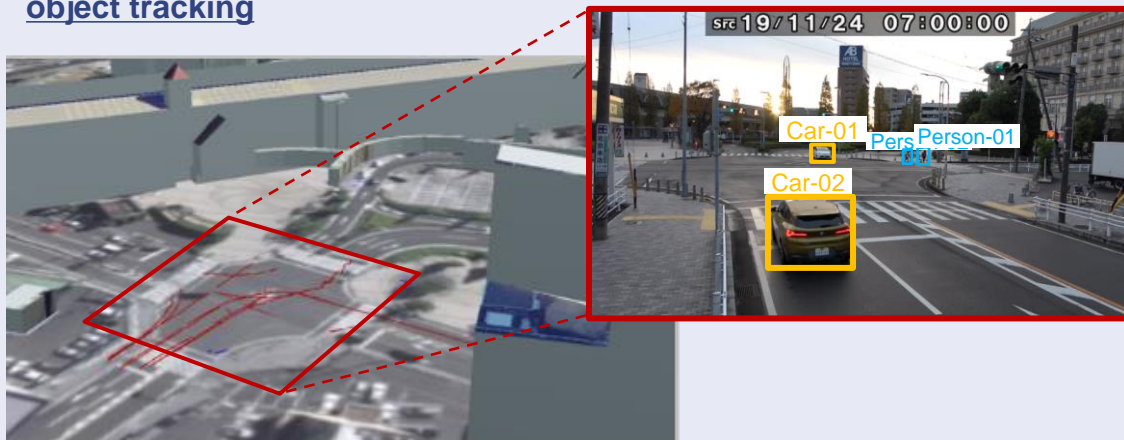
PLATEAU
by MLIT

- Joined 3D city model project "PLATEAU" promoted by the Ministry of LITT*1 as a project partner
- Visualization of urban activities in Anjo City
- Analysis of camera footage to display people flow and vehicle traffic within live 3D city model

Vehicle and pedestrian traffic visualization



Map position plotting via object tracking



*1 Ministry of Land, Infrastructure, Transport and Tourism

Collaboration agreement with Taisho University



- Signed **industry-university collaboration agreement** with Taisho University
- Promote **data utilization** and **digitization** in university education and research activities
- In addition to campus smartification, promoting digital transformation across Sugamo district, surrounding the campus
- "Saizeriya (large restaurant chain)" and "Mitaka City" also joined as third-party partners to pursue collaboration

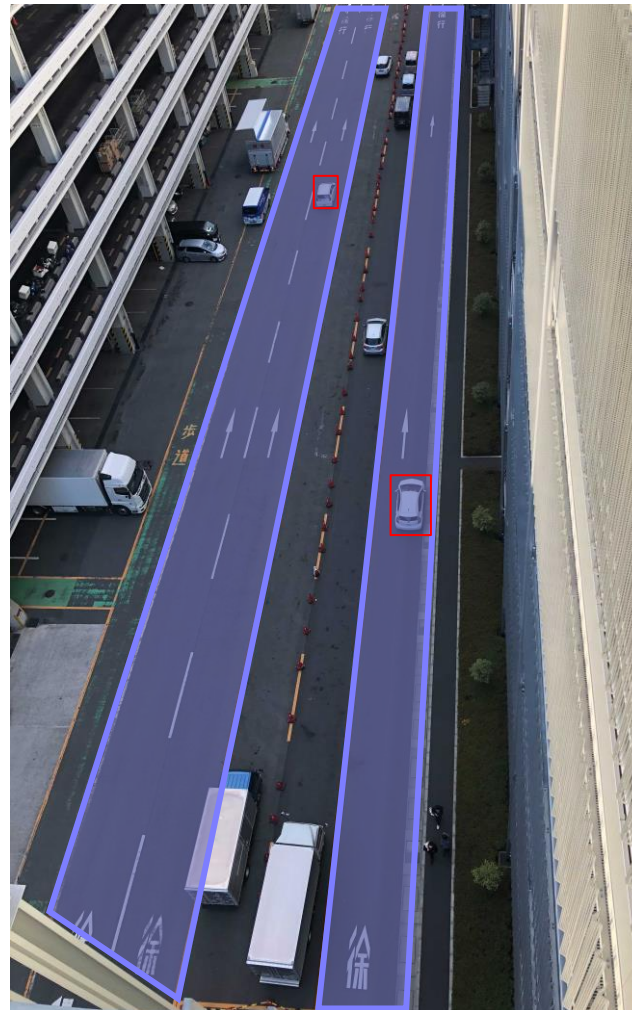
Installation of "Digi-Park" to Tokyo Ryutsu Center



A  **MITSUBISHI ESTATE** Group Company

- Installed "Digi-Park," an AI parking and vehicle management solution, in Tokyo Ryutsu Center's Logistics Center^{*1}
- Visualization of on-site traffic through camera images enabling efficient facility operations

On-site traffic detection



*1 東京都大田区平和島にある東京流通センターの運営する物流センター

Optimizing training data collection and AI detection accuracy with CG technology



【Conventional approach】

Collect training data one by one

Picture #1



Picture #2



Picture #3



Picture #4



Detection accuracy
80% level*1

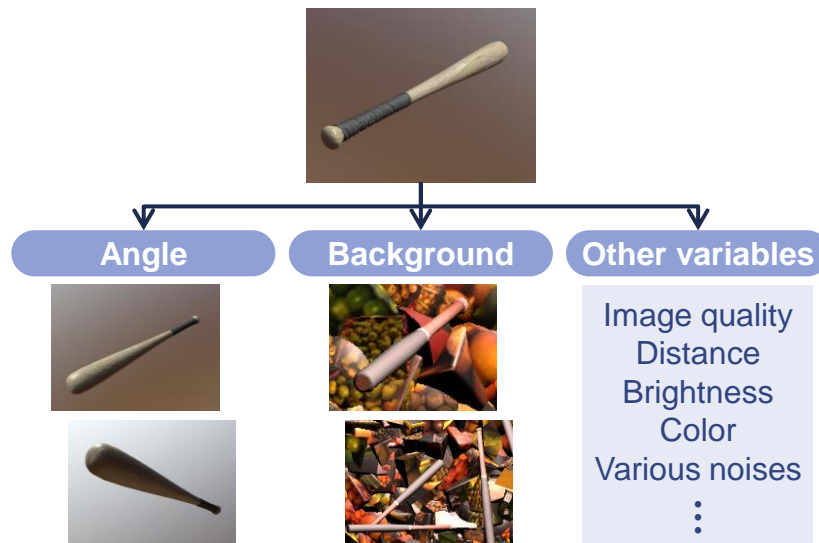
Dramatic accuracy improvement

95% reduction in required time

**Time to collect training data*

【Approach utilizing CG (Computer Graphics)】

Generating countless training data from a single CG



Detection accuracy
100% level*1

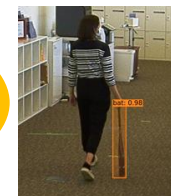


Image of bat detection

*1 See examples published within <https://blogs.unity3d.com/2021/04/09/boosting-computer-vision-performance-with-synthetic-data/>

Compliance with AI development and data security policies

Compliance with government issued guidelines for data acquisition and AI development

Certified information security management system in place to manage and protect data



IoT Promotion Consortium
 Ministry of Internal Affairs and Communications
 Ministry of Economy, Trade and Industry

**カメラ画像利活用
ガイドブック**

(Camera Image Utilization Guidebook)

平成 30 年 3 月
ver2.0

IoT 推進コンソーシアム
 総務省
 経済産業省

Privacy Mark Japan Industrial Standards (JIS)

プライバシーマーク
登録証

たいせつにします プライバシー

- 登録番号 第17003558(01)号
- 事業所の名称及び所在地
ニューラルポケット株式会社
東京都千代田区有楽町1丁目1番2号
- プライバシーマーク付与の有効期間
2019年3月5日～2021年3月4日
- プライバシーマーク付与通知について審査を行ったプライバシーマーク認定審査機関
一般社団法人日本情報システム・ユーザー協会

一般財団法人日本情報経済社会推進協会

JIPDEC

Certified since Mar 2019

ISO/ISMS Certification International standard

bsi.

Certificate of Registration

情報セキュリティマネジメントシステム
 ニューラルポケット株式会社
 〒100-0006 東京都千代田区有楽町一丁目1番2号 東京駅前ビルディング5F 505号室

上記組織の登録番号は 16140155 であり、その有効期限は 2021年3月4日～2024年3月4日までです。

登録標準規格
 ISO/IEC 27001:2017 情報セキュリティマネジメントシステム 要求事項

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 ISO/IEC 27001:2017 情報セキュリティマネジメントシステム 要求事項

2021年5月20日 発行 有効期限 2024年3月4日

For and on behalf of BSI:

代表取締役社長 坂本 真哉

国際規格登録番号: IS 740155
 BSI ロケーション番号: 004795423-000

国際規格登録番号: IS 740155
 発行日: 2021-05-20
 有効期限: 2024-03-04

...making excellence a habit™

International certification newly acquired in May 2021

Status of Patent Acquisition

**Domestic
Granted**

Cumulative

12 patents

2 patents newly
granted in Q1 2021
(As of Mar. 2021)

**Domestic
Pending**

Cumulative

10 patents

(As of Mar. 2021)

**International
Pending**

In preparation

4 patents

(As of Mar. 2021)

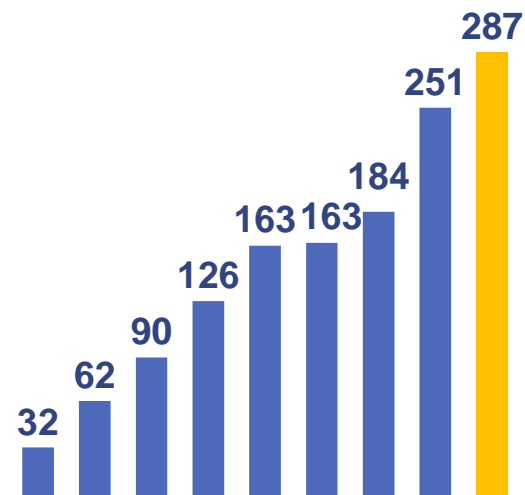


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FY2021 Q1 ended Mar. quarterly trajectory

Net Sales

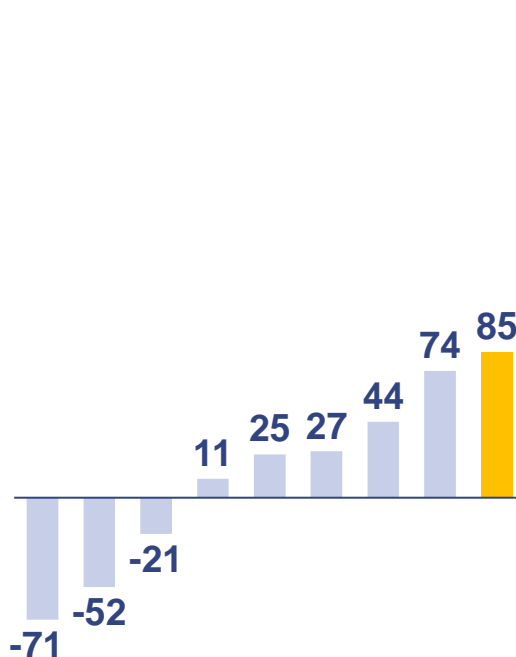
(百万円)



Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1
FY2019 (ended Dec. 2019) **FY2020** (ended Dec. 2020) **FY2021** (ending Dec. 2021)

Operating Profit

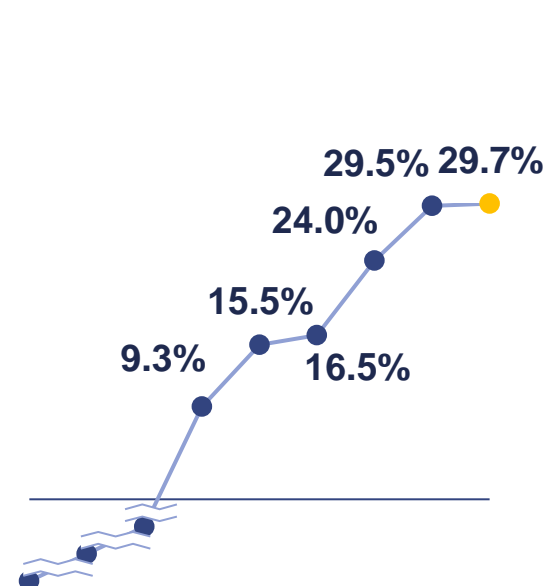
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Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1
FY2019 (ended Dec. 2019) **FY2020** (ended Dec. 2020) **FY2021** (ending Dec. 2021)

Operating Profit Margin

(%)



Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1
FY2019 (ended Dec. 2019) **FY2020** (ended Dec. 2020) **FY2021** (ending Dec. 2021)

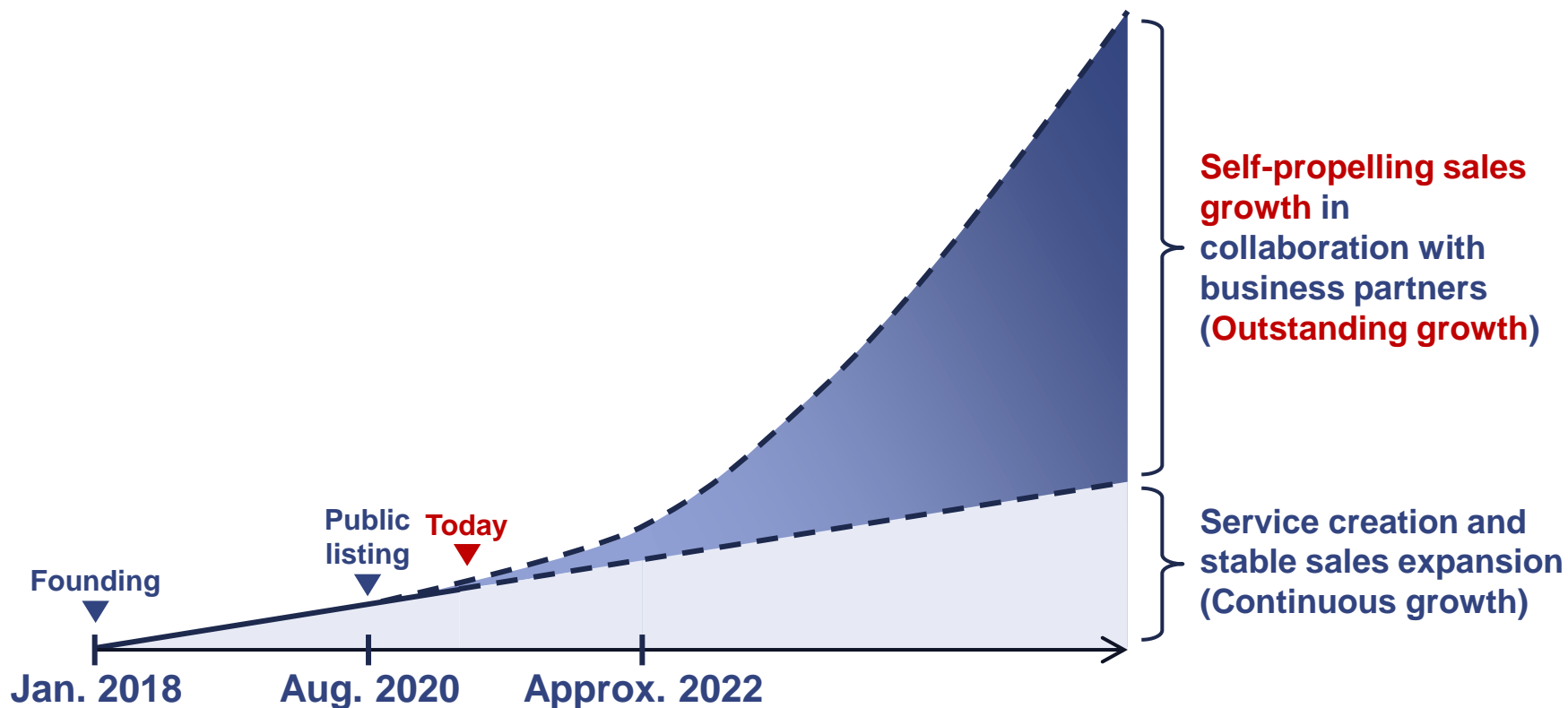
FY2021 Q1 ended Mar. Statement of Income

(million JPY)	<u>FY2020 Q1 ended Mar.</u>	<u>FY2021 Q1 ended Mar.</u>	<u>Increase (amount)</u>	<u>Increase (percentage)</u>
Net sales	163	287	+124	+76.4%
Operating profit <i>% of net sales</i>	25 <i>15.5%</i>	85 <i>29.7%</i>	+60	+237.4%
Ordinary profit <i>% of net sales</i>	24 <i>14.9%</i>	84 <i>29.3%</i>	+59	+246.2%
Net profit <i>% of net sales</i>	24 <i>14.9%</i>	83 <i>29.1%</i>	+59	+244.8%

FY2021 Q1 ended Mar. Balance Sheet

(million JPY)	FY2020 Q4 ended Dec.	FY2021 Q1 ended Mar.	Increase (amount)
Total current assets	1,673	1,780	+106
<i>Cash and cash deposits</i>	<i>1,424</i>	<i>1,455</i>	<i>+30</i>
Total non-current assets	247	263	+16
Total assets	1,920	2,044	+123
Total liabilities	714	695	(18)
<i>Interest bearing debt</i>	<i>564</i>	<i>563</i>	<i>(1)</i>
Total net assets	1,206	1,348	+142

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

Management policy for FY2021

From fee-based to unit-based sales

In addition to expansion through individual contracts with companies/ governments, we aim to accelerate self-propelling sales from generalized services

【Theme 1】 Expansion of co-creation partners

Expand required elements such as sales, maintenance and support, and bidding rights for government through partnerships or mergers and acquisitions as needed

【Theme 2】 Towards easy-to-use AI services

Pursue ease-of-use of services designed around customer needs
Aim to achieve 10,000-unit service system, with high AI service quality and operational stability

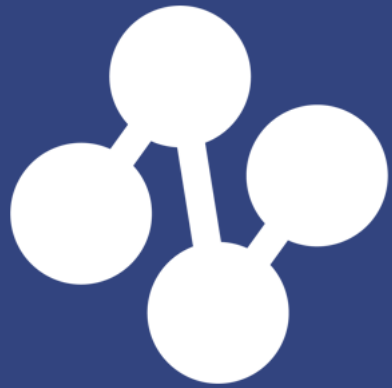
【Theme 3】 Commitment to AI technology dev.

Collect and accumulate the industry's leading level of data
Continue to invest in the dev. of optimal AI logics using proprietary learning technologies, including CG

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