

Update the world for a better tomorrow



# **Financial Results Briefing Material**

## **7th term, Q2 ended June 30, 2024**

Neural Group Inc.  
August 9, 2024

# Financial highlights of FY2024 (7<sup>th</sup> term) Q2

- **[Summary]** Following the establishment of proprietary AI services in FY2023, both revenue growth and profitability strengthened significantly in FY2024. Business continued to expand steadily into Q2, with **profitability reaching the break-even point. Profit generation is now in sight starting from Q3.**
- **[Sales]** Q2 FY2024 sales reached **880 million yen (+14.0% YoY)**, driven by partnerships with top domestic and international companies, enhancing both technology and services.
  - In June 2024, we joined NVIDIA's Partner Program, "**NVIDIA Partner Network**". By utilizing NVIDIA's cutting-edge GPU servers (**NVIDIA DGX Station**), Metropolis software, JetPack SDK, etc., AI inference on edge devices has been significantly accelerated.
  - Launched the "**KizunaNavi**" 1on1 support service, jointly developed with Sony, utilizing edge AI and SaaS systems. By combining video/audio analysis AI and generative AI, the service helps solve 1on1 meeting challenges and supports employee engagement and growth.
- **[Profitability]** Sales of proprietary AI services led to significant efficiency improvements in R&D and sales expenses, quickly enhancing profitability.
  - **Reached break-even in Q2** (with **operating profit in June**). After about two years of business investment starting from Q4 FY2021, we successfully shifted to the **profit and cash generation phase** (investment recovery phase).
  - While sales grew by **14% YoY**, SG&A expenses were reduced by **144 million yen (576 million yen annualized)**, significantly improving the break-even point.
  - Contribution margin exceeds **60%**, supporting profitability beyond break-even and expecting **sharp profit increases** moving forward.
  - Exchange rate for imports and procurement of NVIDIA edge devices and LED components is assumed at **160 JPY/USD**. The recent yen appreciation is expected to be a **positive factor** for second-half results.
- **[Growth Strategy]** **From the second half of FY2024 through FY2025**, we will **actively pursue profit expansion** and strengthen our technology and business models.
  - Drive **profit expansion** through scaling of proprietary AI services.
  - Strengthen **recurring revenue models** and aggressively expand **SaaS businesses such as KizunaNavi**.
  - Integrate **cutting-edge AI technologies** in image and audio fields into our services and continue researching **generative AI**.

- **Overview of Neural Group**

- Financial highlights and business model
- Growth strategy

# Management team



## Founder & CEO, Roi Shigematsu,

- Partner at McKinsey & Company.
- Led private equity investments at Bain Capital.
- Advisory Board of The Faculty of Engineering, The University of Tokyo (to present)
- Member of Keizai Doyukai (Japan Association of Corporate Executives) (to present)
- M.S. (Engineering), The University of Tokyo



## Advisor, Yutaka Matsuo

- Professor, Artificial Engineering Research Center, Graduate School of Engineering, The University of Tokyo
- President, Japan Deep Learning Association; Expert Member, Council for the Realization of New Capitalism; Chair, AI Strategy Council
- Outside Director, SoftBank Group
- Advisor to the Company since 2018



## Senior Executive Officer Tsubasa Iwakiri

- Led various consulting engagements at Accenture.
- CEO of Neural Engineering Co.
- Graduated from Doshisha University, Faculty of Life and Medical Sciences, Department of Medical Engineering.



## Senior Executive Officer Masaaki Yamamoto

- Spent 15 years at Sony engaged in technology development and new business development.
- Earned a graduate degree from Tokyo Institute of Technology, specializing in Mechanical and Aerospace Systems.



## Senior Executive Officer, CTO Takahiro Mikami

- Engaged in researches about image recognition (ResNet) and natural language (LSTM) models at Nomura Research Institute.
- Engaged in research on image recognition and natural language models at Nomura Research Institute.
- Ph.D. (Theoretical Physics), The University of Tokyo



## Senior Executive Officer Taro Hitokoto

- Engaged in policy planning at the MLIT, covering areas such as parks and green spaces, urban planning, and sports facilities.
- M.S. (Agricultural and Life Science), The University of Tokyo

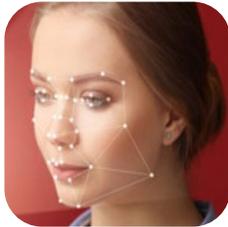
# We develop proprietary AI libraries/ edge-related implementation technologies to enable AI smart cities

## People attribute analysis

Gender/ age estimation



Facial recognition



Line-of-sight detection



Fashion analysis



## People emotion and thought analysis

Facial expression, emotion analysis



Voice/ emotion analysis



Natural language processing

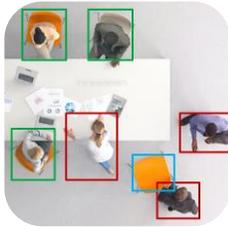


## People movement and behavior analysis

Congestion analysis



Vacancy detection



Safe monitoring



Intrusion detection crime prevention



## Vehicle analysis

Traffic analysis



Parking occupancy



License plate detection



## Technologies related to social implementation of AI

Edge AI



Edge security



Ad delivery optimization



AI-enabled product recommendation



Data analytics



Digital signage integration



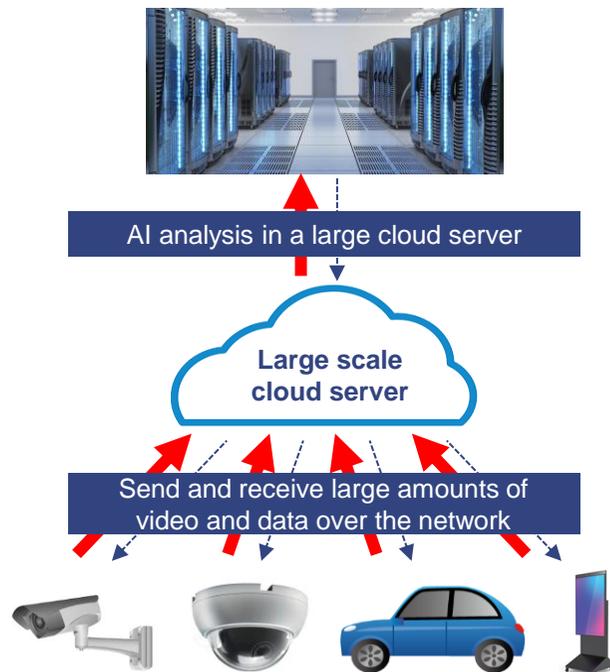
Mobile app integration



# AI technology is evolving along with the industry's growth

## Cloud AI

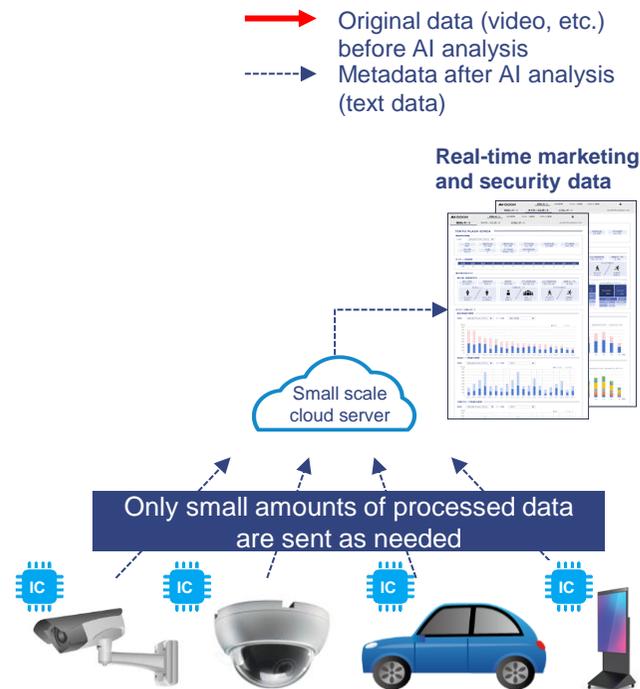
Conventional approach



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

## Edge AI

Our approach



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

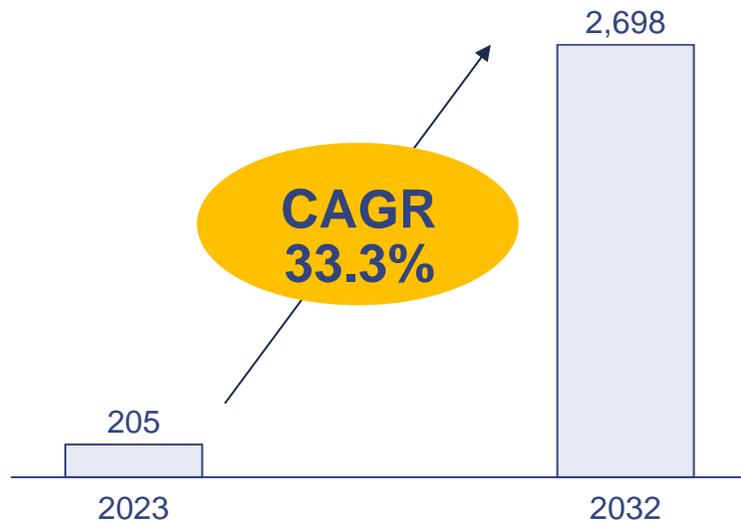
Also greatly contributes to privacy protection



Edge AI has a large global market size and offers high growth potential.

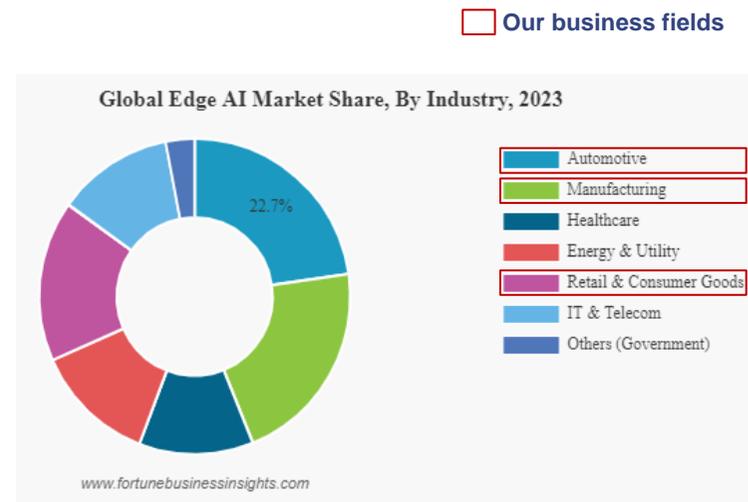
## The Edge AI market is growing at an annual rate of 33.3%

Global: Edge AI Market, in USD billions



## We operate in many of the key growth segments

Global: Breakdown of Edge AI Market by Industry (2023)



Source : <https://www.fortunebusinessinsights.com/edge-ai-market-107023> (Last Updated: July 29, 2024)

# Our AI libraries operate on a variety of technical standards, contributing as an Edge AI Platform developer

As an NVIDIA Metropolis Partner, we actively adopt the NVIDIA Jetson series.



NVIDIA JETSON Xavier NX



python™ Rust

- Processor
- OS
- Language



NVIDIA JETSON Nano



python™ Rust



NVIDIA JETSON TX2



python™



intel arm



python™

- Processor
- OS
- Language



QUALCOMM™



Swift Java



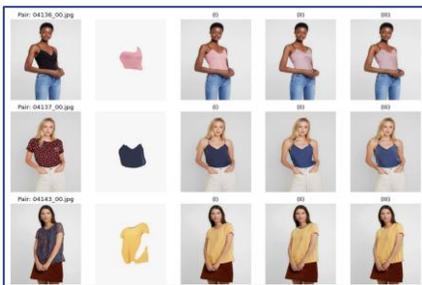
QUALCOMM™



python™

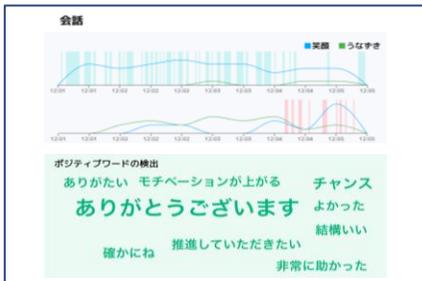
Continuing advanced AI research: By continually integrating new technologies into our services, we accelerate platformization and generalization, while also contributing to building barriers to market entry.

### Image generation AI model



- Fully internalized image generation AI model.
- Enables creation of diverse content, supporting more creative advertising production.

### Edge AI voice system



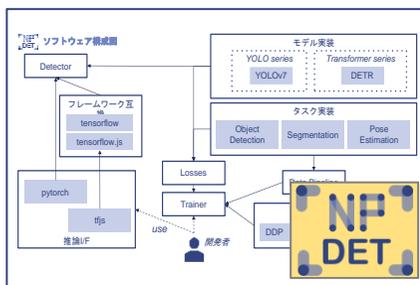
- Real-time analysis of user speech within edge devices.
- Natural language processing enables user feedback. Kizuna Navi development and release.

### Multitask AI model



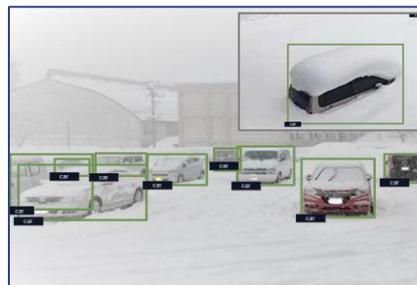
- Development of a multitask AI model integrating separate models.
- Reduced memory usage by ~50%, enabling faster AI recognition and miniaturization for edge devices.

### Accelerating next-generation AI model development



- Building an AI model development platform.
- Able to implement cutting-edge academic methods with less than 1/10 of the conventional effort.
- Speeding up the cycle of additional learning and application to commercial services.

### Uncompromising AI accuracy



- Conduct AI accuracy research and apply results to commercial services.
- Achieved stable detection accuracy and robustness even in abnormal environments, especially in data parks.

### Neural Platform

- Real-time management of numerous online-connected edge AI devices.
- Enables automatic program updates and AI model updates remotely.

- Cutting-edge AI technologies, developed in academia, are rapidly implemented and integrated into commercial services through **remote updates**.
- By standardizing AI models and core technologies **across services**, services are generalized, contributing to **lower implementation costs and improved company profitability**.
- These initiatives contribute to **higher entry barriers and enhanced customer retention**.

Neural Group solves social issues in cities through Edge AI and enhances spatial value.



## Edge AI & Smart City Solutions

*Mobility, traffic control*



**Digi Park**

*Safety and efficiency using Edge AI*



**Edge Alert**

*Fashion trend analysis using image AI*



*Number plate and vehicle detection*



**Digi Thru**

*Work style reform and human capital utilization*

**KizunaNavi**

*AI advertising media for luxury apartments*



**FOCUS CHANNEL**

*Urban Foot Traffic*



**Digi Flow**

*Generative AI for retail marketing*

**NeuralVision**

*Generative AI utilization and web generation*



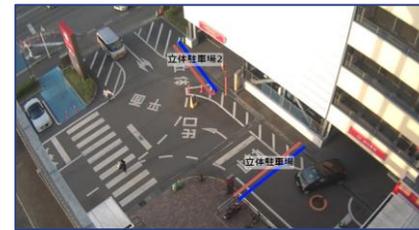
**Generative Web**  
powered by ChatGPT

**We build innovative AI services in-house  
and provide them to our customers.**

# Providing services for smart city development using AI cameras.



For outdoor flat parking lots, a single camera can capture over 100 parking spaces.



Congestion analysis based on line counting at parking lot entrances and exits is also available.

**1 Real-time availability management system for facility managers.**

Parking space availability data is utilized to improve operational efficiency and enhance the customer experience.

**2 Linking data to the facility website.**

110	108
111	107
112	106
113	105
114	104
115	103
116	102
117	101
118	100

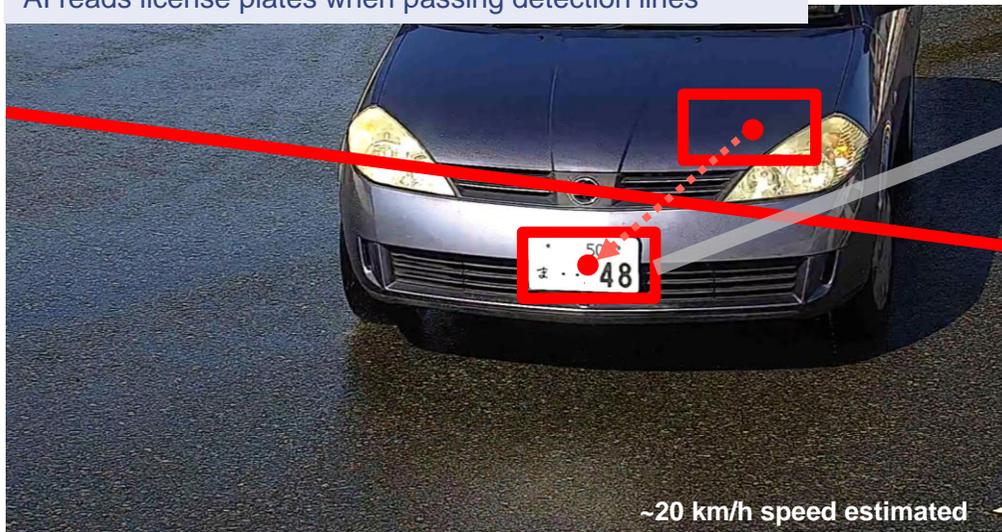
Customers can check parking availability in advance on their mobile devices.

**3 Guiding drivers on-site to streamline traffic flow within parking lots.**

Real-time on-site traffic control.

# Visualizing vehicle movement and stay information through license plate analysis of moving vehicles.

AI reads license plates when passing detection lines



~20 km/h speed estimated



AI acquires the following information

- Vehicle location
- Classification #
- Hiragana
- 4-digit number
- Device/Camera ID
- Vehicle passing time
- Vehicle passing direction

Grasp vehicle passage and dwell time

**1 Web UI capable of external data integration**

Transfer data periodically

End-user's cloud

External system and data integration possible

Possible to download as csv

**2 Analyze dwell time by vehicle type and time of day**

24/7 regional share analysis and facility dwell time analysis possible

**3 Automatic notification of registered/unregistered vehicles**

ナンバープレートを検知して登録された車が来たことを伝える

Pre-registration of vehicle license plates and real-time arrival notification

At parking lot exits, roads, etc., real-time detection and notification of pedestrians and vehicles by direction is possible.

Real-time direction detection by Edge AI



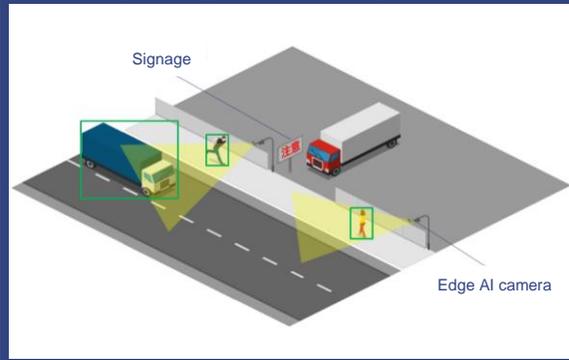
Instant notification to digital signage



AI replaces traffic guides in labor shortage situations, improving cost efficiency.

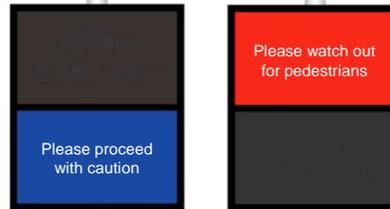
1

Human detection and instant reporting for safe departures



2

Signage reduces the need for traffic guides



By reducing guide personnel costs, it is possible to achieve cost savings exceeding 10 million yen annually

3

Capable of detecting and reporting wrong-way driving



It can also be utilized at road construction sites

# Released a 1-on-1 support service to improve employee work comfort and accelerate their growth.

1-on-1 support services

## KizunaNavi

KizunaNavi uses state-of-the-art AI analysis technology to improve the quality of 1-on-1 meetings.

By facilitating effective 1-on-1s, we support the significant enhancement of corporate and organizational well-being.

### Examples of Customers



### AI-generated advice on discussion topics.

member: To fill in the talk theme in advance

**AI generates topics for discussion.**

manager: With the help of AI advice, conduct 1-on-1s with creativity and ingenuity.

### Improving managers' interviewing skills.

Analyze conversations with Edge AI.

Wordsings    Conversation Ratio    attitude (Smiles, nods)

**Visualizing members' degree of empathy.**

### Facilitating continuous improvement of 1-on-1 meetings.

- Access past 1-on-1 notes anytime.
- Review AI evaluation history to continuously improve the quality of 1-on-1 meetings.
- Strengthen organizational capabilities.

# Top share in Japan with more than 12,000 LED signage installations

## NeuralVision

- **Unparalleled installation track record**  
Experience in a wide variety of industries, including large corps, government offices, commercial facilities, and merchant stores.
- **Unparalleled track record of stable operations**  
Stable operating track record throughout Japan, including cold, hot, and humid regions.
- **Flexible contract forms**  
Flexible purchase formats such as lease agreements and credit/cash purchases.



# Expanding AI-driven web businesses with ChatGPT.

## Generative Web powered by ChatGPT



### Feature 1 Automatic Blog Generation

### Feature 2 Multilingual Conversion

### Function 3: Word-of-mouth auto-reply

### Feature 4 SEO Automation

- Leveraging the extensive sales network of Neural Marketing Co. (a wholly owned subsidiary) and our AI development capabilities, we launched a new web page business.
- Started sales in May 2023, quickly commercializing generative AI beyond just research and development.

Partnered with many public and private organizations to promote AI services through an extensive network.

### Industry groups



### Collaboration with corporations



### Smart City related



# Appearances at seminars/ events

## AI technology

- **Tokyo Data Platform Convention** Professional Advisor
- **RX Japan NexTech Week2022【Fall】** Lecture title “Smart Cities Today”
- **Macnica: Possibilities in Retail for Image Recognition AI** Speaker on Image Recognition AI
- **AI Innovation AWARD2022 “Future envisioned by Smart Cities”**
- **HONGO AI 2021** Judge
- **JR East Mobility Transformation Consortium**

## Urban planning

- **Shibuya Ward Kitaya Park Jinnan Market** Thinking about the future of Shibuya Park! Speaker
- **Muroran City DX Promotion Forum** Panelist for “Connected Smart City” session
- **“Roadside Station Murayama” Development Basic Plan Study Citizens’ Meeting** Advisor
- **Regional Development College in Otaru** Plans for Otaru, a new northern commercial city, based on a Digital Rural City State Concept Speaker
- **National Ugoki Statistics Co-creation Idea Contest (Softbank)** Awarded Excellence Prize

## Collaboration with Academia

- **DCON2023 Japan Technical College Deep Learning Contest** Final round, technical jury
- **Yokohama f College** Special lecture
- **Aoyama Gakuin University** Special lecture

## Apparel

- **Ministry of Economy, Trade and Industry The 5th Study Group on Sustainability in Textile Industry** Presenter
- **Senken Shinbun “Fashion DX Day 2021”**

## Others

- **ROCK THAILAND #4** Presented in Bangkok, Thailand
- **AWS Japan 「IoT AWS Seminar for Engineers」 etc.** “Creating services using IoT Core”
- **NTT Docomo Ventures Start-up Academy**
- **WIRED STARTUP LOUNGE** “The Art of Innovation -Mirror World”

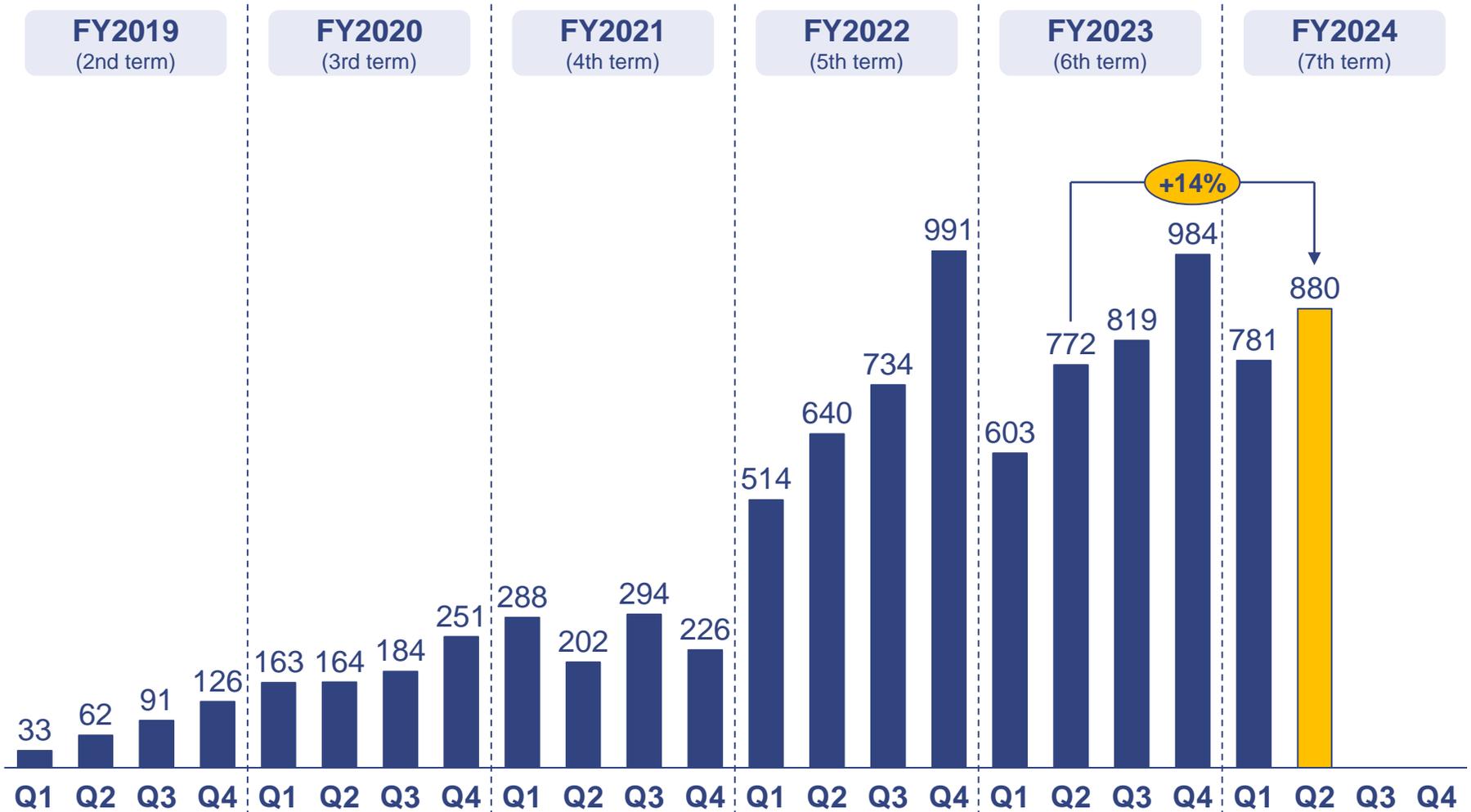
- Overview of Neural Group
- **Financial highlights and business model**
- Growth strategy

## Consolidated financial results for the Q2 ended June 30, 2024 – Profitability recovering at a rapid pace

(JPY Millions)	FY2023 Q2 Actual	FY2024 Q2 Actual	Increase/ Decrease	Change in Percentage
<b>Revenue</b>	772	880	+108	+14.0%
<b>Gross profit</b> Percentage of revenue	507 65.7%	579 65.8%	+72	+14.2%
<b>EBITDA</b> Percentage of revenue	-177 -	31 3.6%	+208	-
<b>Operating profit</b> Percentage of revenue	-221 -	-5 -	+216	-
<b>Net income</b> Percentage of revenue	-172 -	-35 -	+137	-

# Quarterly revenue

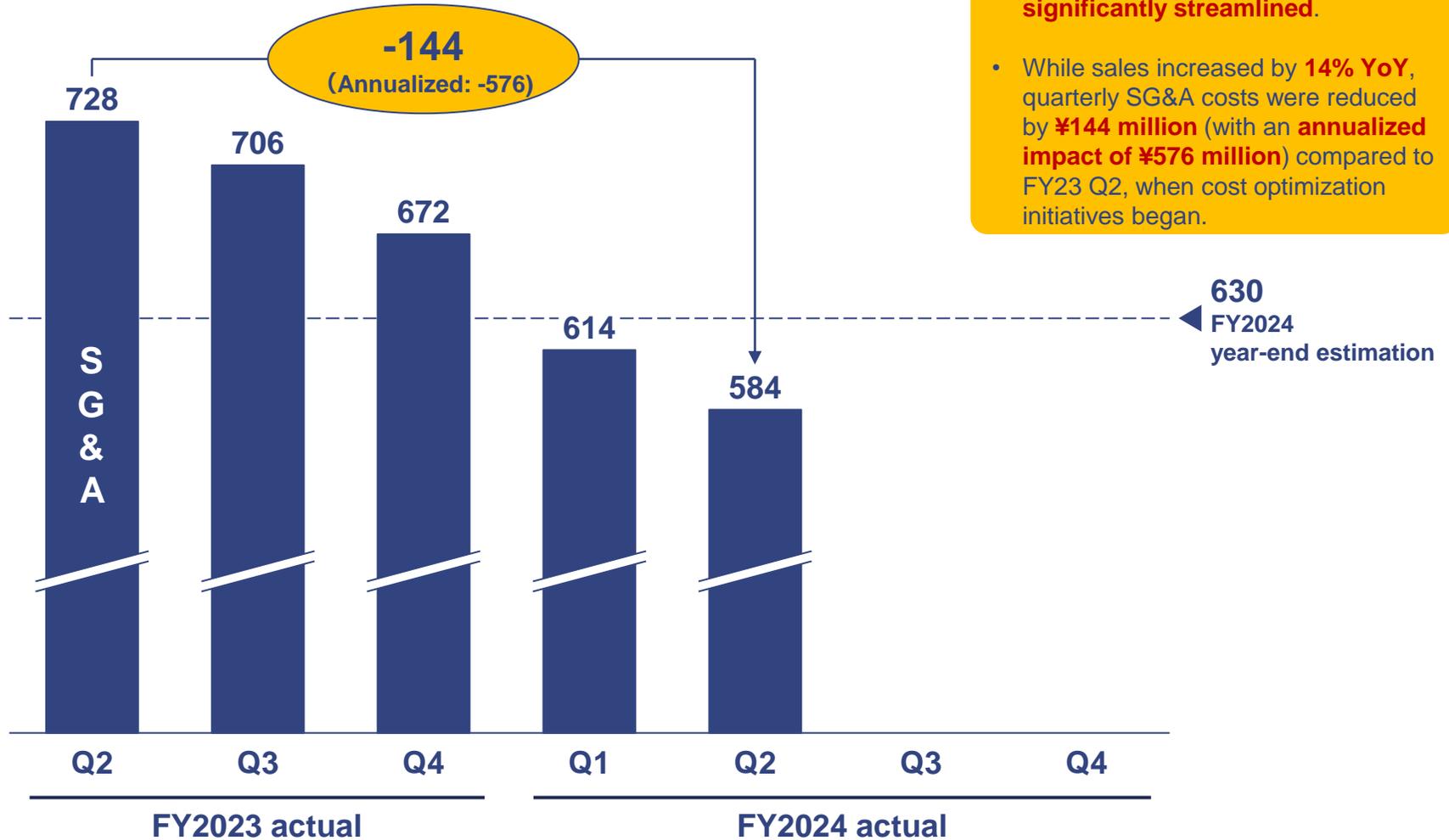
(JPY Millions)



# Quarterly SG&A cost

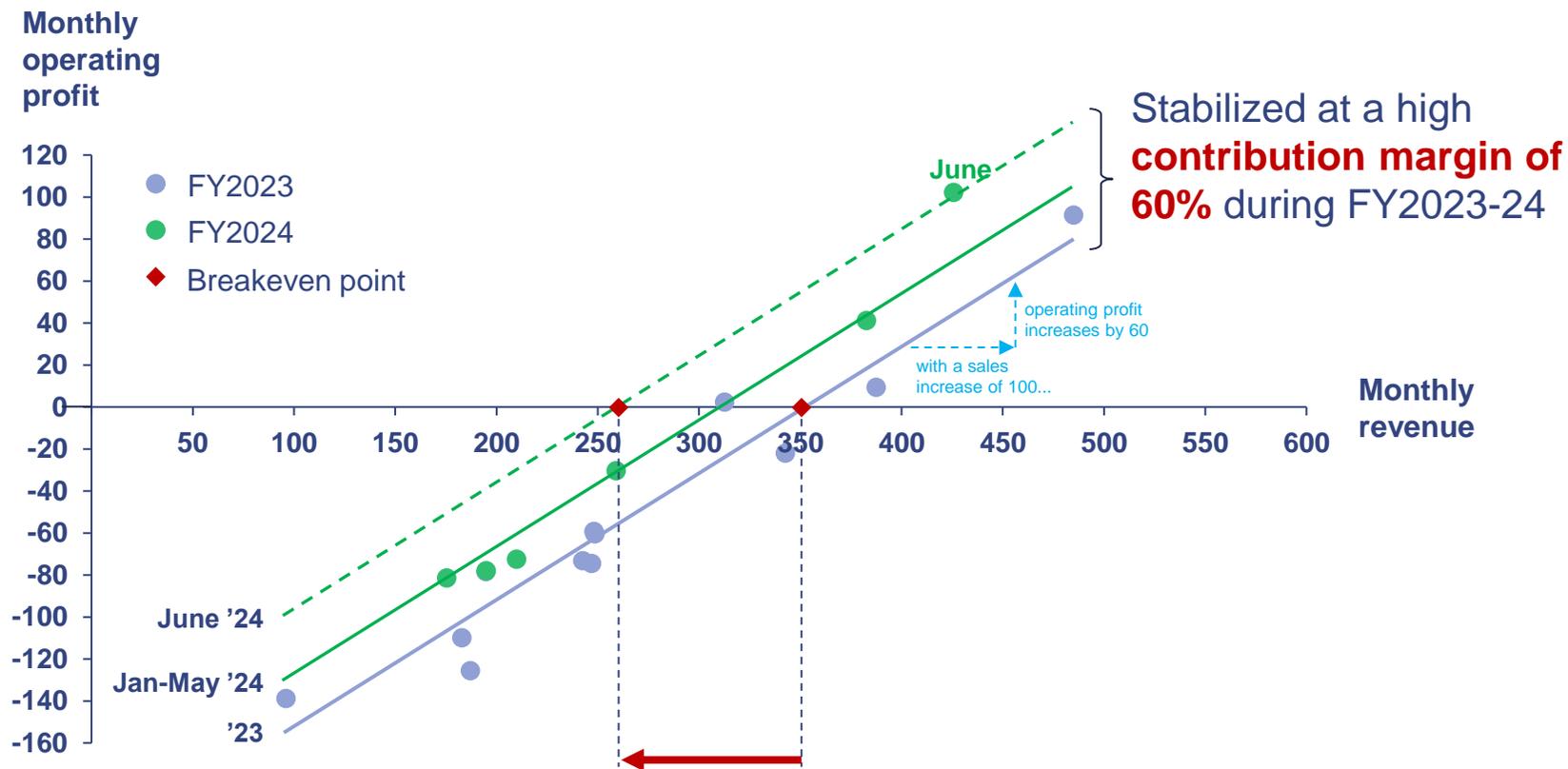
(JPY Millions)

- With the establishment of our proprietary AI services in FY2023, **R&D and sales expenses** required for service sales have been **significantly streamlined**.
- While sales increased by **14% YoY**, quarterly SG&A costs were reduced by **¥144 million** (with an **annualized impact of ¥576 million**) compared to FY23 Q2, when cost optimization initiatives began.



# Relationship between revenue and OP (FY2023–FY2024 monthly results)

(JPY Millions)



With the establishment of AI services, sales and development activities became more efficient. As a result, SG&A expenses decreased significantly, leading to a **major improvement in the break-even point.**

# Evolution of our business models and quarterly operating profit performance.

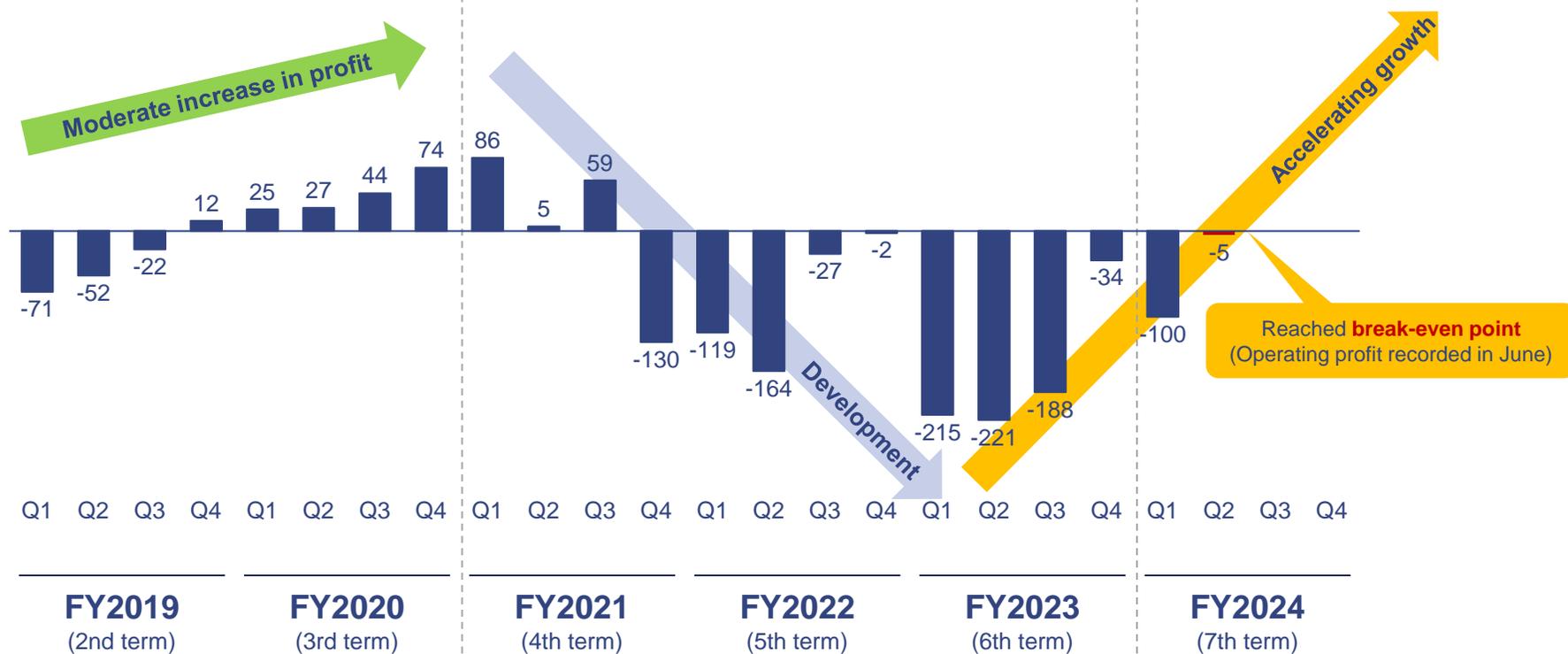
(JPY Millions)

After six years since its founding, successfully established a scalable AI service structure.

We started our business by developing AI algorithms and licensing them to companies.

We have shifted our business model to focus on providing our proprietary AI services.

We aim to turn scalable and profitable.



## Financial results for FY2024 Q2

Reached **break-even point** in Q2  
(**Operating profit was achieved in June**,  
the final month of the quarter).

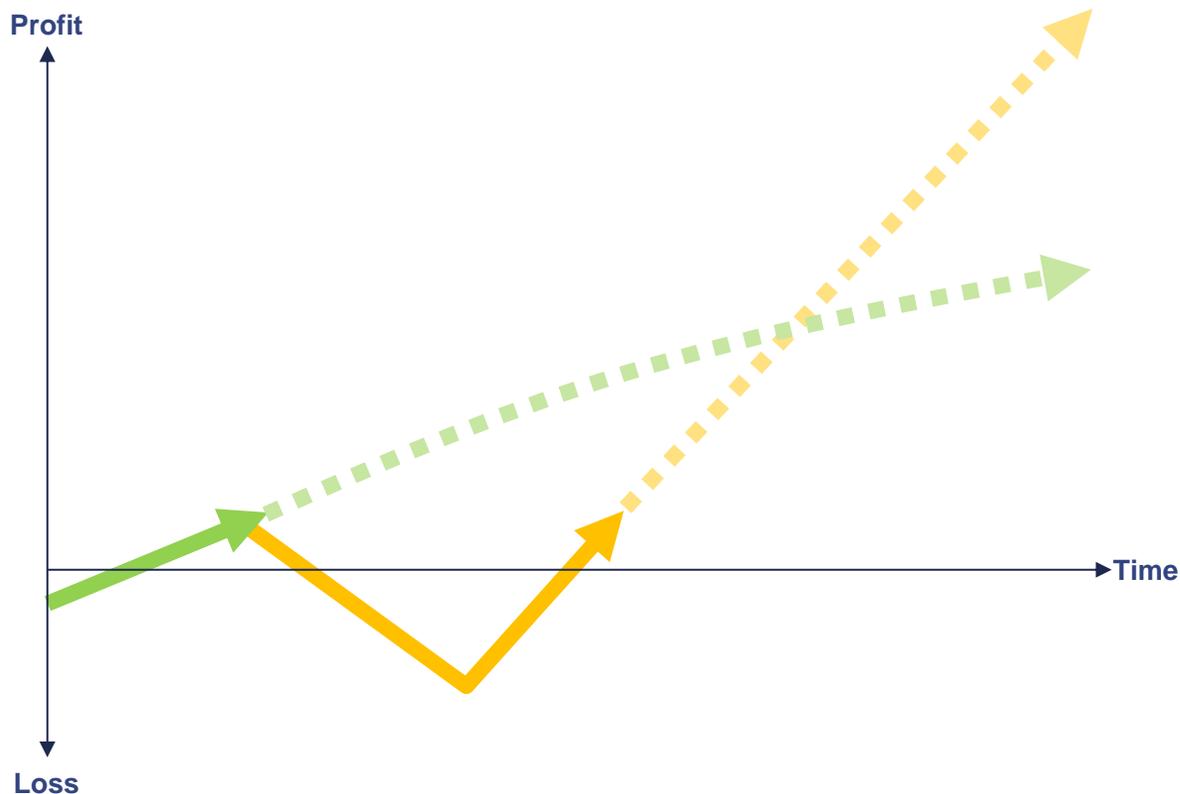
Successfully shifted to the profit and **cash generation phase**  
after two years of business investment from Q4 FY2021.

On track to **generate profits starting from Q3**  
(Supported by a high contribution margin, **a sharp increase in  
profitability is expected after break-even**)

A favorable impact on future performance is expected, assuming  
an exchange rate of **160 JPY/USD** for imports and procurement  
of NVIDIA edge boxes and LED components, with further  
**positive effects** anticipated if the yen appreciates.

Strategic investments during this period, though resulting in temporary deficits, laid the foundation for future profit expansion and long-term growth.

【 Image of profit expansion for each business model \*1 】



**Our business model**

**【AI Service sale】**

- Building an AI service requires not only the development of AI systems spanning a wide range of front-end and back-end elements, but also the establishment of a sales structure to reach end users.
- **While offering high profit margins and the potential for significant growth through scaling, it requires upfront investments in the short term, which is a disadvantage.**

**【AI license sale】**

- The developed AI algorithms themselves become a source of revenue, making **short-term profitability achievable**.
- However, as revenue tends to be directly linked to the number of personnel and licenses sold, **future scaling may face challenges in achieving rapid profit growth**.
- Furthermore, after reaching a certain scale, growth often **slows down or stagnates**.

\*1 This illustration shows a comparative image of scaling based on business model selection. This material does not forecast our future profits.

- Overview of Neural Group
- Financial highlights and business model
- **Growth strategy**

# Our growth strategy

## Revenue expansion

- **Expand and accelerate profits** by scaling proprietary AI services.
- Prioritize and focus on only the most attractive services.

## Business model evolution

- Enhance the **recurring nature** of the revenue model.
- Actively strengthen **SaaS businesses** such as **KizunaNavi**.

## AI technology exploration

- Implement **cutting-edge AI technologies** in image and audio domains into proprietary services.
- Continue research into **generative AI** technologies.

# APPENDIX

# Corporate overview

**Company Name** : Neural Group, Inc.

**Established** : January 22, 2018

**IPO** : August 20, 2020 (TSE Growth : 4056)

**Business Description** : Developing AI services based on image and video analysis using proprietary AI algorithms and terminal processing technology.

**Headquarter** : Tokyo Midtown Hibiya 32F, 1-1-2 Yurakucho, Chiyoda-ku, Tokyo

**Subsidiaries:** Neural Marketing, Inc.  
Neural Engineering Co.  
Neural Group Thailand. ,Ltd

**Branch locations** : Tokyo, Osaka, Sapporo, Sendai, Nagoya, Takamatsu, and Hiroshima, Fukuoka, Bangkok

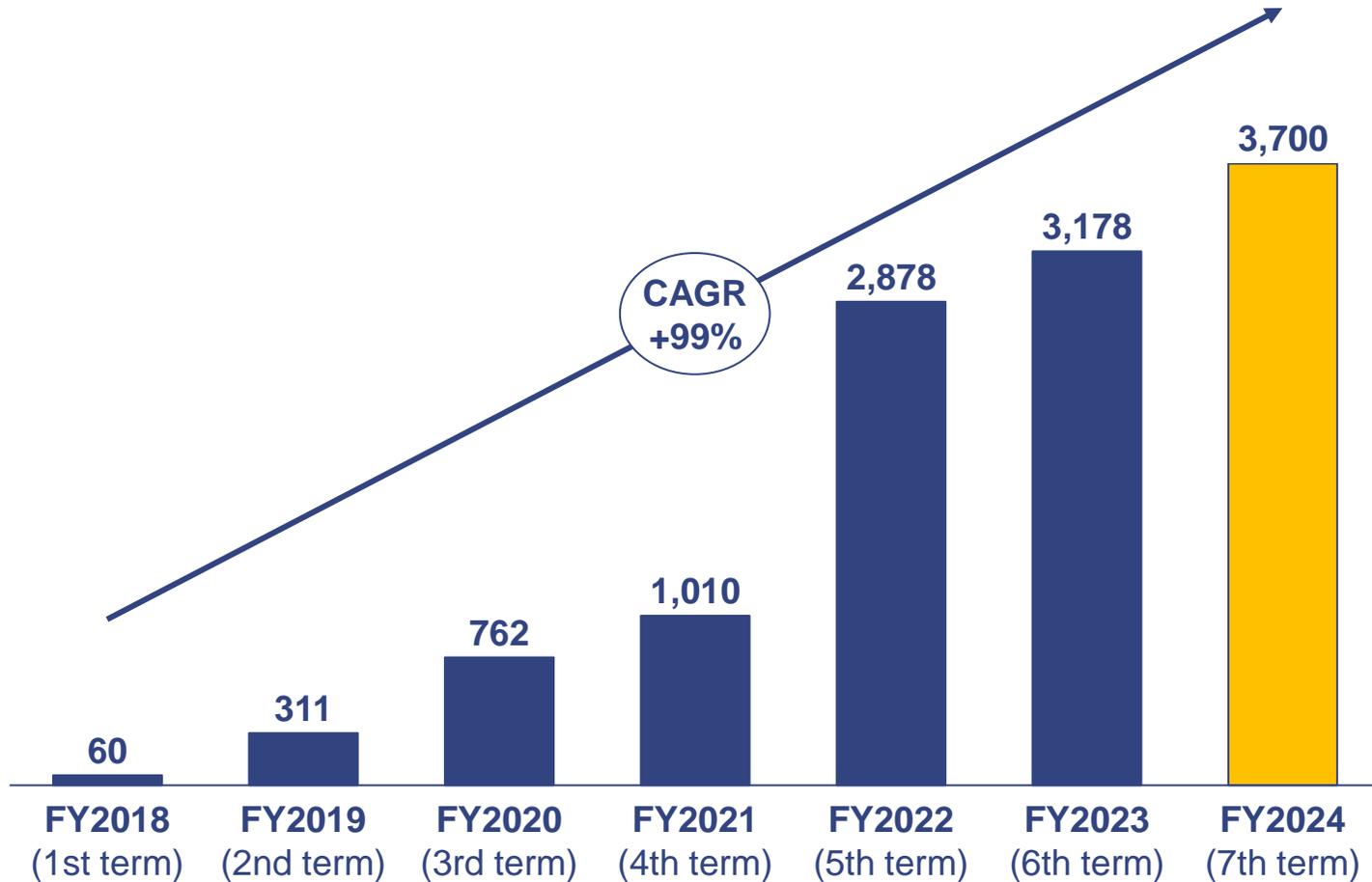
**Number of employees** : 239 (consolidated, as of June 30, 2024, excluding executives, part-time staff, temporary workers, and contractors)

**Membership and associations :**

- Japan Deep Learning Association (JDLA)
- Nippon Keidanren (Japan Business Federation)
- Satellite Earth Observation Consortium
- Forum for the Promotion of MaaS Social Implementation
- Japan Logistics Systems Association All Japan Parking Association
- Osaka Chamber of Commerce and Industry
- Osaka Smart City Partners Forum, etc.

# Historical revenue performance

(JPY Millions)



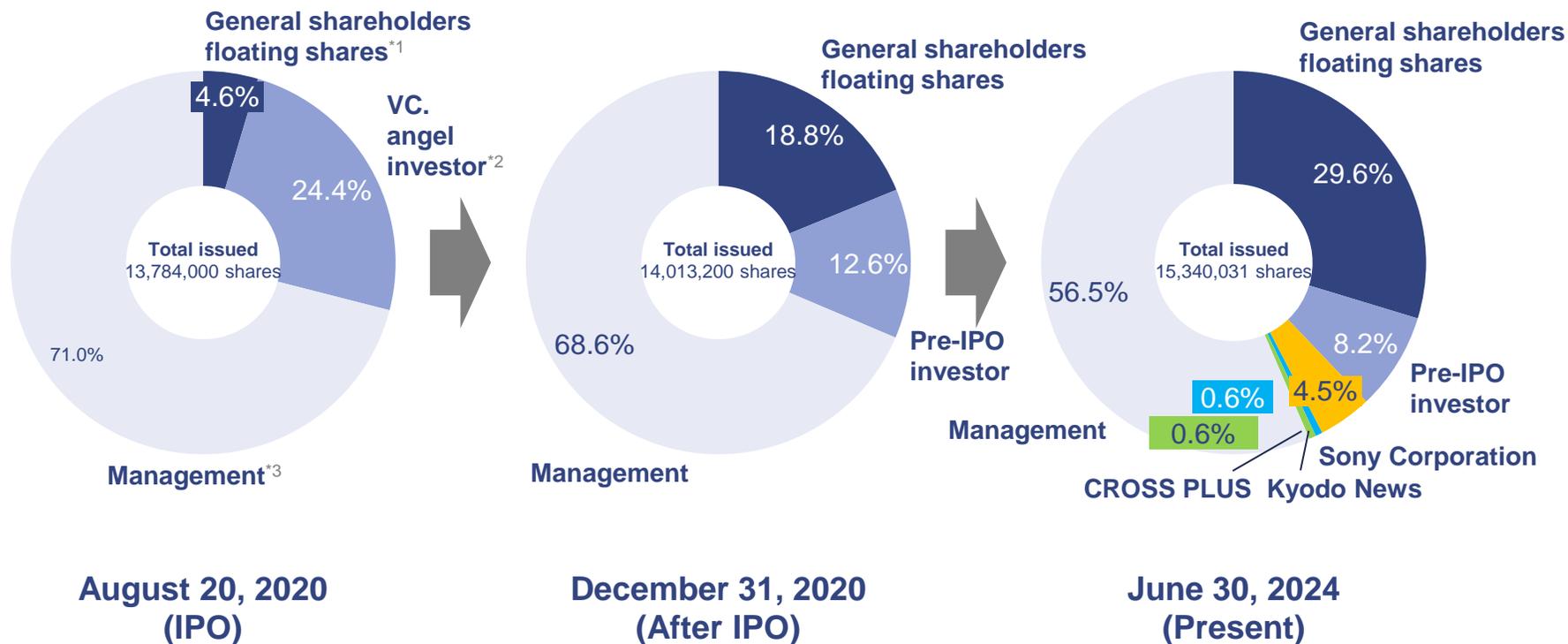
## Consolidated full-year financial estimate for FY2024

<b>Progressing smoothly</b>	<b>FY2023 Actual</b>	<b>FY2024 Estimate</b>	<b>Increase/Decrease</b>	<b>Change in Percentage</b>
(JPY Millions)				
<b>Revenue</b>	<b>3,178</b>	<b>3,700</b>	<b>+522</b>	<b>+16.4%</b>
<b>Gross profit</b> Percentage of revenue	<b>2,063</b> 64.9%	<b>2,550</b> 68.9%	<b>+487</b>	<b>+23.6%</b>
<b>EBITDA</b> Percentage of revenue	<b>-490</b> -	<b>180</b> 4.9%	<b>+670</b>	<b>-</b>
<b>Operating profit</b> Percentage of revenue	<b>-658</b> -	<b>30</b> 0.8%	<b>+689</b>	<b>-</b>
<b>Ordinary income</b> Percentage of revenue	<b>-686</b> -	<b>0</b> -	<b>+687</b>	<b>-</b>
<b>Net income</b> Percentage of revenue	<b>-650</b> -	<b>-120</b> -	<b>+530</b>	<b>-</b>

## FY2024 Q2 – Balance Sheet

(JPY Millions)	FY2023	FY2024
	June 30	June 30
<b>Current Asset</b>	<b>1,972</b>	<b>1,415</b>
of which, Cash and Deposits	1,198	657
<b>Fixed Assets</b>	<b>1,788</b>	<b>1,567</b>
<b>Total Assets</b>	<b>3,761</b>	<b>2,983</b>
<b>Total Liabilities</b>	<b>3,013</b>	<b>2,455</b>
of which, interest-bearing debt	2,650	2,070
<b>Net Assets</b>	<b>747</b>	<b>528</b>

# Promoting capital and business alliances with operating companies while ensuring share liquidity by expanding floating shareholders



\*1 Calculated based on the total number of 415,000 shares offered and 215,800 shares sold (including over-allotment) as well as the number of shares sold by shareholders, management and others since before the listing, which accounted for 13,784,000 shares of the total number of shares issued as of August 20, 2020.

\*2 Shares held by shareholders (VC investors and angel investors) since before the company's listing, as recognized as a result of the company's own research.

\*3 Number of shares held by the Company's management

**Update the world for a better tomorrow**



**Neural Group, Inc.**

We named our company "Neural Group" to express our desire to provide inspiring services that transcend boundaries across a wide range of fields through the development of cutting-edge technologies, including AI. We aim to leverage edge AI technologies in both real and virtual spaces to help create an exciting future society in various areas such as smart cities, urban development, work style innovation, and entertainment.

# 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.