



Headwaters Co., Ltd.



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# 1 The History of Headwaters

- Past
- Present
- Future





Name	Headwaters Co., Ltd.
Established	November 2005
CEO	Yosuke Shinoda
Head office	Shinjuku–I–Land 4F 5-1, 6-chome, Nishishinjuku, Shinjuku-ku, Tokyo
Capital	367,773 thousand yen
Number of employees	148 including contract employees  * As of June 30, 2023

ISMS (ISO/IEC 27001:2005/JIS Q 27001:2006) certified



# Becoming the center of industry, headwaters.

Engineering  $\times$  Business =  $\infty$ 

Implement new technology to the society





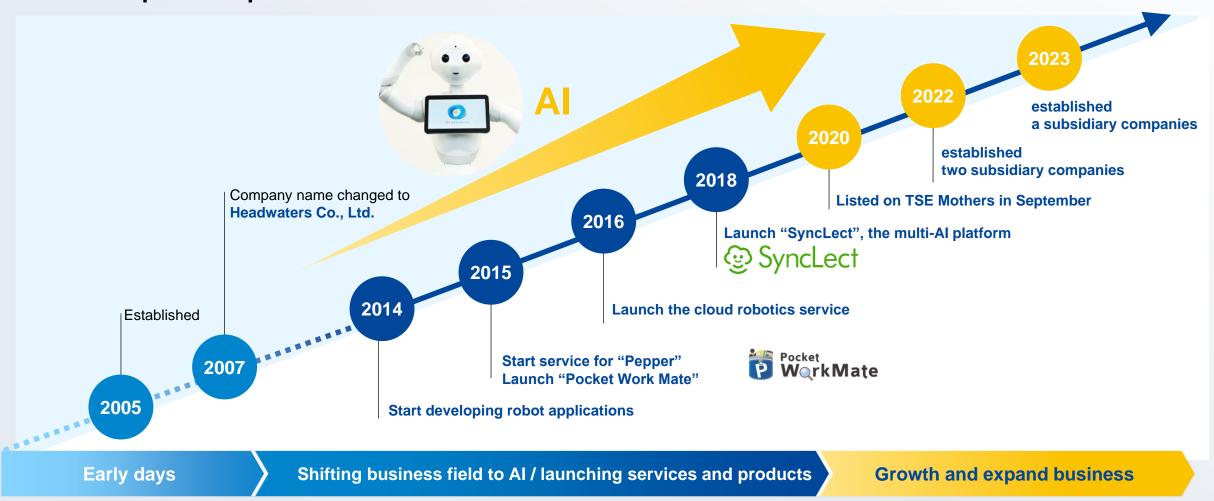




## **Our Commitments since 2005**



We are a front-runner with abundant data accumulated since the early days of Al, analytical methods, and development capabilities.



### **The Market Environment**

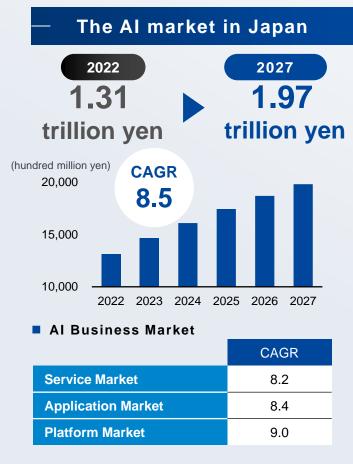


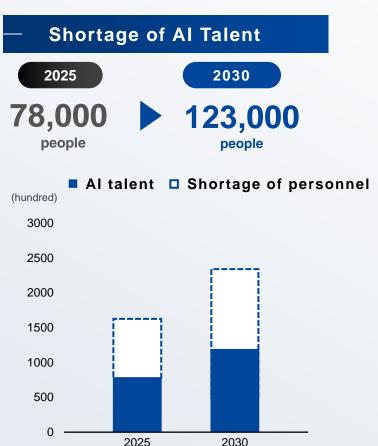
The demand for DX and AI utilization has increased significantly due to the decreasing workforce resulting from the aging population. Especially, the expansion of municipality DX is expected. As the market growing, the shortage of human resources related to AI/DX will be concerned.





	CAGR
Manufacturing DX Market	11.2
Retail DX Market	16.8
Transportation/Logistics DX Market	13.5
Real Estate DX Market	12.4
Municipality DX Market	19.0





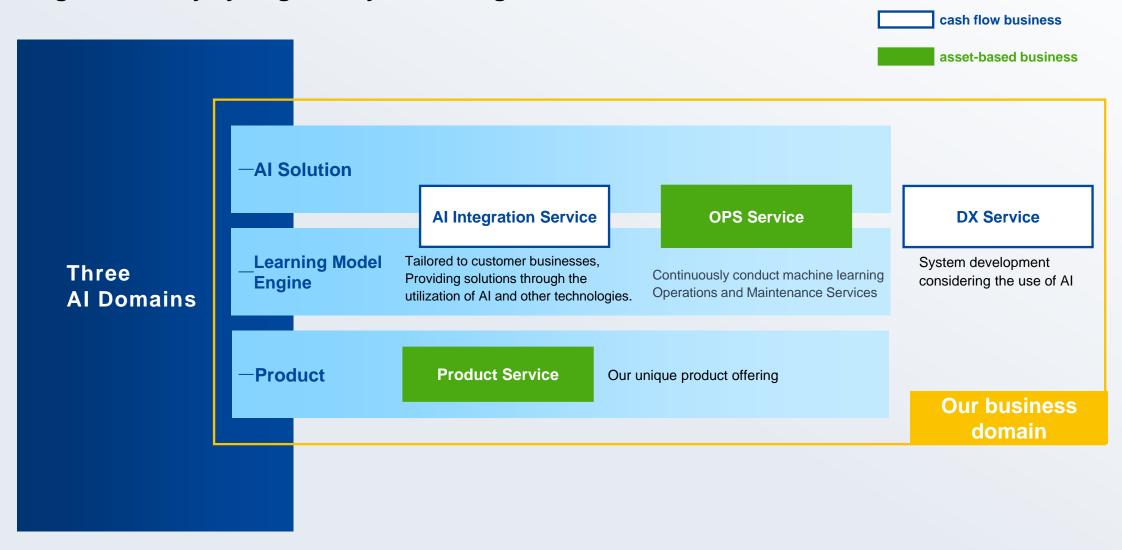
Source: Based on the "2022 Artificial Intelligence Business Comprehensive Survey" and "Future Outlook of the 2022 Digital Transformation Market" by Fuji Chimera Research Institute Co., Ltd., as well as the survey on IT personnel supply and demand by Mizuho Information & Research Institute, Inc. conducted and compiled by our company.

2030





### Offering services by synergistically combining three Al domains





# **Al Integration Services**



After engaging in extensive communication with our customers, we deliver a highly practical system with 'end-to-end' functionality.

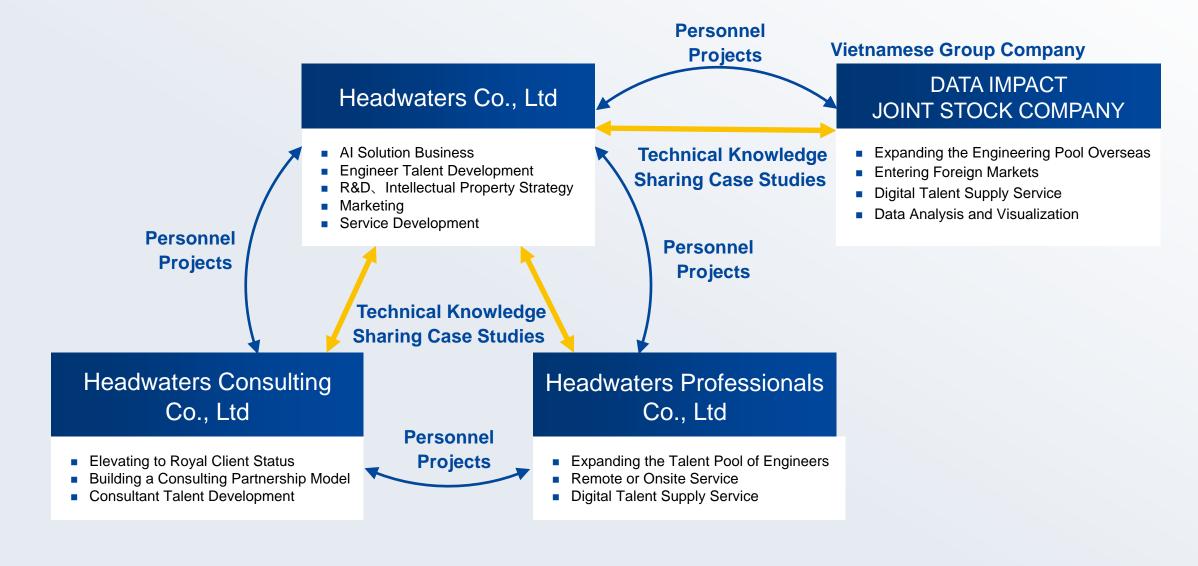
#### The key points

- To prevent any misunderstandings with the customer, we repeat the processes of business analysis and conducting proof-of-concept experiments.
- To prevent contract disputes, it is advisable to enter into a quasi-delegation contract rather than a subcontracting agreement.
- In a PoC, we identify challenges through trail operations and strive for implementation suitable for production use.

#### **Operations and Maintenance** Proof of Concept Experiment **Business Analysis System Development Further Learning** Organizing and visualizing Design Operations and Maintenance business operations and data. Development Usage charge for cloud Implementing in cycles Conduct the assessment Test Monthly subscription fees for of 3 months SyncLect, etc. Report the results and propose the next phase

# The Role of Group Companies



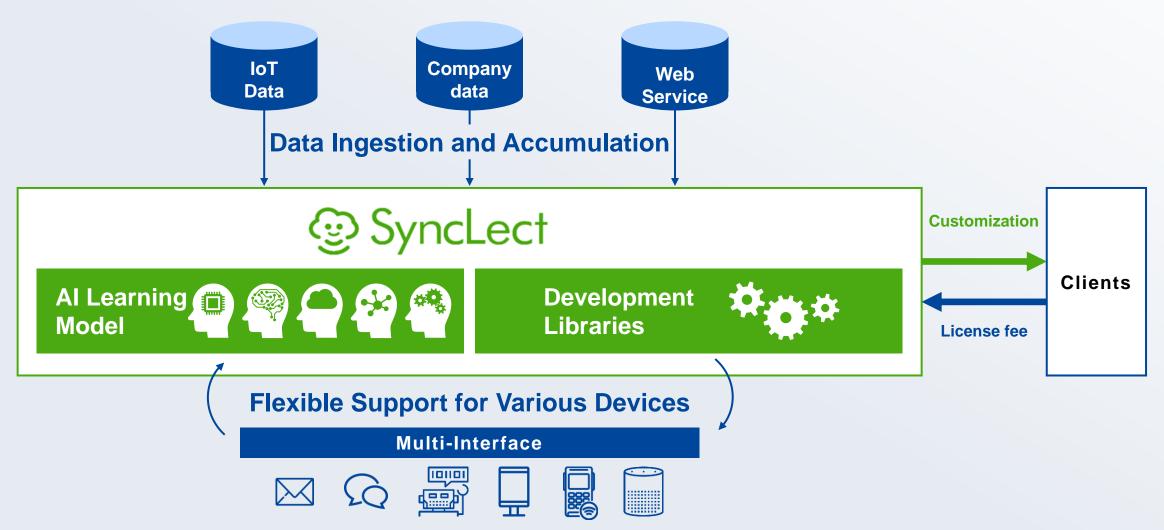




## **Utilizing "SyncLect" Components**



"Al + loT + Big Data Development & Operation Platform" that enables parts to be reused. It enables to deliver system as a customer asset by utilizing our knowledge component.



# Our Achievements toward "Super City Initiative"





#### **Healthcare & Community**

- Online medical care cloud app
- Rehabilitation Al
- Regional disaster prediction solution

#### Logistics AI /DX

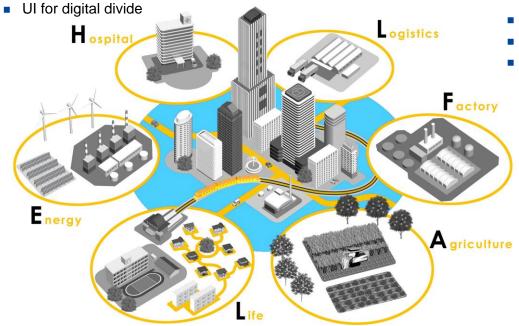
- Ride allocation planning Al
- Routing analysis
- Space analytics

#### Mobility

- Image analysis for mobility
- Smart glasses
- 5G solutions

#### **Smart Store**

- Facial recognition payment platform
- Smart speaker payment
- Dynamic pricing
- In-store purchase behavior analysis



#### **Smart Building**

- Detection of lost items in restroom
- Congestion visualization service
- Digital twin



# Social implementation of AI technologies Achieving Society 5.0

# Co-creation city

Social implementation of AI created with domestic companies and regional cities

# Human

Modern technologies

X

Human-Centered Design

# **Technologies**

Social implementation of AI and IoT with modern technologies



# 02

# **Highlight of FY2023 H1**

- Accomplishment
- Improvement



# **FY2023 2Q Consolidated Financial Results**



(thsnd yen) (thsnd yen)

	FY2022 2Q Cumulative		FY2023 2Q Cumulative			
		Composition Ratio (%)		Composition Ratio (%)	YoY Comparison (%)	Annual Budget Attainment Rate $\left(\% ight)$
Net sales	645,895	100.0	1,158,212	100.0	179.3	54.9
AI	167,631	25.9	462,805	40.0	276.1	56.4
DX	360,762	55.8	523,936	45.2	145.2	55.0
Product	44,803	6.9	53,171	4.6	118.7	44.6
OPS	72,698	11.2	118,300	10.2	162.7	54.6
Operating profit	1,529	0.2	46,724	4.0	3,054.3	38.8
Ordinary profit (Loss)	<b>△7,410</b>	_	47,857	4.1	_	38.3
Net profit (Loss)	△8,774	_	30,069	2.5	_	34.7
Profit attributable to owners of parent (Loss)	△8,774	_	30,166	2.6	_	34.8
Net income per share	△4.69	yen		16.11	l yen	

# Financial Summary



**Net Sales** 

1,158,212 thsnd ye

- YoY Comparison

179.3%

All-time High

n

■ Annual Budget Achievement Rate

54.9%

#### <Accomplishments>

- There was a significant increase in year-end budget consumption projects from enterprise companies in the 1Q.
- The implementation of the alliance strategy obtained large accounts, which changed the layer of clients led to the increase of unit price.
- Driving multiple large-scale projects and the Net Sales increased compared to the same period last year (YoY) in all service category.
- The two group companies established in FY2022 have been growing steadily.
- Sales is progressing with a 20% increase over our sales plan.
- < Things that did not go as planned>
  - Opportunity loss in operations due to unprofitable projects in the 2Q.

# Financial Summary



**Operating Profit** 

46,724

thsnd ven

- YoY Comparison

3,054.3%

- Annual Budget Achievement Rate

38.8%

#### <Accomplishments>

- The gross profit amount has reached a new record high for two consecutive quarters (2H FY 2022, 1H FY 2023).
  - → Gross Profit: 395 million yen, 146.9% YoY
- Costs were incurred for recruitment and training, leading to an increase in SG&A expenses.
   However, progress is on track as planned.
  - → SG&A Expenses: 348 million yen, 130.3% YoY
- The acquisition of large accounts has resulted in an increase in the average sales per company.
  - → Average sales per company: 6.54 million yen, 183.4% YoY

#### <Things that did not go as planned>

- Operating loss of 14.55 million yen in the 2Q
- The increase in COGS
  - → COGS: 762 million yen, YoY Comparison 202.5%
  - → The allocation of personnel resources during the new project launch phase.

# Financial Summary



**Ordinary Profit** 

47,857

thsnd yen

- Annual Budget Achievement Rate 38.3%

#### <Accomplishments>

Non-operating income: Income of approximately 1.1 million yen generated from subsidies

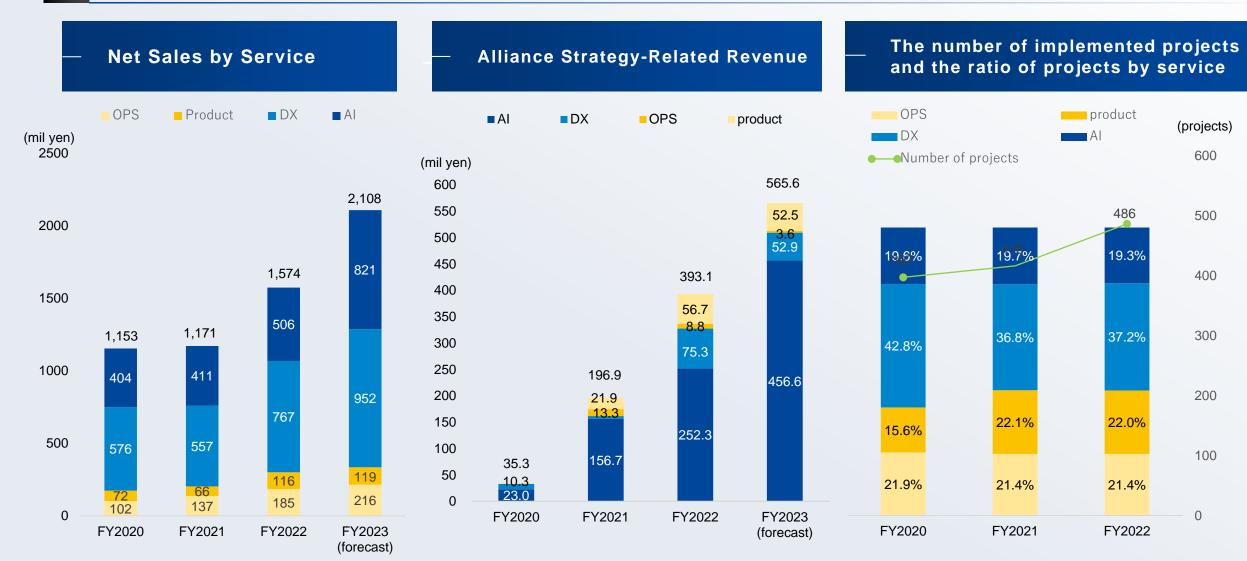
#### **Others**

#### <Improvement>

- The hiring process is progressing smoothly, and the number of employees has reached an all-time high.
  - → The number of employees (as of the end of June 2023): 148 employees
  - → Net increase of 35 employees across the entire group of companies.
- Collaboration is underway due to the establishment of overseas subsidiary.
  - → Received a medal in the Kaggle competition!





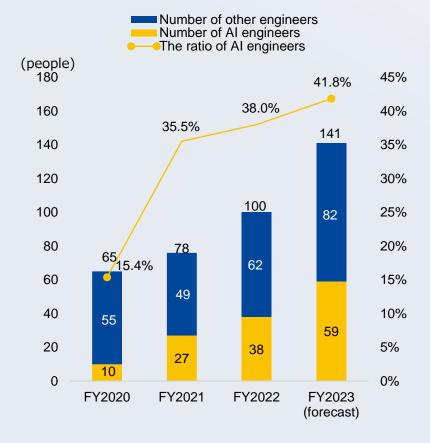


\*The figures have been consolidated, including group companies, since FY2022 4Q



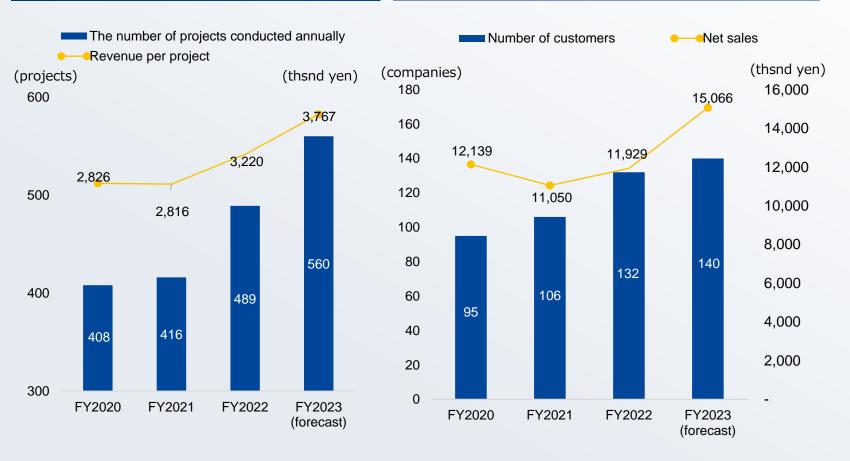


# The evolution of the number of Al engineers



#### Revenue per project





\*The figures have been consolidated, including group companies, since FY2022 4Q



# The Progress of the Growth Strategy



#### **Short term**

Address DX Needs

Utilization of External Resources

- · Address both projects and talent education for DX needs
- · Increasing collaborative projects
- Rapid expansion in our revenue through alliance strategy
- Strengthened collaborations with major companies, such as Microsoft

#### (Reference: KPI-1)

- Net sales by service category
- The number of implemented projects and the ratio of projects by service

#### (Reference: KPI-1,2)

- · Alliance Strategy-Related Revenue
- · Annual revenue per company

#### **Medium to Long-Term**

Increasing Revenue in Asset-based Business

New Revenue Streams

- Improving the ratio towards establishing a solid revenue foundation.
- FY2023 1H: Asset-based business is 170 million yen
- · R&D for new technologies
- · Development of our in-house service
- Driving our intellectual property strategy

(Reference: KPI-1)

Net sales by service category



# **Alliance Structure with Top Global Technology Companies**



## Microsoft **Intelligent Cloud**

- Microsoft Solution Partner certification
- Azure OpenAl RA Partner
- Microsoft Enterprise Accelerator GovTech

We will promptly catch up with the cutting-edge technologies offered by various companies and implement them for our clients.

**Technologies / Knowledge** 



**Certified Solution Provider** for Global Technology Companies

> Social implementation of new technologies

**Technology** · Knowledge

**Technologies / Knowledge** 

# SONY **Sensing Technology**

- Edge AI Sensing Platform "AITRIOS"
- Intelligent Vision Sensor "IMX500"
- Sony's wireless communication standard "ELTRES IoT Partner"

# Supercomputer

- NVIDIA Metropolis Partner Program certification
- NVIDIA Omniverse Partner Council certification
- NVIDIA DX Acceleration Program

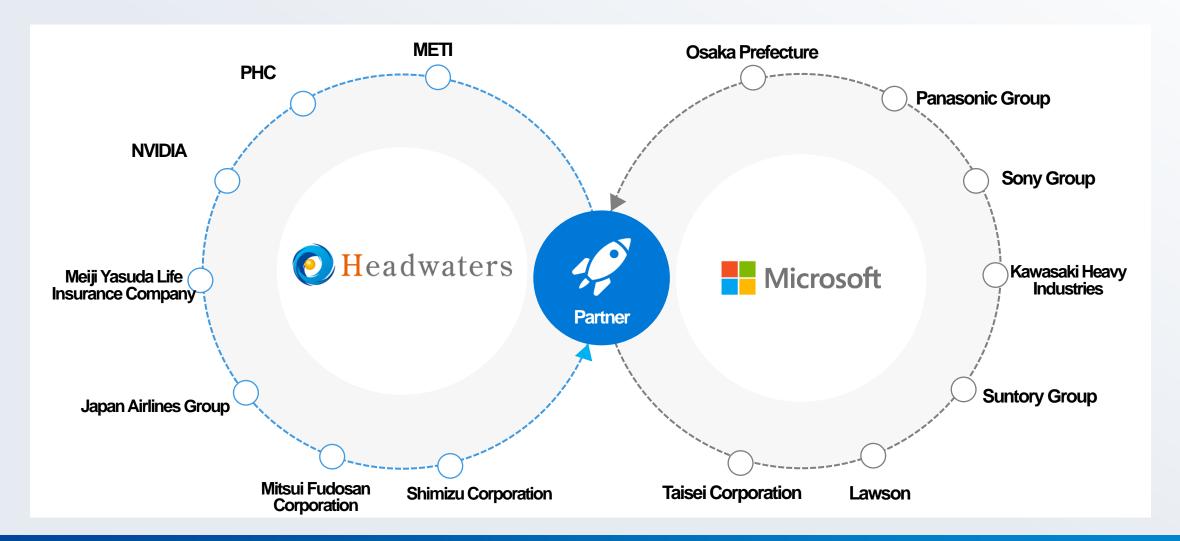
# **NVIDIA**



# **Alliance Strategy: Collaboration with Microsoft**



Accelerating business by leveraging Microsoft's customer base and technology along with our own customer base and technical expertise and building an ecosystem through "Joint Sales x Joint Marketing x Joint Solutions".





## **Our Trusted Clients & Alliance Partners**



## **Part of Our Clients by Industry**

#### **Manufacturing**

- Sony Corporation
- YKK Corporation \*
- Mitsubishi Materials Corporation \*
- ROHM Co., Ltd. \*
- Toyota Tsusho Corporation \*
- Asahi Kasei Corp. \*
- Lion Corporation \*
- Kawasaki Heavy Industries, Ltd.

#### Wholesale / Logistics

- Tokyo Seika Co., Ltd.
- ALPS LOGISTICS CO., LTD.\*

#### **Travel**

- Japan Airlines Co., Ltd.
- Keio Corporation\*

#### Retail / Food

- Sapporo Holdings Limited
- J-OIL MILLS, INC.
- Suntory Spirits Ltd. \*
- TO EN, LTD. \*
- Nisshin Flour Milling Inc. \*

#### **Construction / Real Estate**

- TAISEI CORPORATION \*
- SHIMIZU CORPORATION
- Mitsui Fudosan Co., Ltd.

#### IT Industry

- SoftBank Corp.
- NTT DATA Japan Corporation \*
- Sony Network Communications Inc. \*

(\* Note: Asterisk denotes a new client acquired within the past year.)

#### Finance / Insurance

- Meiji Yasuda Life Insurance Company
- Seven Bank, Ltd. \*

#### Retail

- Village Vanguard Co., LTD.
- Lawson, Inc.
- Pan Pacific International Holdings Corporation
- BICCAMERA INC. \*
- SEVEN-ELEVEN JAPAN CO.,LTD. \*
- NITORI Co., Ltd. \*

#### **Government / Public Sector**

- Ministry of Economy, Trade and Industry
- Osaka Prefecture
- Kobe University\*

#### Part of our Alliance Partners

- Sony Corporation
- Intel Corporation
- SECURE, INC.

- Microsoft Japan Co., Ltd.
- Scenera, Inc.
- Sony Network Communications Inc.
- NVIDIA Corporation
- MACNICA HOLDINGS, INC.
- CHANGE Holdings, Inc.



# 03 Challenges and Strategies

# ► Future Initiatives



— Increase of Sales	<ul> <li>Acquisition of large accounts</li> <li>By strengthening our consulting team, we leverage the advantage of being our one-stop solution</li> <li>Strengthening alliances</li> </ul>
Improvement of Profit Margin	<ul> <li>Strengthening the stock-based business, including the licensing mode</li> <li>Increasing profit margins through the utilization of SyncLect</li> </ul>
<ul><li>Stabilization of Revenue</li></ul>	<ul> <li>Expanding recurring business through team development under a lab-type contract</li> <li>Improvement of sales ratio in the stock-based business</li> </ul>
<ul><li>Talent Acquisition</li></ul>	<ul> <li>Continuous talent recruitment, including three affiliated companies within the group</li> <li>Enhancement of internal systems</li> <li>Talent acquisition through M&amp;A</li> </ul>
Enhancement of Employee Benefits	<ul> <li>Engineers with a wide range of technical skills</li> <li>Reviewing the salary system for each group company</li> <li>Enhancement of welfare benefits</li> </ul>



# Generative AI (Challenges and Solutions for Companies Utilizing ChatGPT) Weadwaters



#### **Challenges for companies in utilizing ChatGPT**

## When specialized for corporate use

- **Security concerns**
- Lack of familiarity with the latest information
- Lack of standardized or organized prompt management
- **Character limits when using ChatGPT API**
- Inability to reference internal company knowledge (documents in Excel, Word, PDF, etc.)
- Request for training on company-specific public information via URL
- **Less GPT training accuracy in Japanese** compared to English

# **Proprietary Generative AI Solution Service SyncLect Generative Al**

## **About SyncLect Generative Al**

- Convenient feature set for further leveraging GPT.
- **Quick and cost-effective implementation after** resolving challenges.
- Azure OpenAl Service GPT-4 and ChatGPT API accessible to non-technical users





## **Generative AI (Example-1)**



#### **Support for Integrating ChatGPT into Project Management Tools**

#### **Support Description:**

Utilizing Azure OpenAl Service leads to more efficient project management operations.

#### Tasks:

Selection, integration, and optimization of relevant data validation of prompt engineering methods.

#### **Duration:**

3 months

#### **Team Size**

3 people

#### **Outcome:**

Implementation of a secure ChatBot that can provide responses exclusively for project management issues and guidance on tool utilization.

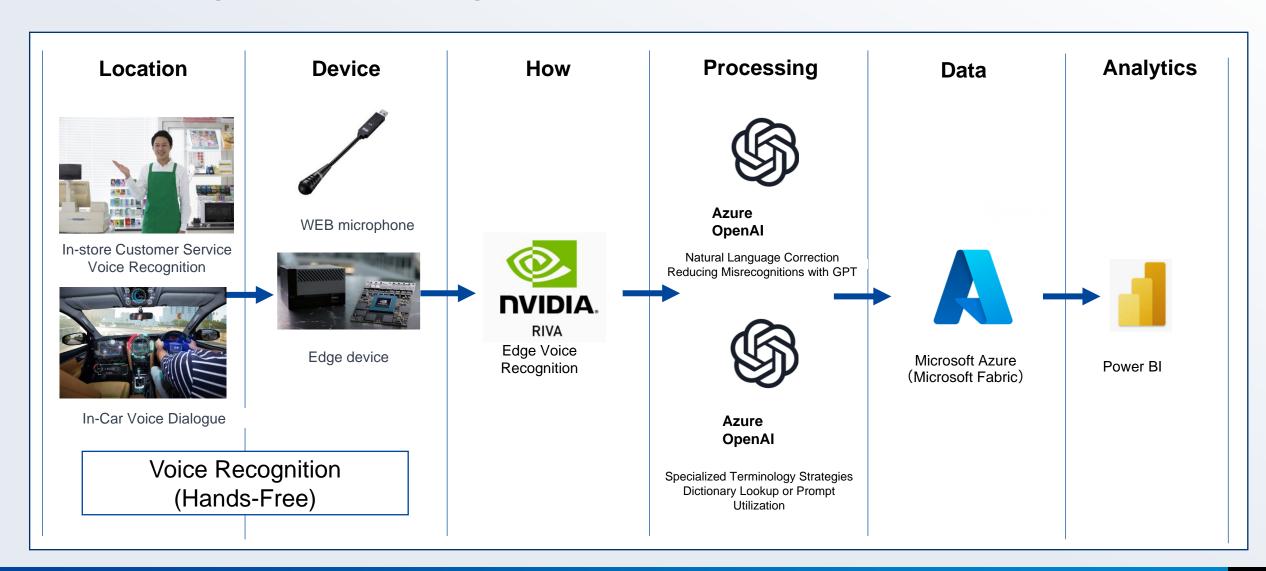




# **Generative AI (Example-2)**



## Speech Recognition with NVIDIA Edge x Azure OpenAl Service

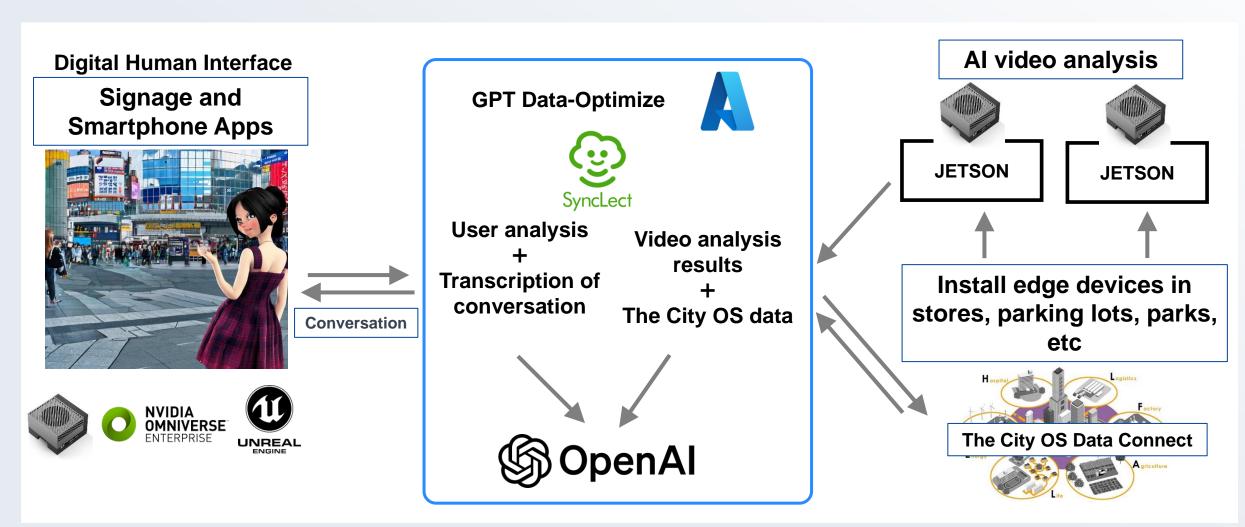




## **Generative AI (Example-3)**



Smart City: Accessing real-time data integrated with the City OS by interacting with animations and engaging in conversations displayed on signage and smartphone apps.





# The Achievement in Generative Al



Inquiries and orders for generative AI development have been steadily increasing.

## Inquiry

**Inquiry** 

order

\* Results for the past 3 months \* Major enterprise companies are counted.

#### **Our solution**

- Prompt Engineering Lab Service
- SyncLect GenerativeAl Service
- Azure OpenAl Service PowerApps bot
- Azure OpenAl Service WebUl bot

#### **Alliance Case Studies**



Microsoft's Azure OpenAl Service **Alignment with Reference Architecture Partners** 





The technical capabilities of Headwaters

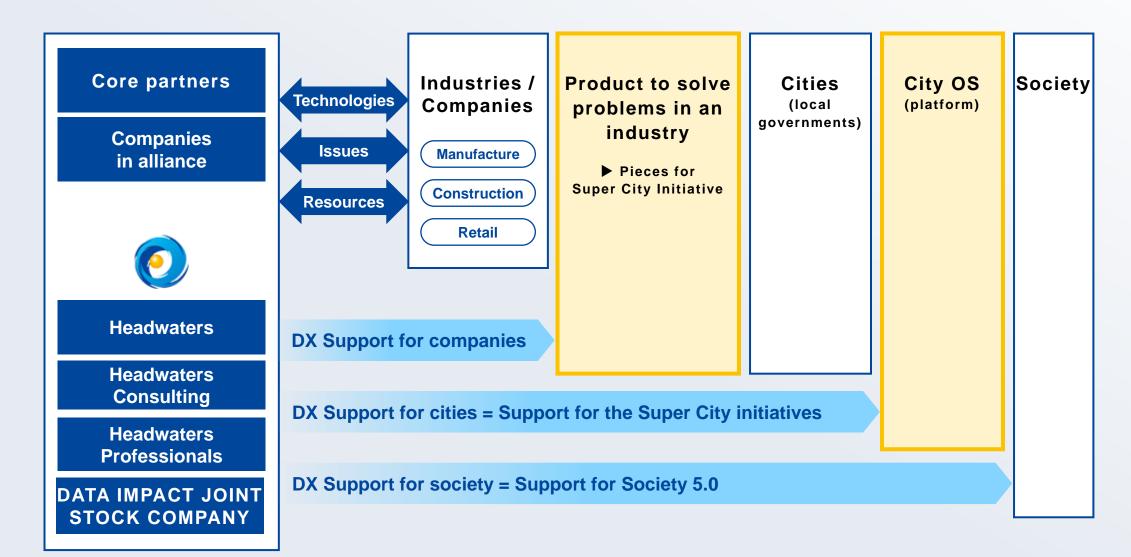
The natural language processing expertise of Rinna



# Strategy Map for Society 5.0 (Medium to Long-Term Policies)



Developing a foundation to enable close communication with industries and companies for Society 5.0





Scenario for developing a successful model for our Al and DX-related businesses





# Appendix



# **Consolidated Balance Sheets**



(Thousand yen)

	30 Jun 2022	
	Results	Composition Rate (%)
Current assets	918,375	92.9
(Cash and deposits)	748,571	75.7
(Account receivable-trade)	152,808	15.5
(Other)	16,993	1.7
Non-Current assets	70,255	7.1
(Property, plant and equipment)	26,946	2.7
(Intangible asset)	6,904	0.7
(Other)	36,373	3.7
Total assets	988,600	100.0
Total liabilities	197,076	19.9
(Current liabilities)	197,076	19.9
Total net assets	791,524	80.1
Total liabilities and net assets	988,600	100.0

31 Dec 2022	
Results	Composition Rate (%)
1,103,103	94.3
818,610	70.0
265,526	22.7
18,965	1.6
66,138	5.7
26,347	2.3
16,881	1.4
22,909	2.0
1,169,242	100.0
293,799	25.1
293,799	25.1
875,442	74.9
1,169,242	100.0

30 Jun 2023		
Results	Composition Rate (%)	
1,215,155	94.6	
846,087	65.8	
327,191	25.5	
41,875	3.3	
69,812	5.4	
31,399	2.4	
15,541	1.2	
22,871	1.8	
1,284,968	100.0	
369,380	28.7	
369,380	28.7	
915,587	71.3	
1,284,968	100.0	

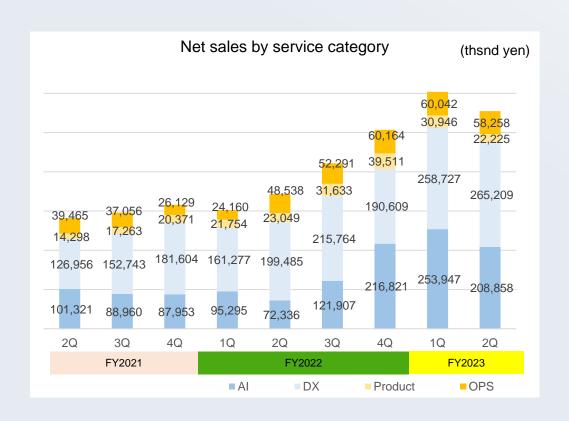


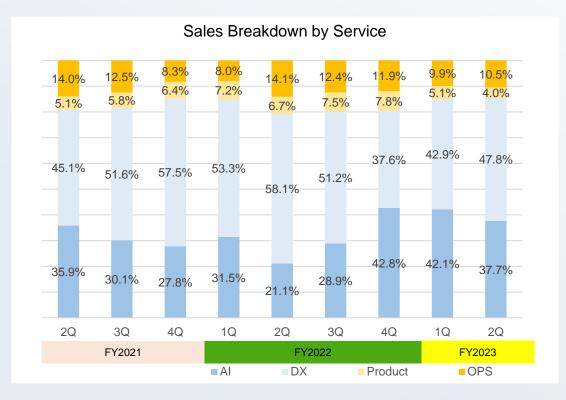
## **The Transition of Sales**



The net sales achieved the second-highest and the DX business segment reached the record high in sales.

Some unprofitable projects led to the opportunity loss in business.





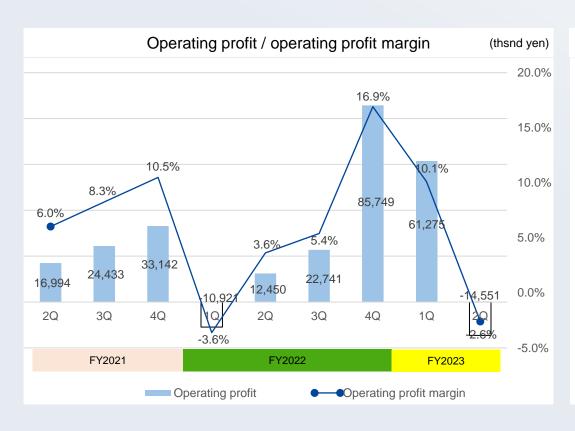


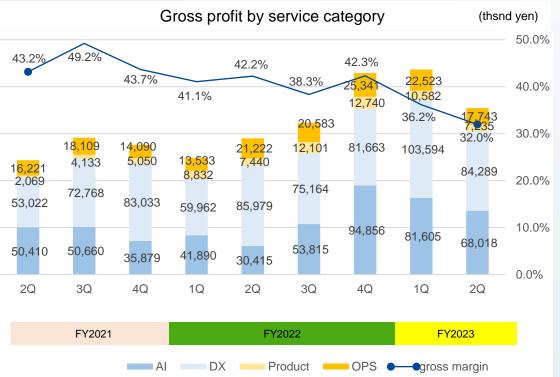
# The Transition of Operating Profit / Gross Profit by Service



In addition to some unprofitable projects, an increase in OJT projects due to steady recruitment and a rise in the partner ratio led to a decline in profit margins.

Gross profit achieved 122.2% compared to the same quarter of the previous year.



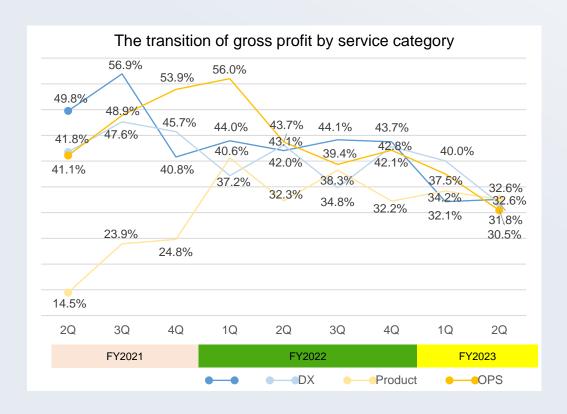


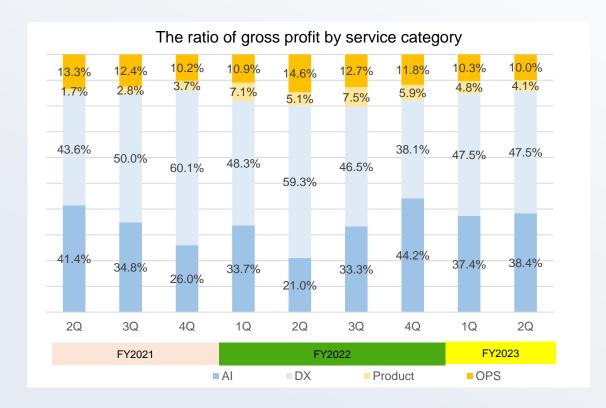


## **The Transition of Gross Profit**



Along with the increase in sales, the partner ratio has increased in each service category. The soaring unit price of partner engineers had an impact on the decline in gross profit.





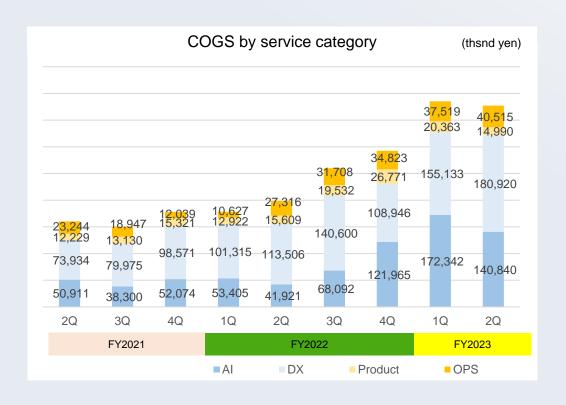


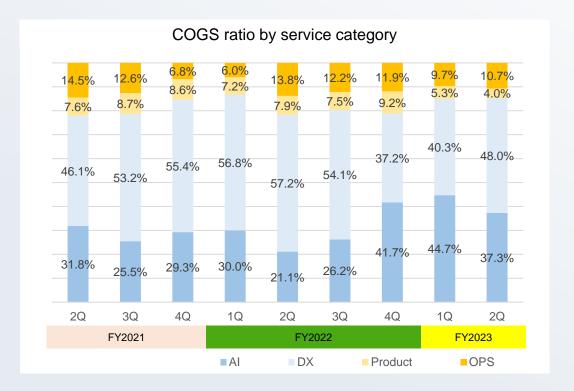
## The Transition in Cost of Goods Sold



The cost of goods sold is increasing at a rate higher than the increase in sales, 190.2% compared to the same quarter of the previous year, QoQ 97.9%.

The price surge for partner engineers is affecting the increase in cost of goods sold.





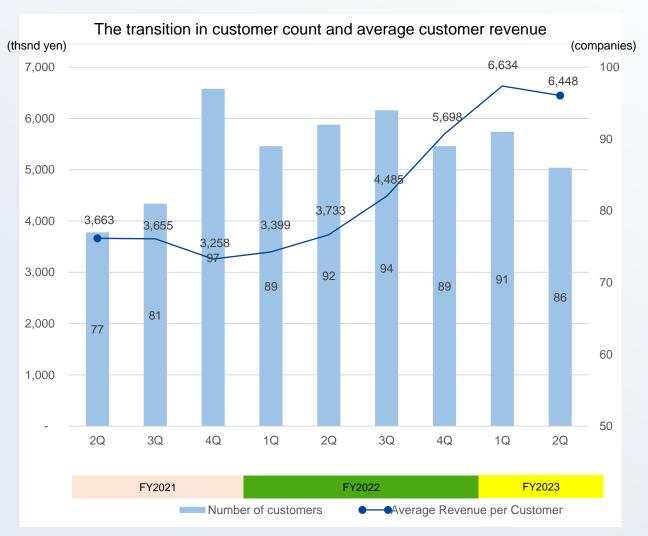


## The Transition of SG&A, Employees, Clients and Unit Price



The promotion of large accounts has helped maintain a high level of customer average transaction value. Customer Average Transaction Value: 170.7% compared to the same quarter of the previous year, QoQ 96.1%.







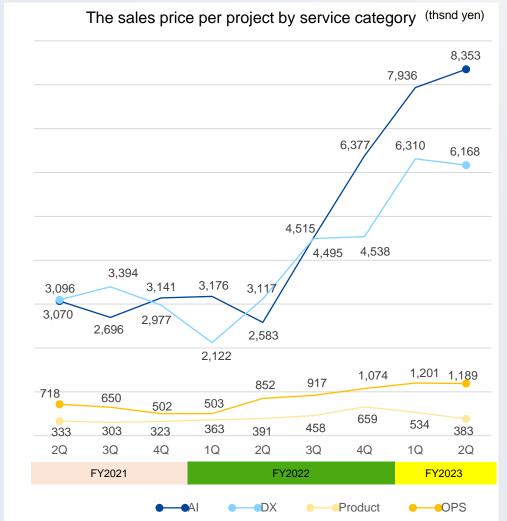
# Unit Sales Price, Number of Projects and Contractual Chain Status by Service Category Headwaters

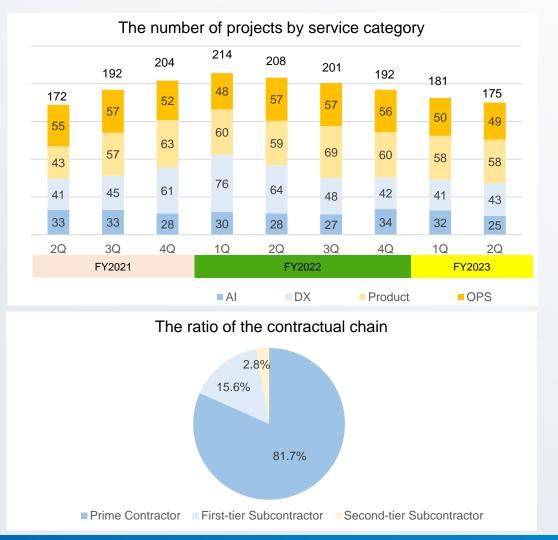


The unit sales price per project in the Al category has further increased due to changes in client demographics.

The decrease in the number of projects is due to changes in the client base and larger scale of projects, and the progress is in accordance

with the plan.







#### Addressing climate change issues and promoting diversity

**Expressed support for the TCFD recommendations.** 



**Participation in the TCFD Consortium** 



Participation in the Ministry of Economy, Trade and Industry's 'GX League



Participation in the 'OSAKA Zero Carbon Foundation'



Obtaining the 'Kurumin' certification



- Promotion of Parental Leave Uptake
- Improvement of the Short-Time Work System
- Build a Diverse Work Environment

<u>Developed the app 'Tabe nate' contributing to</u> food loss reduction



# Forward-Looking Statements



Materials and information provided in this announcement include so-called "forward-looking statements".

They are estimated at the present and are based on the assumption that involves forecasts and risks, and substantially they include uncertainties which could cause different results from these statements.

These risks and uncertainties include general industry and market conditions, and general domestic and international economic conditions, such as interest rates and currency exchange fluctuations.

In the future, even if there is new information or future events etc., we shall not be obligated to update and revise the "forward-looking statements" included in this announcement.

Headwaters Co., Ltd.

Contact: Investor Relations Dept.

ir@headwaters.co.jp

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