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Cacco Inc. | Stock Code: 4166

May 12, 2023



Financial Results for the First Quarter of Fiscal Year Ending December 31, 2023

Note: This document is an excerpt translation of the original Japanese document and is only for reference purposes. In the event of any discrepancy between this translated document and the original Japanese document, the latter shall prevail.

Our Business / Main Services and the Products of the Company

Utilizing our technology and know-how in security, payments, and data science, we develop and provide SaaS-type algorithms to support game changers with their various challenges.

Fraud Detection Service



Fraudulent Order Detection Service

O-PLUX

Detect fraudulent orders such as payments in arrears in EC payments and resale in real time.

Unauthorized Access Detection Service

O-MOTION

Real-time detection of unauthorized access and login at financial institutions and member sites, etc.

We hold three patents in the area of fraud detection.

Patent No. 6534255

Patent No. 6534256

Patent No. 6860156

Payment Consulting Service

Provide payment systems and consulting services for the BNPL business, mainly for BNPL*2 operators. Use **O-PLUX** as the screening engine.

BNPL Settlement Package

SaaS-type BNPL system

Release the “SaaS-type BNPL system,” a BNPL settlement package that can be installed without initial investment.

This is provided not only to payment service providers, but also to EC shopping carts and major EC businesses, etc. It is intended to develop new customer segments in the BNPL market.

Data Science Service

Develop and provide data analysis and algorithms using AI, statistics, and mathematical optimization techniques.

In the course of promoting the business, plan and develop our new SaaS-type services while expanding our business domain and creating new revenue opportunities.

*1 TOKYO SHOKO RESEARCH, LTD., “Survey on the number of EC sites in Japan introducing paid fraud detection service,” (as of the end of May 2022)

*2 BNPL: Abbreviation for Buy Now Pay Later, post-payment settlement

Our Business / Cacco's Main Business — Rapidly increasing information theft and fraud crimes —

The number of fraud crimes involving the misuse of information stolen through phishing and cyber-attacks is increasing rapidly, and countermeasures are urgently needed.

Information theft

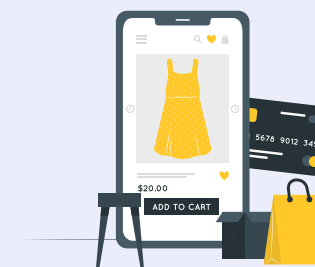


Unauthorized use
of credit cards

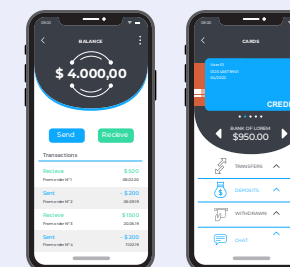
Unauthorized
access

Fraud crimes involving the misuse of information stolen

Online shopping Fraudulent orders

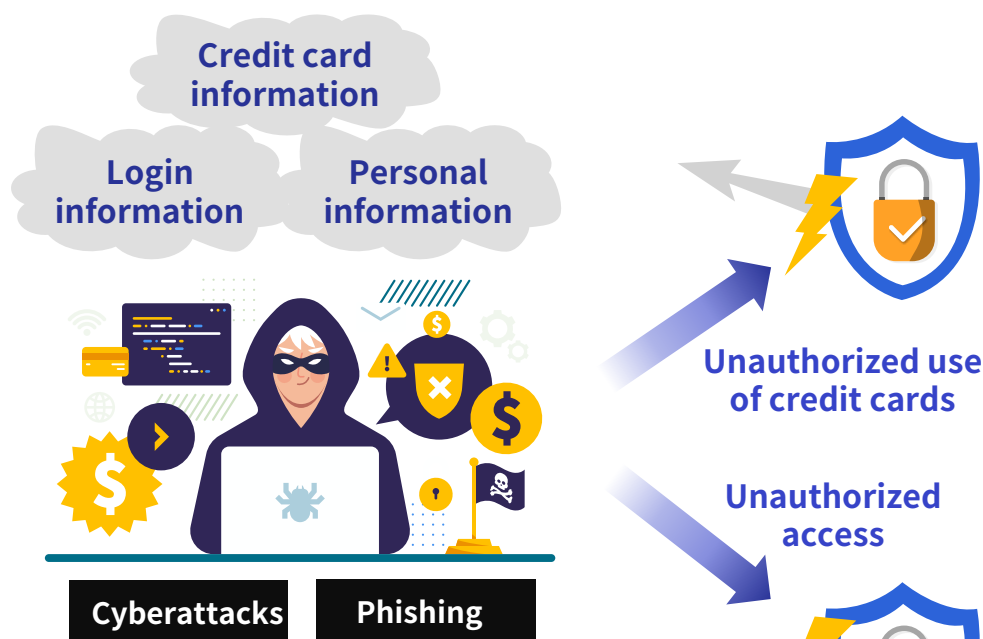


Internet banking Unauthorized remittances



Our Business / Cacco's Main Business — Cacco's fraud detection service —

Cacco's fraud detection service is No. 1 in the number of installations in Japan*, contributing to the construction of a safe and secure EC infrastructure.



Detect fraud

Fraudulent Order Detection Service

O-PLUX

- ◆ No. 1 in Japan in terms of number of installations for 4 consecutive years in a row
- ◆ Sharing of fraudulent information on a cumulative total of actually implemented 20,000 sites
- ◆ Well-connected with EC service cart systems

Unauthorized Access Detection Service

O-MOTION

- ◆ Adopted by securities firms and banks
- ◆ Automatic detection of bots and spoofing
- ◆ Patented terminal identification technology

Construct a safe and secure EC infrastructure

Safe and secure online shopping



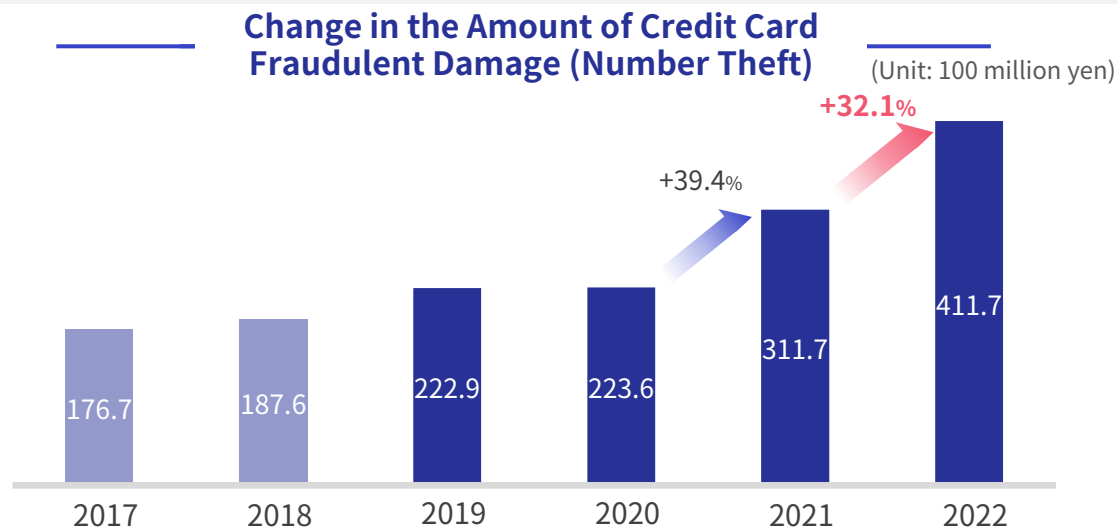
Safe and secure Internet banking



* TOKYO SHOKO RESEARCH, LTD., "Survey on the number of EC sites in Japan introducing paid fraud detection service," (as of the end of May 2022)

The market for fraud detection services is expected to grow further as society's demand for fraud countermeasures continues to increase.

- In response to the rapid increase in fraud damage, regulations regarding anti-fraud measures have been tightened year after year, including revisions to the Installment Sales Act and updates of credit card security guidelines.



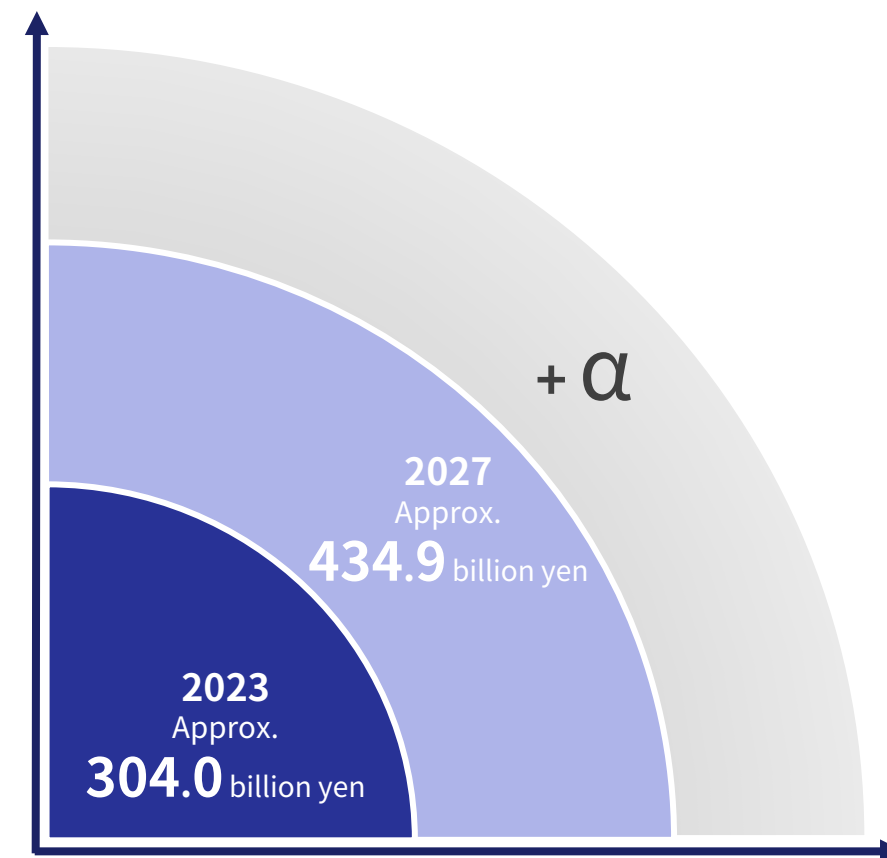
Source: Japan Consumer Credit Association, "Status of Damage from Unauthorized Use of Credit Cards," March 2023

Ranking of Fraudulent Activities after Unauthorized Access Has Occurred

1st place	Unauthorized remittances through Internet banking
2nd place	Unauthorized purchases from Internet shopping
3rd place	Unauthorized acquisition of information, such as snooping on e-mails
4th place	Tampering with online gaming and community sites
5th place	Sending information while pretending to be an acquaintance

Source: National Police Agency, Ministry of Internal Affairs and Communications, and Ministry of Economy, Trade and Industry, 2022 "Status of Unauthorized Access Activities and Research and Development of Technologies Related to Access Control Functions (FY2021)"

Market Size of Fraud Detection Services in Japan



Source: "FRAUD DETECTION AND PREVENTION Global Market Trajectory & Analytics GLOBAL INDUSTRY ANALYSTS, INC. May 2021" (Calculated at \$1 = ¥130)

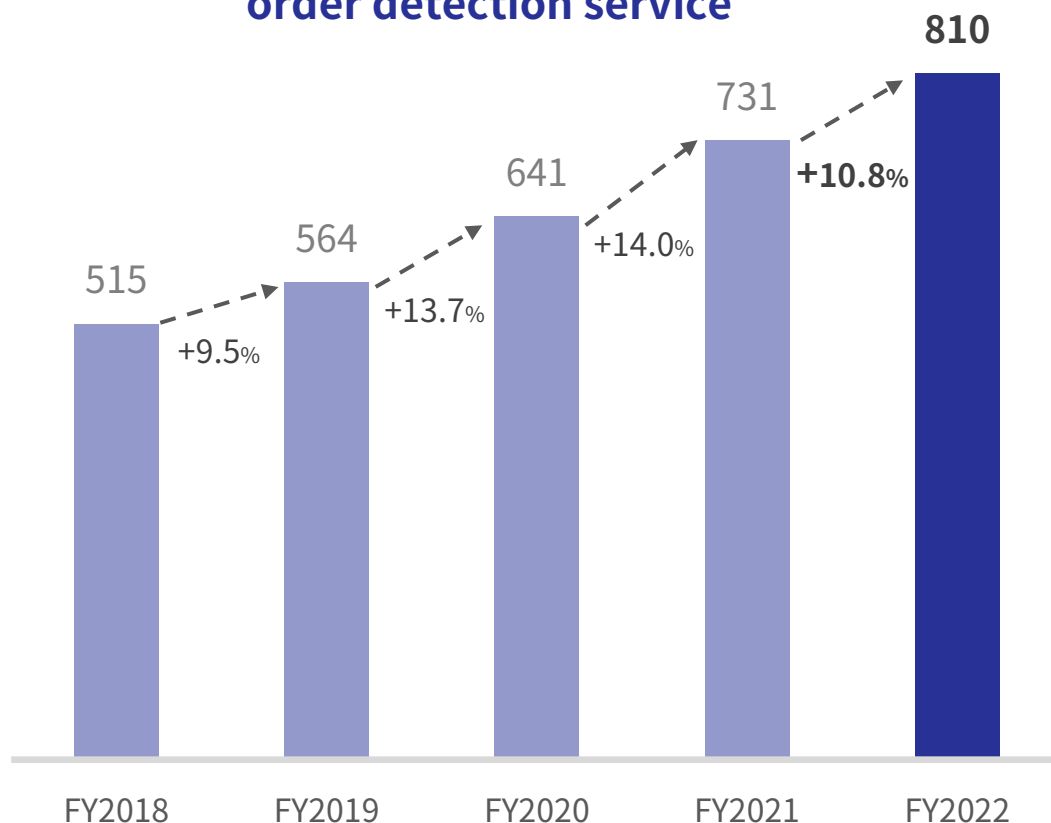
Our Business / Cacco's Main Business — Sales of Cacco's fraud detection service —



Sales of Cacco's fraud detection service are growing steadily in proportion to the rising social demand and the expansion of the market size of the fraud detection service market.

(Unit: million yen)

Sales of O-PLUX, a fraudulent order detection service



(Unit: million yen)

Sales of O-MOTION, an unauthorized access detection service



Cacco Evolutionary Purpose

Shaping the “Let’s Do It” for a next game changer

The Cacco Evolutionary Purpose embodies our desire to contribute to the development of the Japanese economy by supporting people and companies that are taking on the challenge of making the world a better place.

When the company was founded, there was little fraud in Internet transactions, and there were no fully functional fraud detection services in the world. But we believed that in the near future, there would be a wide variety and high volume of fraudulent activities in all Internet transactions, including e-commerce.

Almost a decade later, as we predicted, fraudulent activity is occurring in all kinds of Internet transactions, and the methods are becoming more complex, evolving and expanding. Since the release of O-PLUX in 2012, we have continued to develop it so that it can adequately respond to evolving threats, and as a result, it is currently the No. 1* installed security solution in Japan.

As a company that creates new value through security, payment, and data science technologies, Cacco will continue to strive to realize the Cacco Evolutionary Purpose and sustainably increase its corporate value.



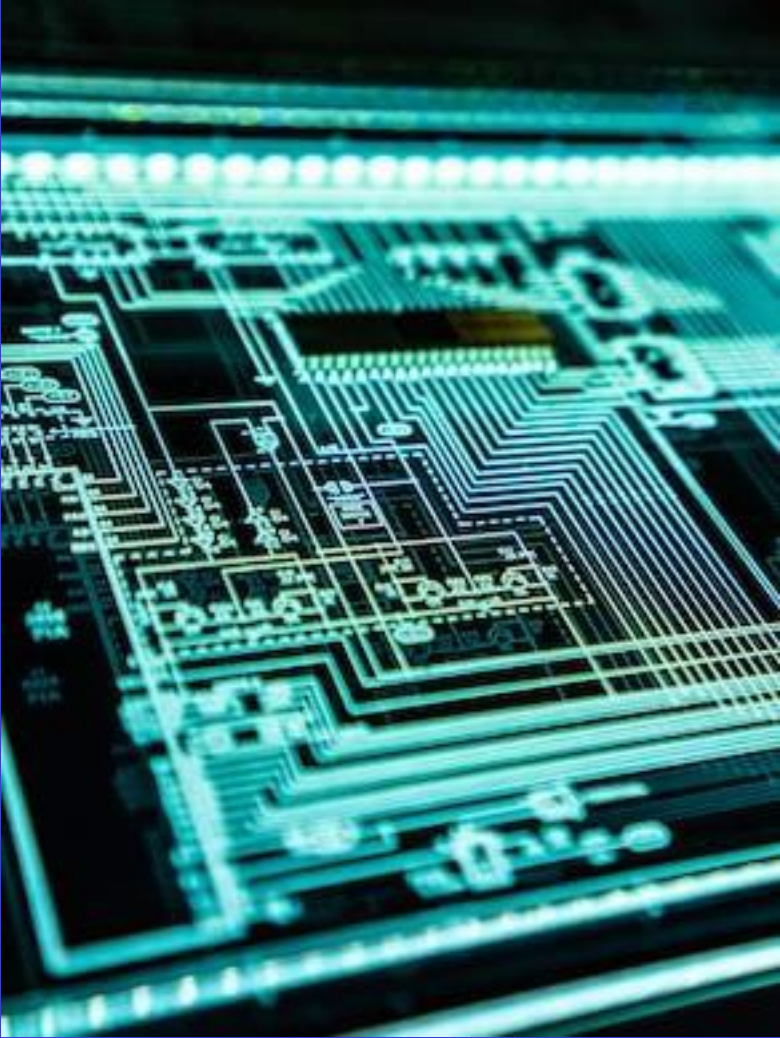
* TOKYO SHOKO RESEARCH, LTD., “Survey on the number of EC sites in Japan introducing paid fraud detection service,” (as of the end of May 2022)

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- 2 Forecast of Financial Results for FY2023
- 3 Growth Strategy
- 4 Appendix (Corporate Overview, Business Description, Other Materials for Reference)

Financial Results for FY2023 1Q

Financial Results for the First Quarter of the
Fiscal Year Ending December 31, 2023



Financial Results for FY2023 1Q / Highlights in Figures

Net sales

263 million yen

YoY **+7.0%**
Plan progress **28.2%**

O-PLUX recurring revenue*

196 million yen

YoY **+7.9%**

* Monthly fee charged as a fixed amount + Examination fee charged on a pay-per-use basis based on the number of examinations

Rate of O-PLUX cancellations
(1Q average)

0.10%

YoY **-0.33pt**

Ordinary income

29 million yen

YoY **-40.0%**

Recurring revenue ratio in total
net sales

74.8%

YoY **+0.6pt**

O-PLUX screening volume
(1Q cumulative)

17.28 million cases

YoY **+7.9%**

Improve the added value of products

Addition of new functions

- Expansion of the functions of O-PLUX, the fraudulent order detection service

-Connect with chatbot tool “qualva” and chat payment service “BOTCHAN Payment”

By connecting with chatbot tool “qualva” provided by PROFESSY INC. and chat payment service “BOTCHAN Payment” provided by wevna inc., this service prevents unauthorized orders, such as those targeting affiliate commissions through chat forms, and streamlines operations such as address confirmation and identity verification by online shopping operators.

- Expanded the function of screening mismatch between Kanji and furigana in name

Improved accuracy in screening through credit master measures to check for fraud and credit card validity regarding digital content, travel, tickets, etc. that do not have shipping address information by expanding the function of screening mismatch between Kanji and furigana in name on order information.

BOTCHAN  **qualva**
*1 *2

*1 Provided by wevna inc.

*2 Provided by PROFESSY INC.

Launched new BNPL product

Launched new BNPL product

■ Launched the “SaaS-type BNPL system”

Released new BNPL service “SaaS-type BNPL System” in December 2022.

BNPL Settlement Package

SaaS-type BNPL system

Until now, EC operators have faced hurdles in introducing BNPL settlement, such as the cost of several hundred million yen for system development and the accumulation of operational know-how for handling non-payment. On the other hand, if EC operators use payment service providers that can take back the credit, they do not need such introduction costs and operational know-how, but there are certain fees to pay and issues such as the inability to accurately grasp the situation of the customer due to the lack of payment history tracking. For this reason, we have released the industry’s first “SaaS-type BNPL system,” which eliminates introduction costs and operational hurdles, and at the same time, enables maximization of revenue and understanding of customer situations.

We introduced and started providing the service to SBI FinTech Solutions Co., Ltd. as the first client.

 **SBI** FinTech Solutions

Business Domain Expansion / Overseas Expansion

Business domain expansion

Invested in Value Creation Inc. and entered into a capital and business alliance in the marketing DX domain (Ad fraud).



Overseas Expansion

Currently working on developing local distributors in parallel with negotiations with local companies considering service test introduction for creating local use cases in Indonesia.

Also preparing to develop CRM tools for e-commerce based on data science. Started research in another country in addition to Indonesia.

Financial Results for FY2023 1Q / Highlights in Results Figures

Total net sales were 263 million yen (up 7.0% year on year), operating income was 29 million yen (down 38.4% year on year), and ordinary income was 29 million yen (down 40.0% year on year).

(Unit: million yen)

	FY2022 1Q Actual	FY2023 1Q Actual	YoY change	FY2023 Forecast	Plan progress
Net sales	245	263	+7.0%	933	28.2%
(Net sales of fraud detection services)	206	222	+7.8%	761	29.2%
Operating income	48	29	-38.4%	-187	-
(Operating income margin)	19.8%	11.4%	- 8.4pt	-20.0%	-
Ordinary income	49	29	-40.0%	-190	-
(Ordinary income margin)	20.1%	11.3%	- 8.8pt	-20.4%	-
Net income (Quarterly net income)	33	19	-41.7%	-190	-

Net sales were 263 million yen, up 7.0% year on year.

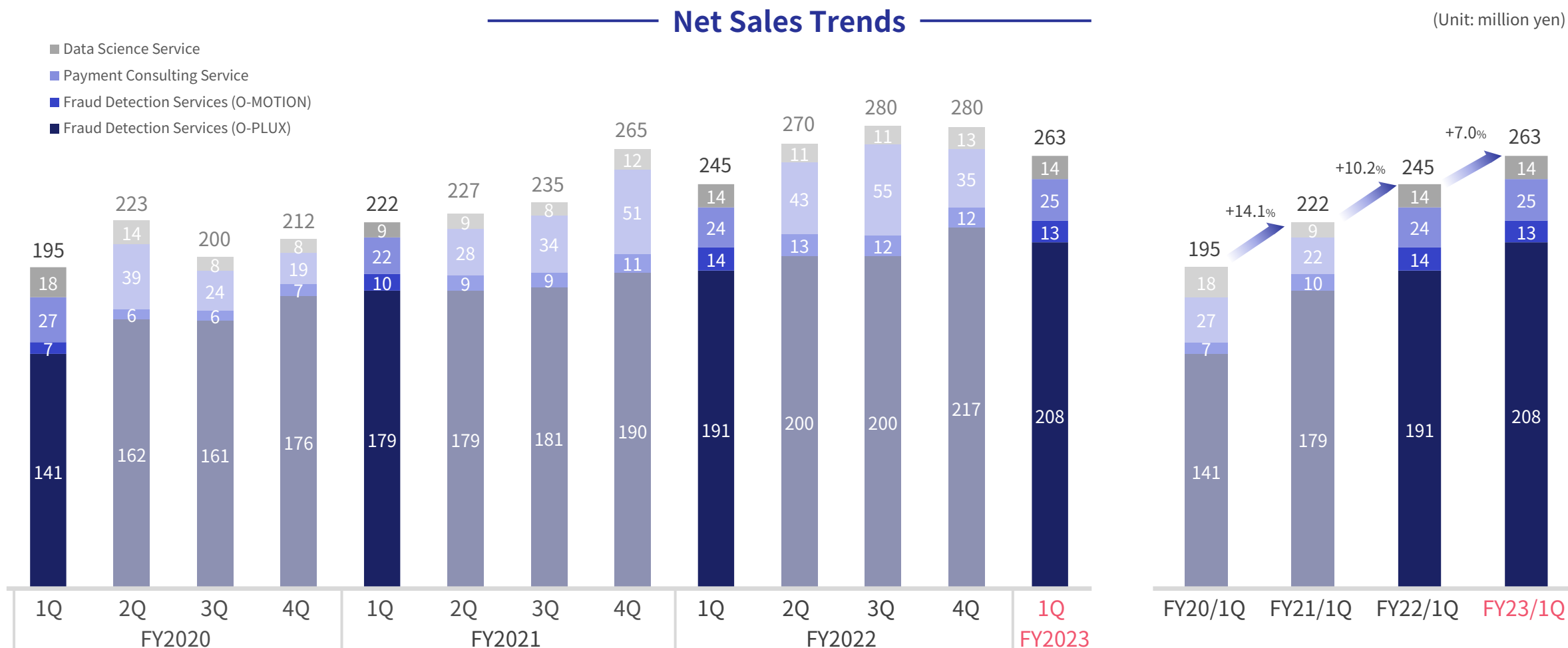
- Net sales were 263 million yen (up 7.0% YoY), 28.2% progress on plan, due to an increase in new customers for our core fraudulent order detection service.

Operating income was 29 million yen, down 38.4% year on year.

- Operating income was 29 million yen, down 38.4% YoY, due to the impact of increased depreciation resulting from the O-PLUX architecture renewal following the previous fiscal year and aggressive investment of expenses in initiatives aimed at earning future revenues, including workforce expansion focusing on sales marketing and customer success areas, business research and test marketing for Southeast Asia business development.

Financial Results for FY2023 1Q / Net Sales Trends

The O-PLUX fraud detection service, the core of our business, steadily grew by 7.0% year on year and the net sales stood at 263 million yen.



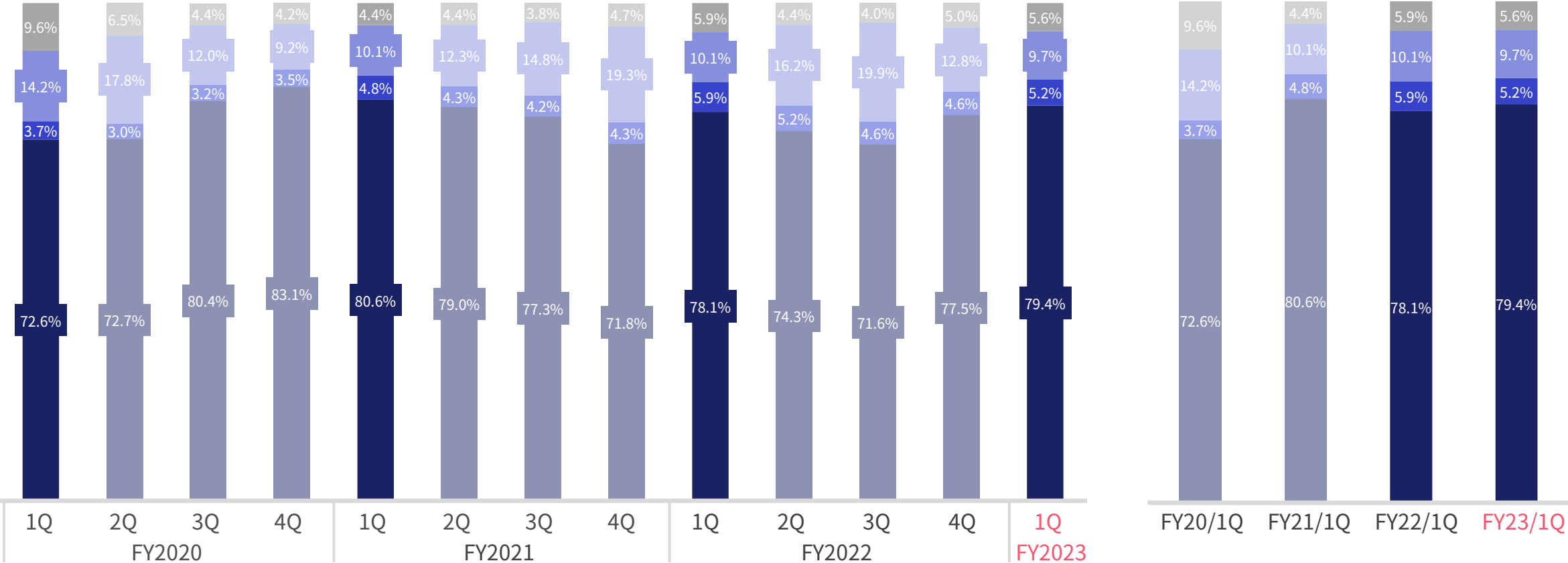
Financial Results for FY2023 1Q / Sales Composition Trends by Service



The sales composition of fraud detection services, the core of our business, reached 84.7% (up 0.6 pt YoY).

Sales Composition Trends by Service

Fraud Detection Services (O-PLUX) Fraud Detection Services (O-MOTION) Payment Consulting Service Data Science Service

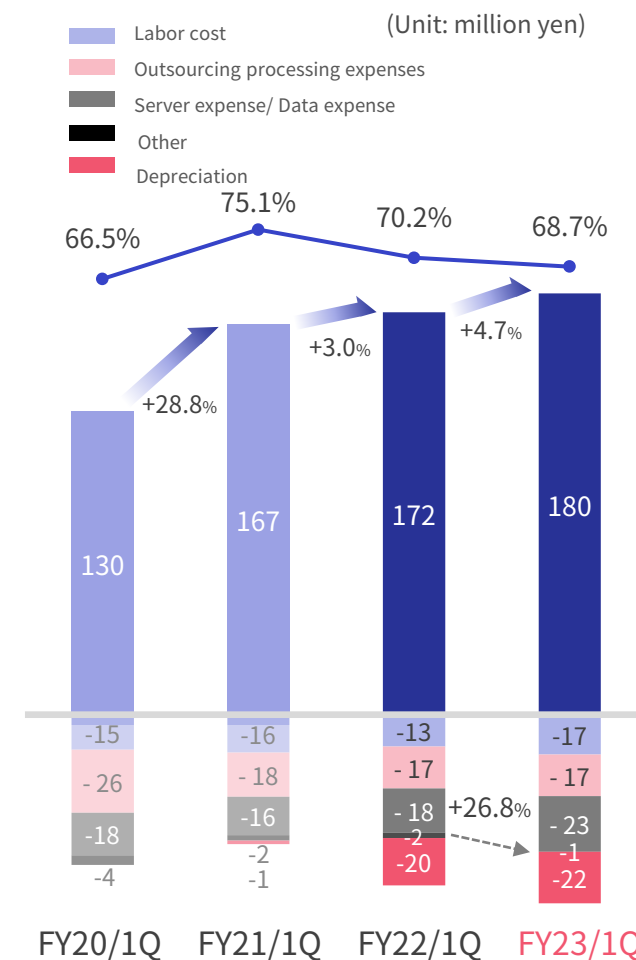
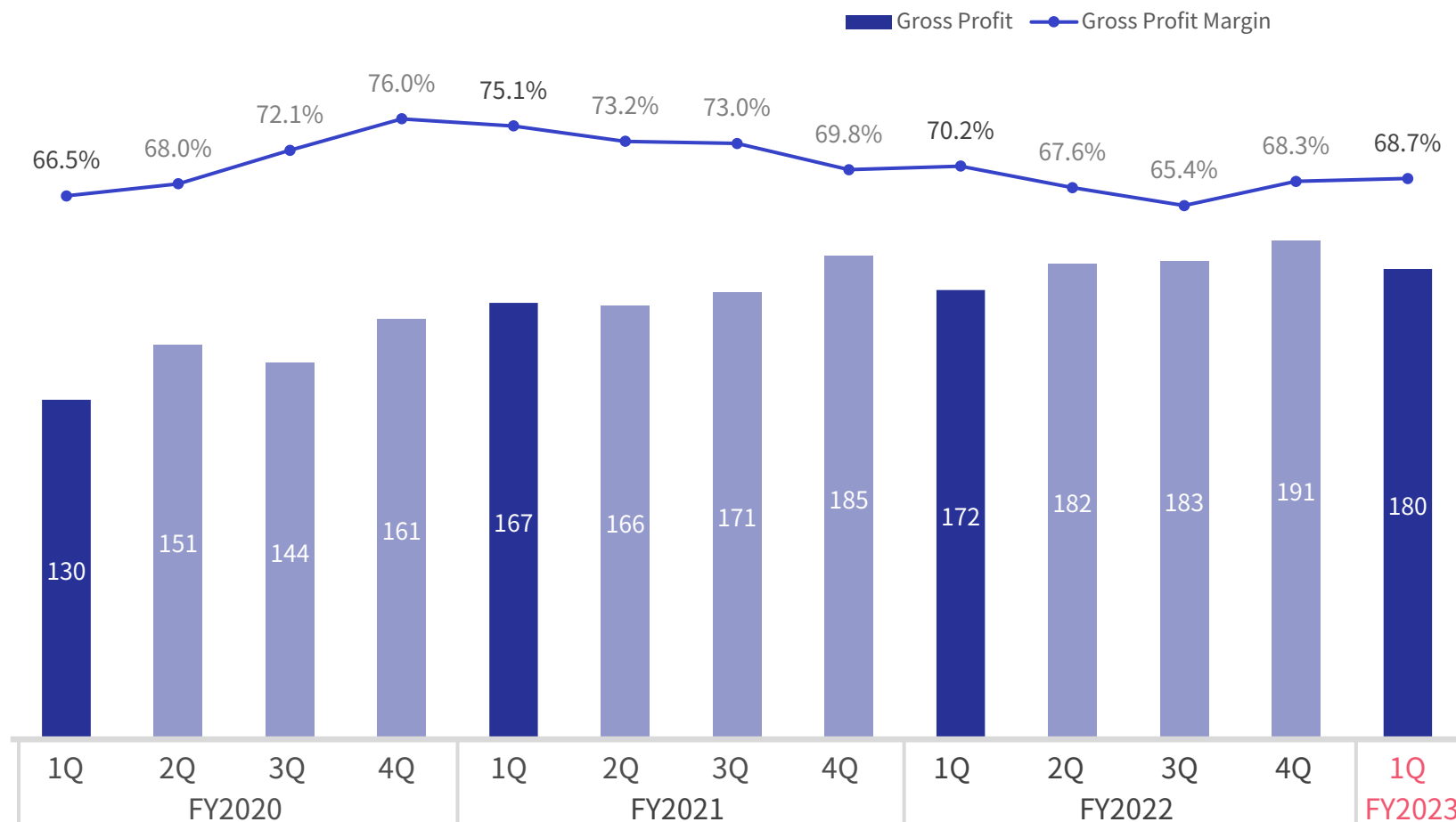


Financial Results for FY2023 1Q / Gross Profit Trends

Gross profit margin was 68.7% (down 1.5 pt YoY), and gross profit in value terms was 180 million yen (up 4.7% YoY).

- Server expenses increased mainly due to an increase in the number of screenings and yen depreciation.

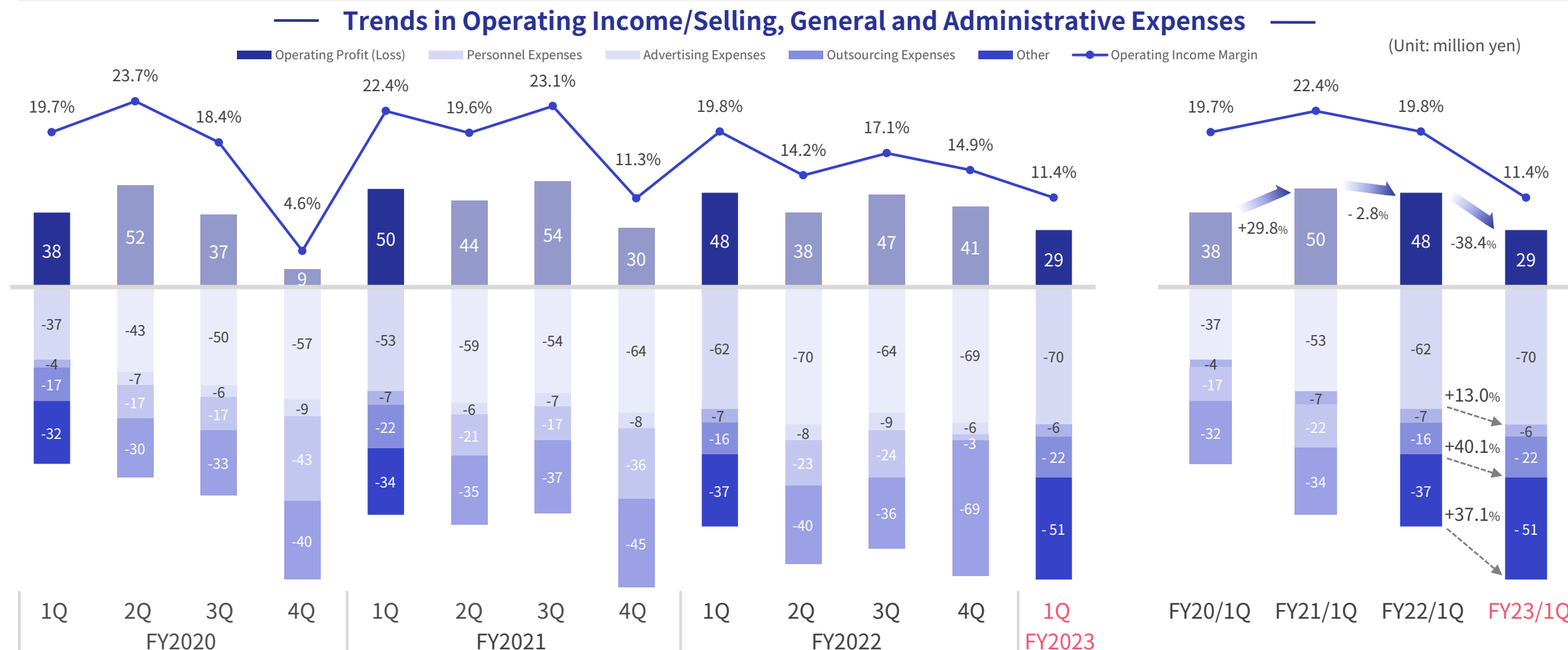
Gross Profit Trends



Financial Results for FY2023 1Q / Trends in Operating Income and Selling, General and Administrative Expenses

Operating income was 29 million yen, down 38.4% year on year and operating income margin was 11.4%, down 8.4 pt year on year.

- Impact of increase in personnel costs associated with workforce expansion focusing on sales marketing and customer success, outsourcing expenses, and others (R&D expenses).



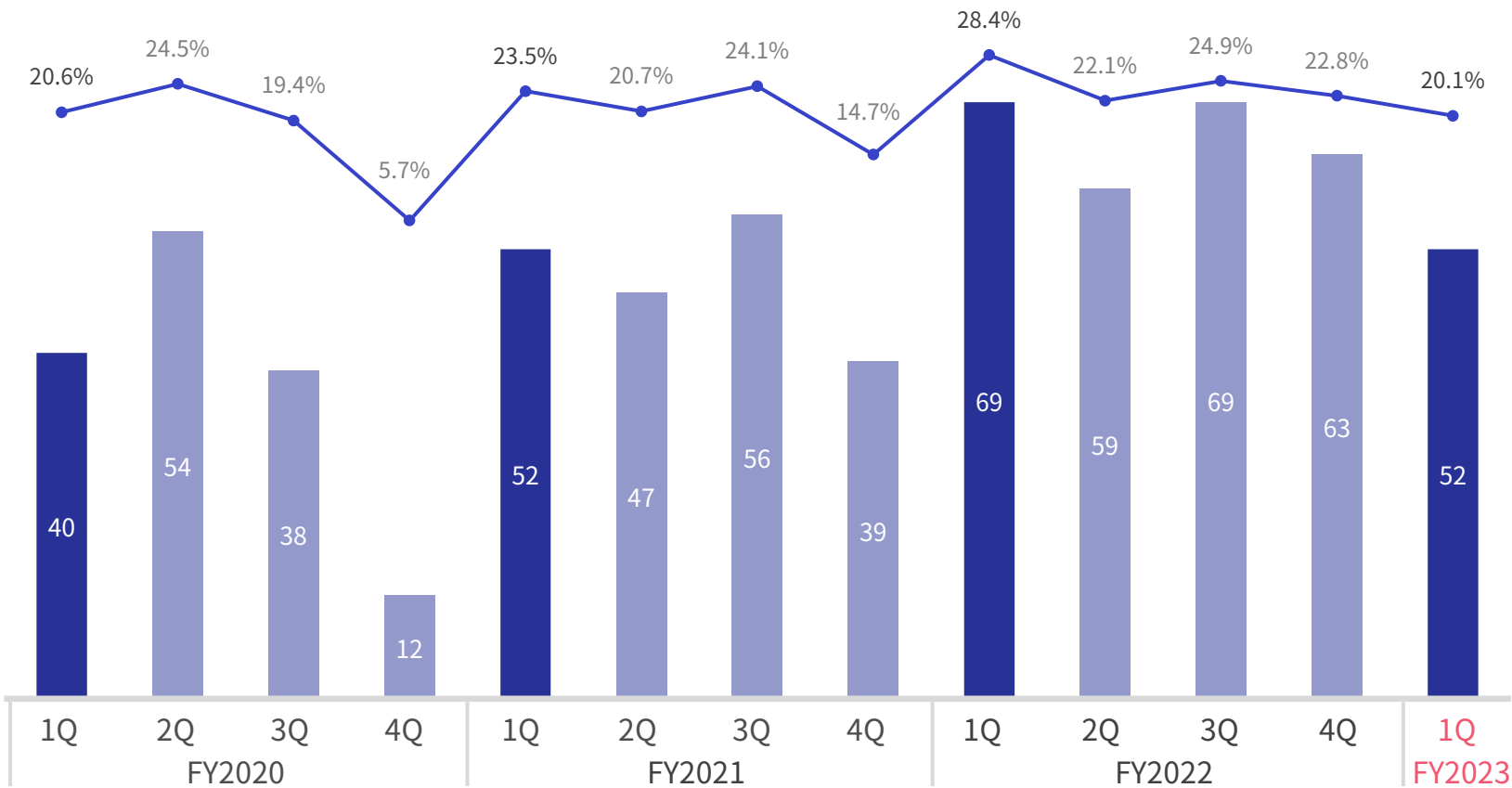
Financial Results for FY2023 1Q / EBITDA Trends

EBITDA was 52 million yen (down 24.5% YoY), and EBITDA margin was 20.1% (down 8.4 pt YoY).

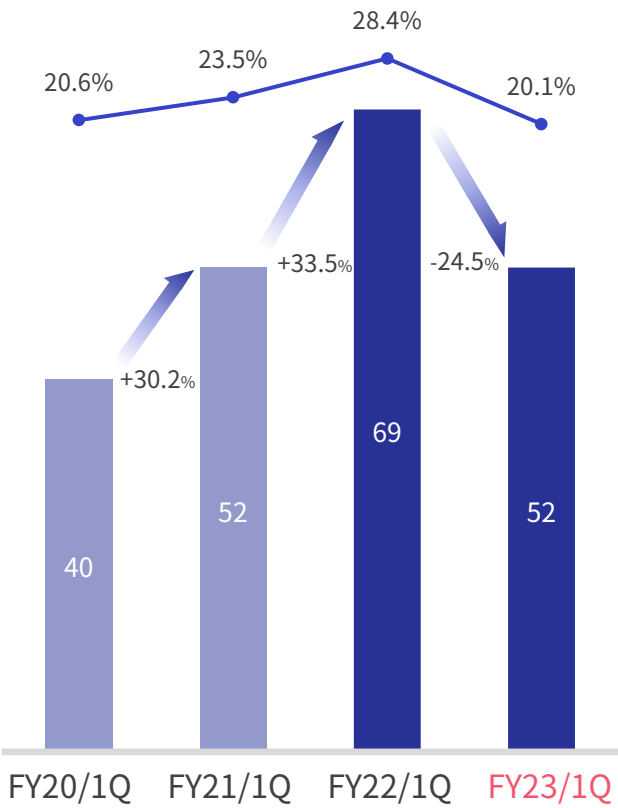
- Impact of increase in personnel costs associated with workforce expansion focusing on sales marketing and customer success, outsourcing expenses, and others (R&D expenses).

EBITDA Trends

■ EBITDA ● EBITDA Margin



(Unit: million yen)



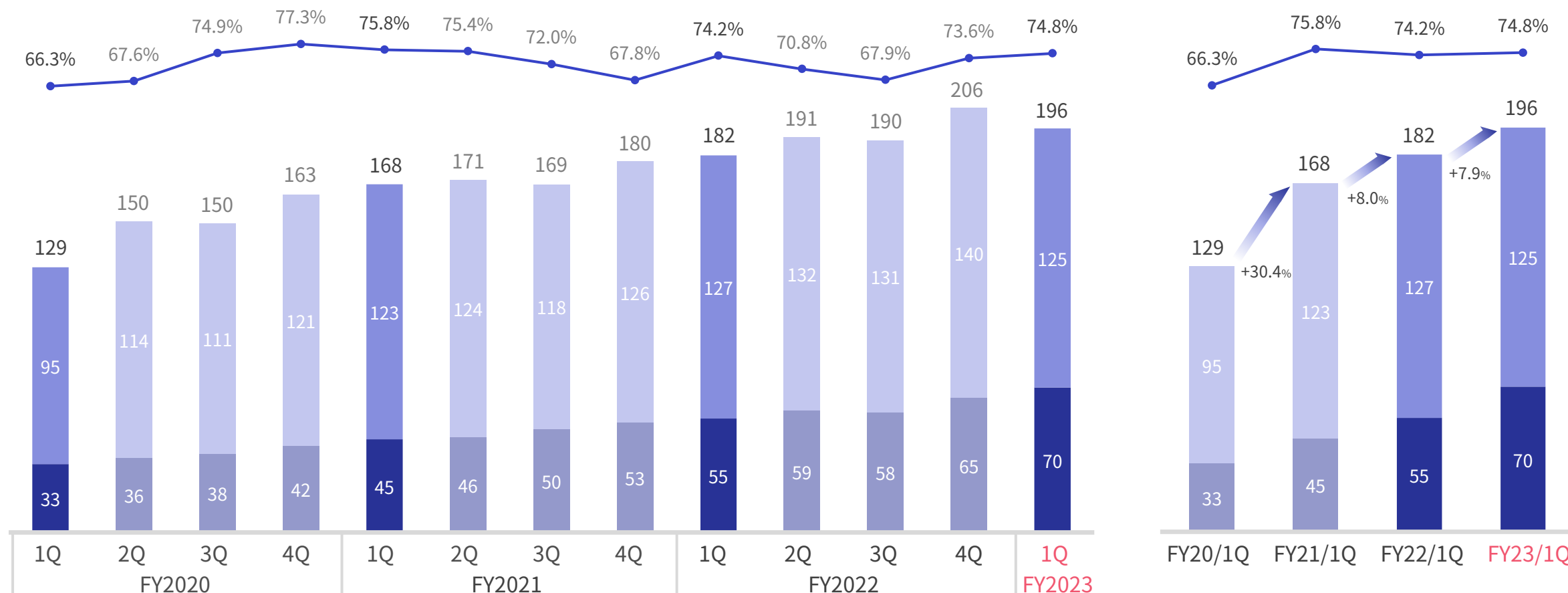
Financial Results for FY2023 1Q / Trends in O-PLUX Recurring Revenue

Annual recurring revenue of O-PLUX was 196 million yen (up 7.9% YoY), and the recurring revenue ratio was 74.8% (up 0.6 pt YoY).

— Trends in O-PLUX Recurring Revenue —

Monthly Fixed Fee Screening Fee Recurring Revenue Ratio

(Unit: million yen)



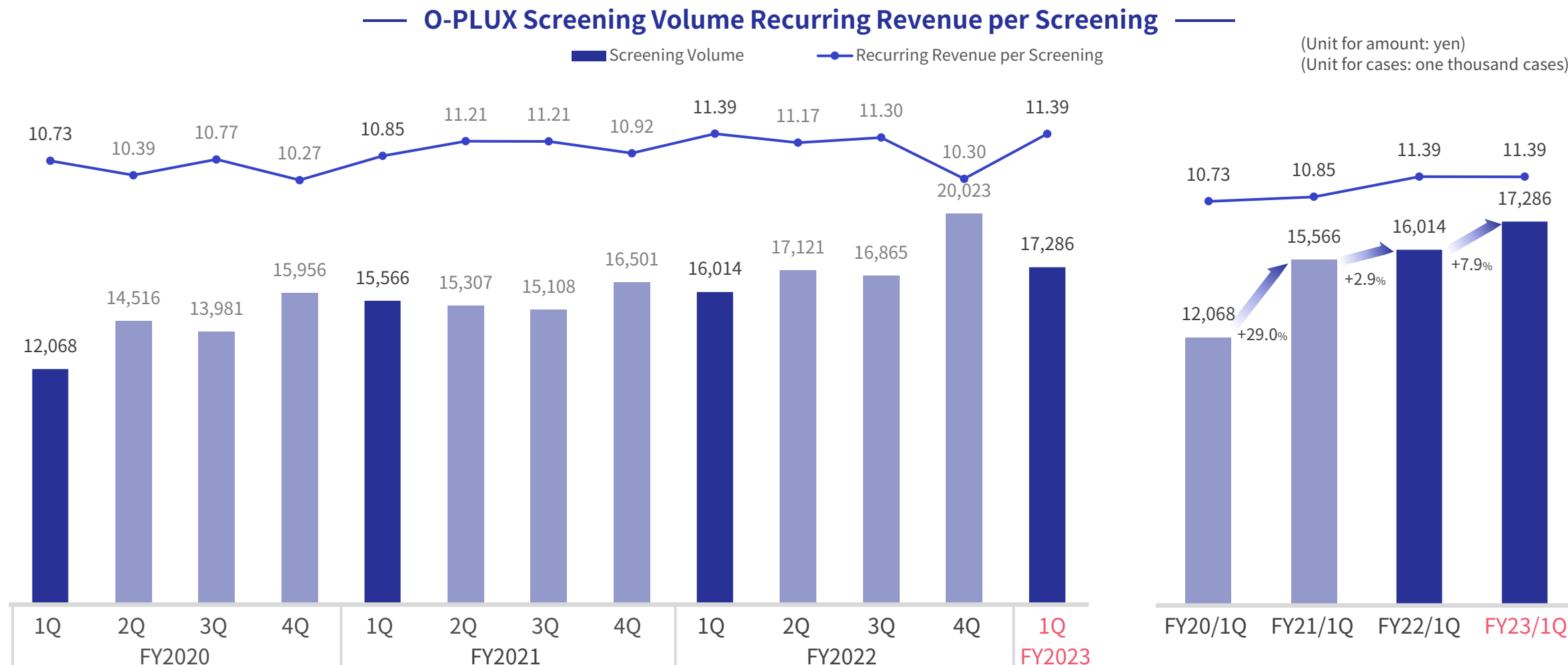
* Recurring revenue = Monthly fee charged as a fixed amount + Examination fee charged on a pay-per-use basis based on the number of examinations (including fraud detection)

* Recurring revenue ratio = Recurring revenue/Net sales (total of all services)

© Cacco Inc.

Financial Results for FY2023 1Q / Screening Volume Trends of O-PLUX

The screening volume of O-PLUX increased to 17,286 thousand (up 7.9% YoY) as a result of strong growth in new customer acquisition of EC business operators.

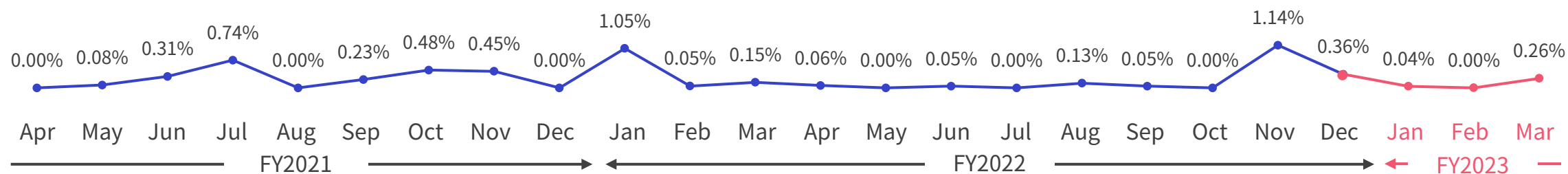


* Recurring revenue = Monthly fee charged as a fixed amount + Examination fee charged on a pay-per-use basis based on the number of examinations (including fraud detection)

Financial Results for FY2023 1Q / Monthly Churn Rate for O-PLUX

The monthly churn rate for O-PLUX remained low, generating constant negative churn.

— Gross Churn Rate —



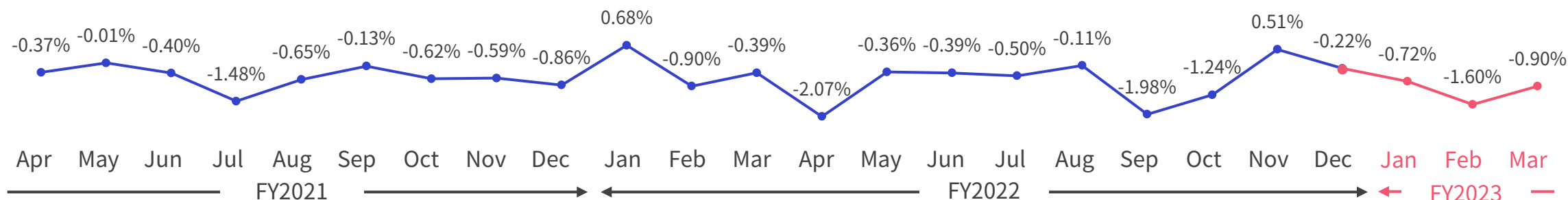
FY2023 1Q average

0.10%

(YoY -0.33pt)

* Gross churn rate = annual average of MRR from the clients who churned the current month / MRR at the beginning of the current month

— Net Churn Rate —



FY2023 1Q average

-1.07%

(YoY -0.87pt)

* Net churn rate = (annual average of MRR from the clients who churned in the current month - MRR from new contracts for current month) / MRR at the beginning of the current month

Financial Results for FY2023 1Q / Balance Sheet

(Unit: million yen)

	FY2022 4Q	FY2023 1Q	QoQ Change	Main Drivers
Current assets	1,094	1,046	-4.4%	
(Cash and deposits)	962	909	-5.5%	
Non-current assets	439	440	+0.2%	
Total assets	1,534	1,486	-3.1%	
Current liabilities	161	93	-42.2%	Decrease in accounts payable – trade and income taxes payable
Non-current liabilities	0	0	–	
Net assets	1,373	1,393	+1.5%	Increase in retained earnings due to recording of quarterly net income
Capital ratio	89.5%	93.7%	+4.7pt	



Forecast of Financial Results for FY2023

Forecast Financial Results for FY2023 / Summary

(Unit: million yen)

	FY2022 Actual	FY2023 Forecast	YoY Change
Net sales	1,076	933	-13.3%
(Net sales of fraud detection services)	865	761	-12.0%
Operating income	176	-187	-
(Operating income margin)	16.4%	-20.0%	-
Ordinary income	154	-190	-
(Ordinary income margin)	14.3%	-20.4%	-
Net income	100	-190	-
EPS (yen)	38.16 yen	-72.33 yen	-

Net sales -13.3% YoY

Due to the discontinuation of the BNPL settlement services for major clients, sales of fraud detection services and payment consulting services, which were being provided to these clients, are expected to decrease significantly.

Net sales of fraud detection services and of payment consulting services are expected to be down 103 million yen and down 52 million yen year on year, respectively.

Operating income -205.9% YoY

Due to an increase in depreciation expenses related to software (O-PLUX architecture renewal and SaaS-type BNPL system) and more aggressive investment and expense spending plan than in the previous fiscal year based on the growth strategy for future revenue growth, we expect operating income to be down 363 million yen year on year.

Forecast Financial Results of FY2023 / Transformation of Profit Structure through Steady Implementation of Strategies - Fraud Detection Service -

A major client, accounting for 30.4% of FY2022 sales, has decided to discontinue its BNPL business at the end of September 2023 (disclosed on November 9, 2022).

Although the Company's fraud detection service sales are expected to be significantly affected from FY2023 onwards, we intend to change our profit structure, which is dependent on payment service providers, through the "Expansion strategy in the EC fraud detection area," which is one of the growth strategies we have already been pursuing.

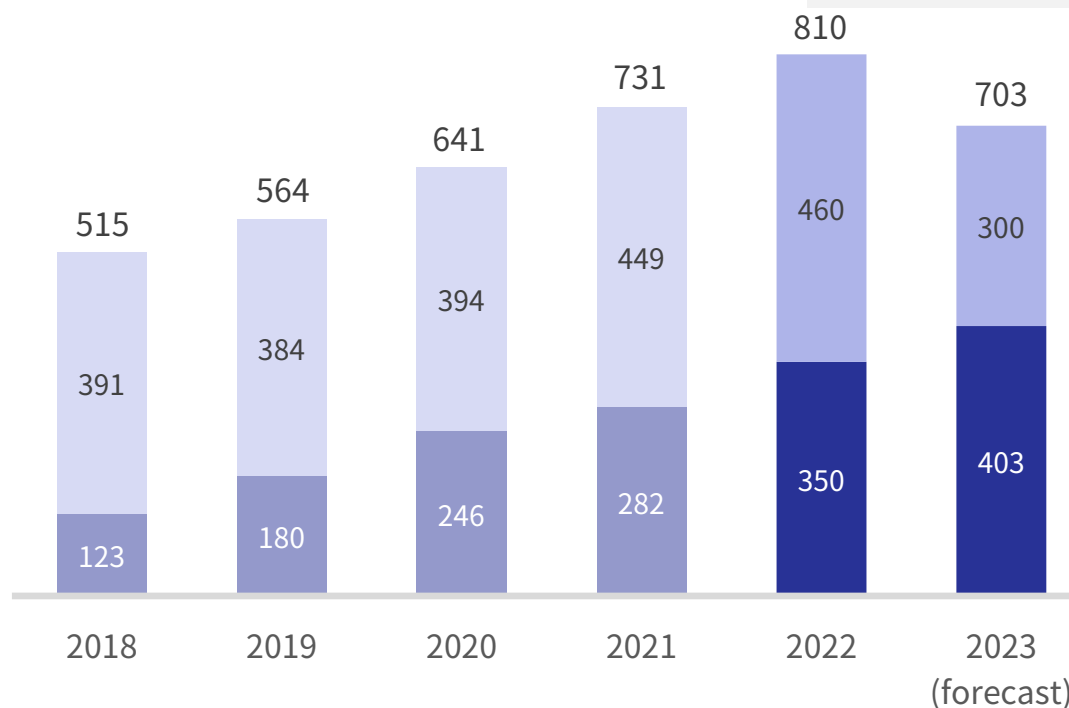
Changes in sales ratio for EC business operators and payment service providers in O-PLUX fraud detection service

(Unit: million yen)

■ EC Business Operators

■ Payment Service Provider

EC businesses (direct sales) sales ratio increased to 40% in 2022.



Expansion strategy in the EC fraud detection area

1

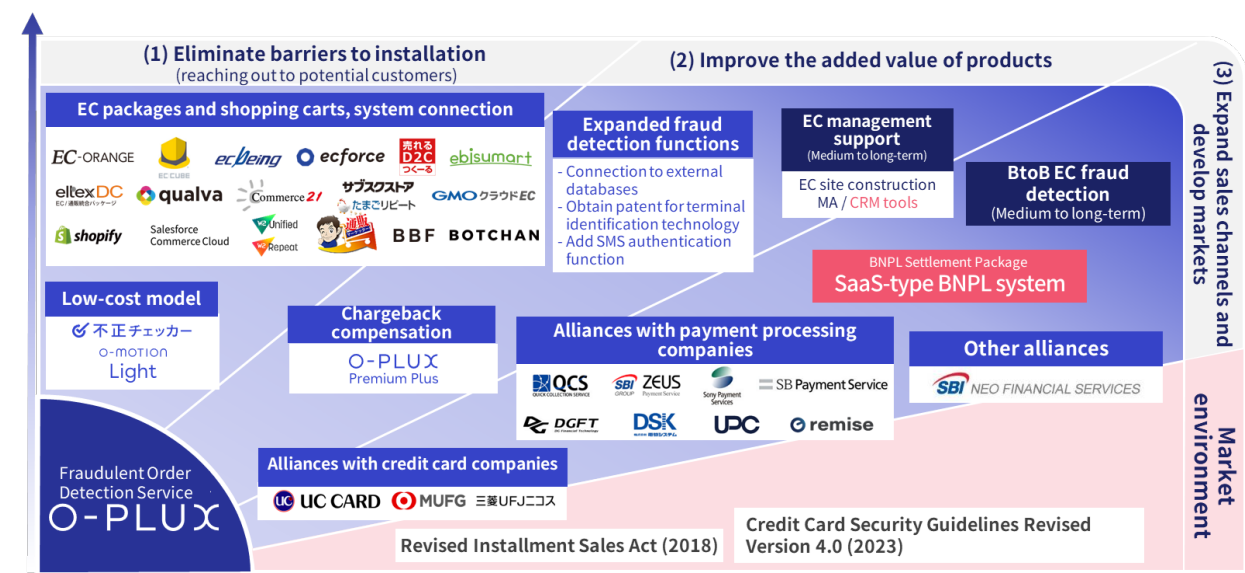
Eliminate barriers to installation
(reaching out to potential customers)

2

Improve the added value of products

3

Expand sales channels and develop markets



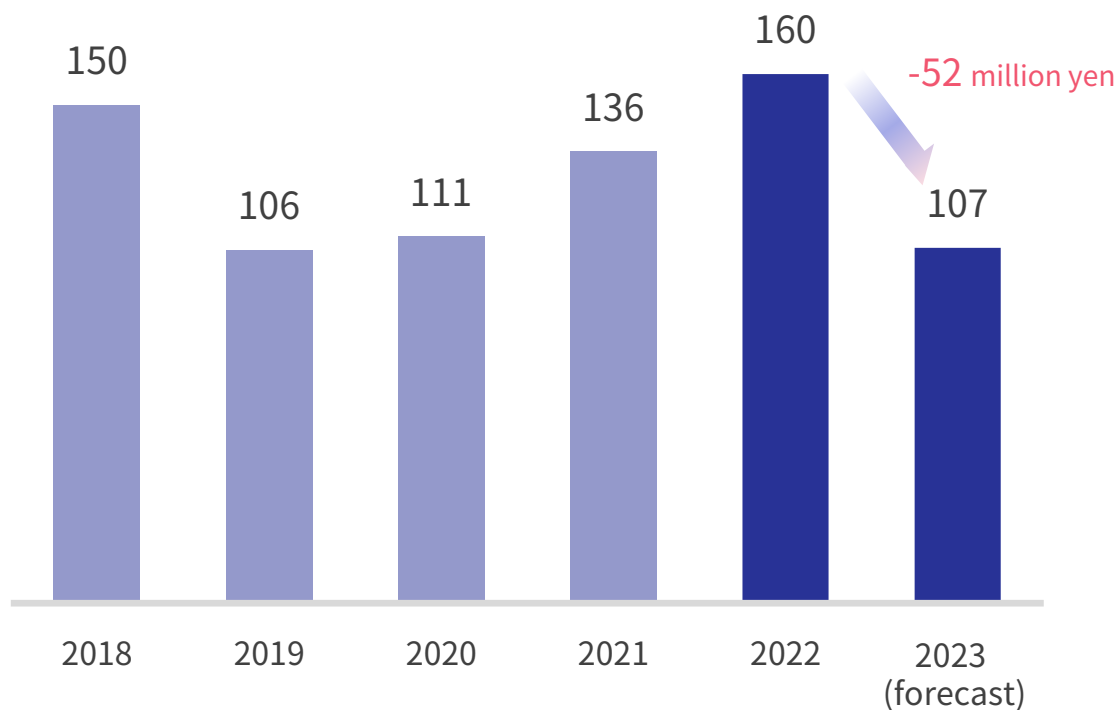
Forecast Financial Results of FY2023 / Transformation of Profit Structure through Steady Implementation of Strategies - Payment Consulting Service -



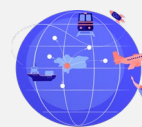
Although effects similar to those on the previous page are expected to significantly impact sales of payment consulting services in FY2023 and beyond, the release of the SaaS-type BNPL system will lower the barrier of entry into the BNPL market and enable businesses other than payment service providers that have been unable to introduce BNPL before.

Changes in Sales from Payment Consulting Service

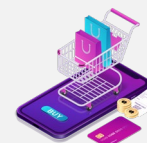
(Unit: million yen)



What the SaaS-type BNPL system should be



Expansion of BNPL for overseas operators, mainly in Southeast Asia



BNPL expansion not only to payment service providers, **but also to EC shopping carts and major EC operators, etc.**

Market Scale of BNPL settlements in Japan

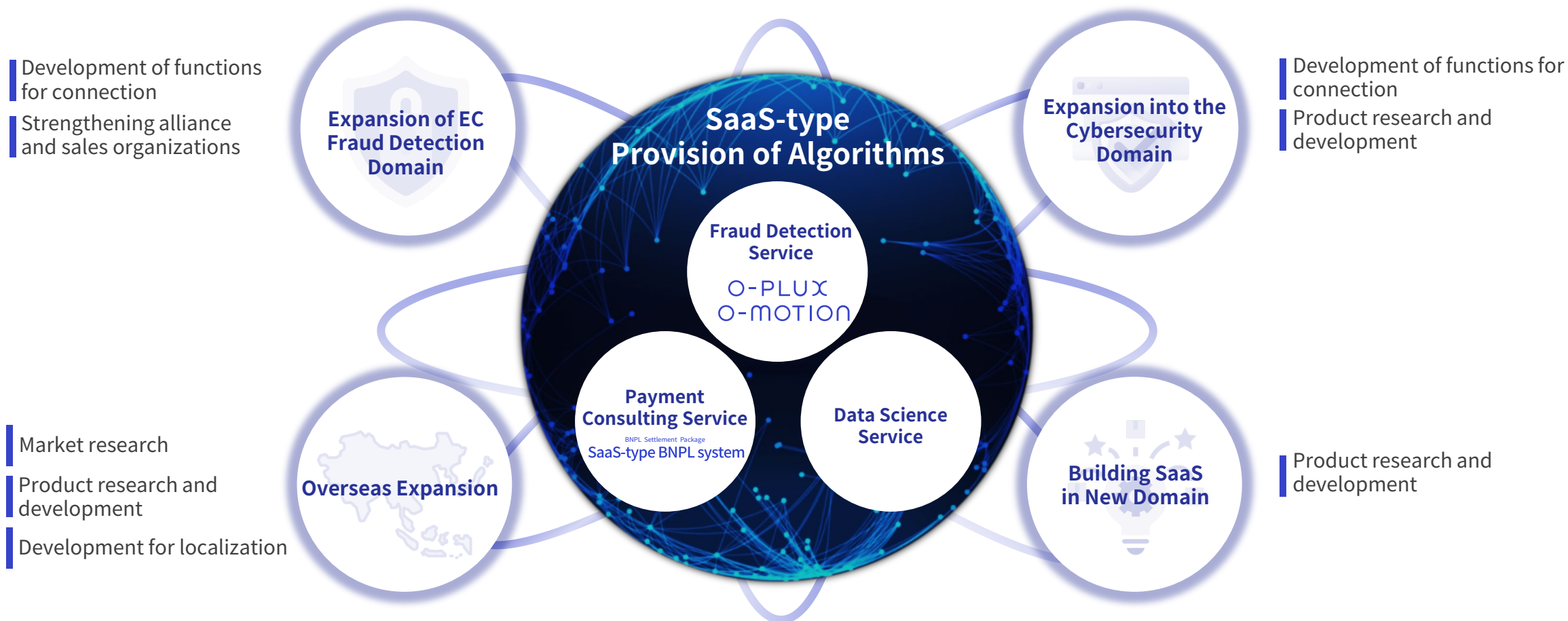
2026: **Approx. 2.0 trillion yen**

2023: **Approx. 1.5 trillion yen**

* Source: Yano Research Institute, "Current Status and Future Forecast of Online Payment Service Providers, 2023 Edition"

Forecast Financial Results of FY2023 / Investment for Future Revenue Growth

More aggressive investment and expense spending than in the previous year is planned based on the growth strategy for future revenue growth.



Growth Strategy





Growth Strategies / Our Main Services and Products

Utilizing our technology and know-how in security, payments, and data science, we develop and provide SaaS-type algorithms to support game changers with their various challenges.

Fraud Detection Service



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BNPL Settlement Package

SaaS-type BNPL system

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Data Science Service

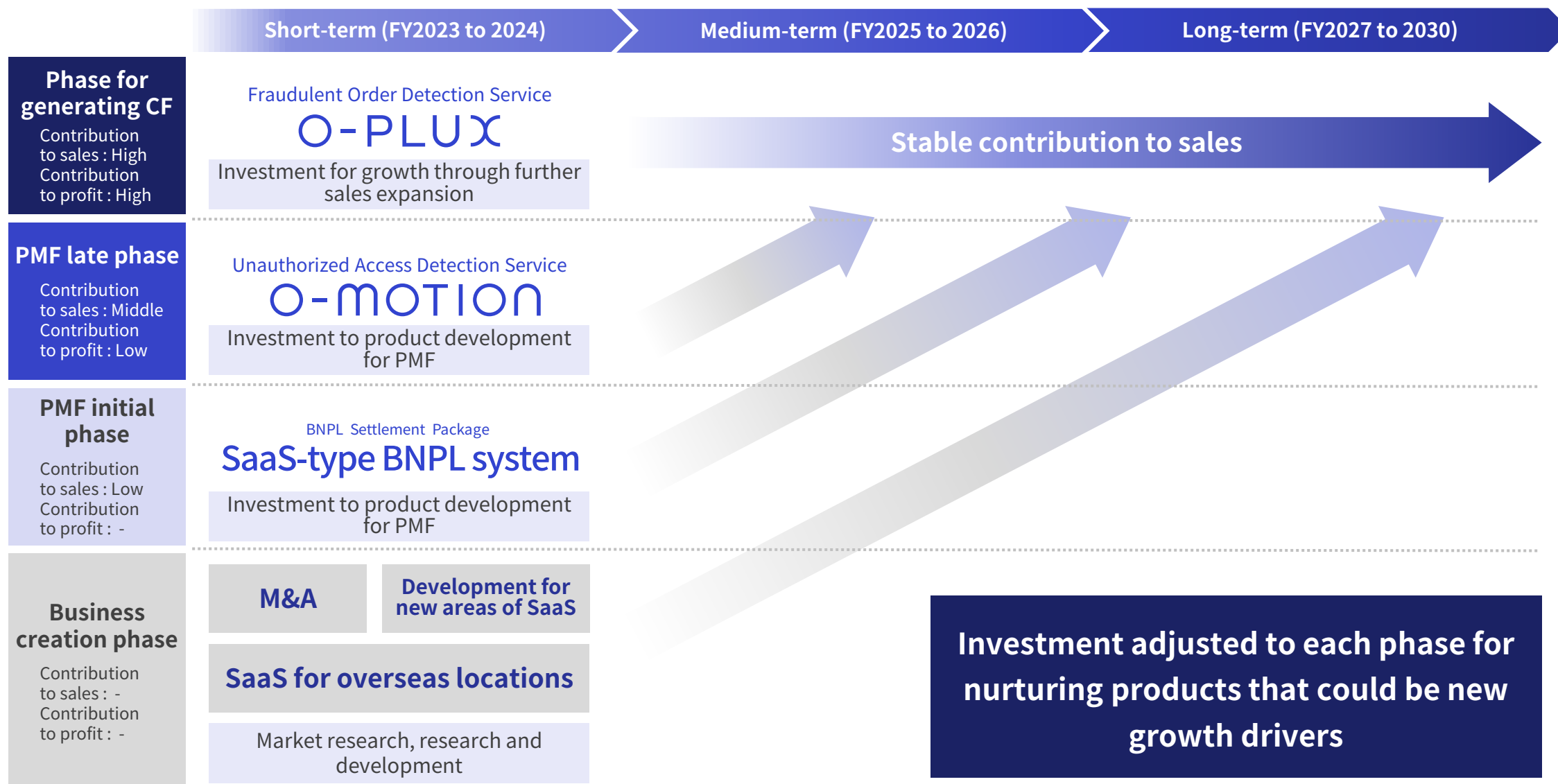
Develop and provide data analysis and algorithms using AI, statistics, and mathematical optimization techniques.

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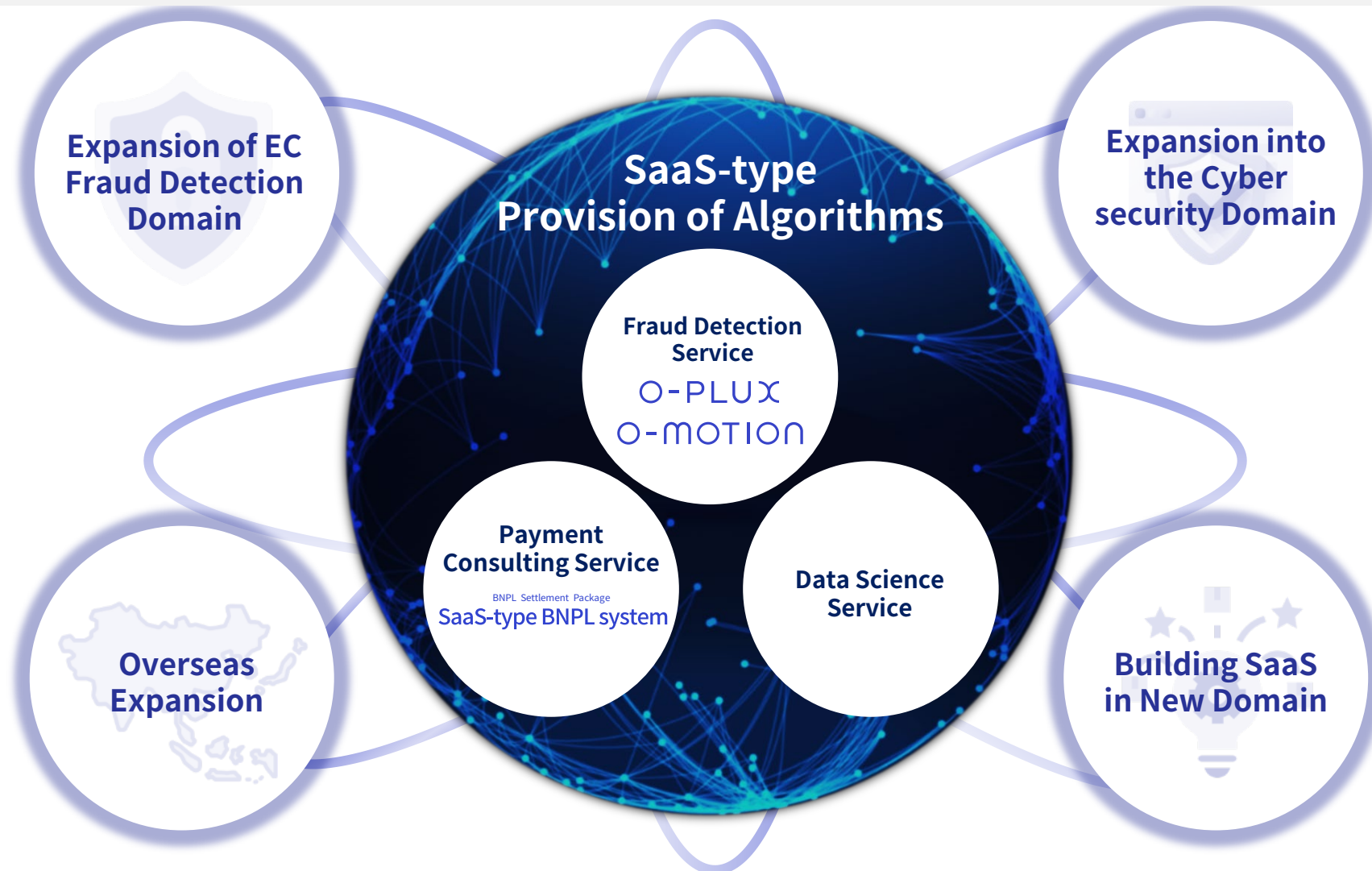
Growth Strategies / Current Status of Products and Revenue Growth Vision



*PMF: "Product Market Fit," the state in which a product (service or commodity) is fit into a particular market.

Growth Strategies / Four Strategies for Business Expansion

Through the four growth strategies, we will accelerate business expansion with a focus on fraud detection services and **creating our own market**.



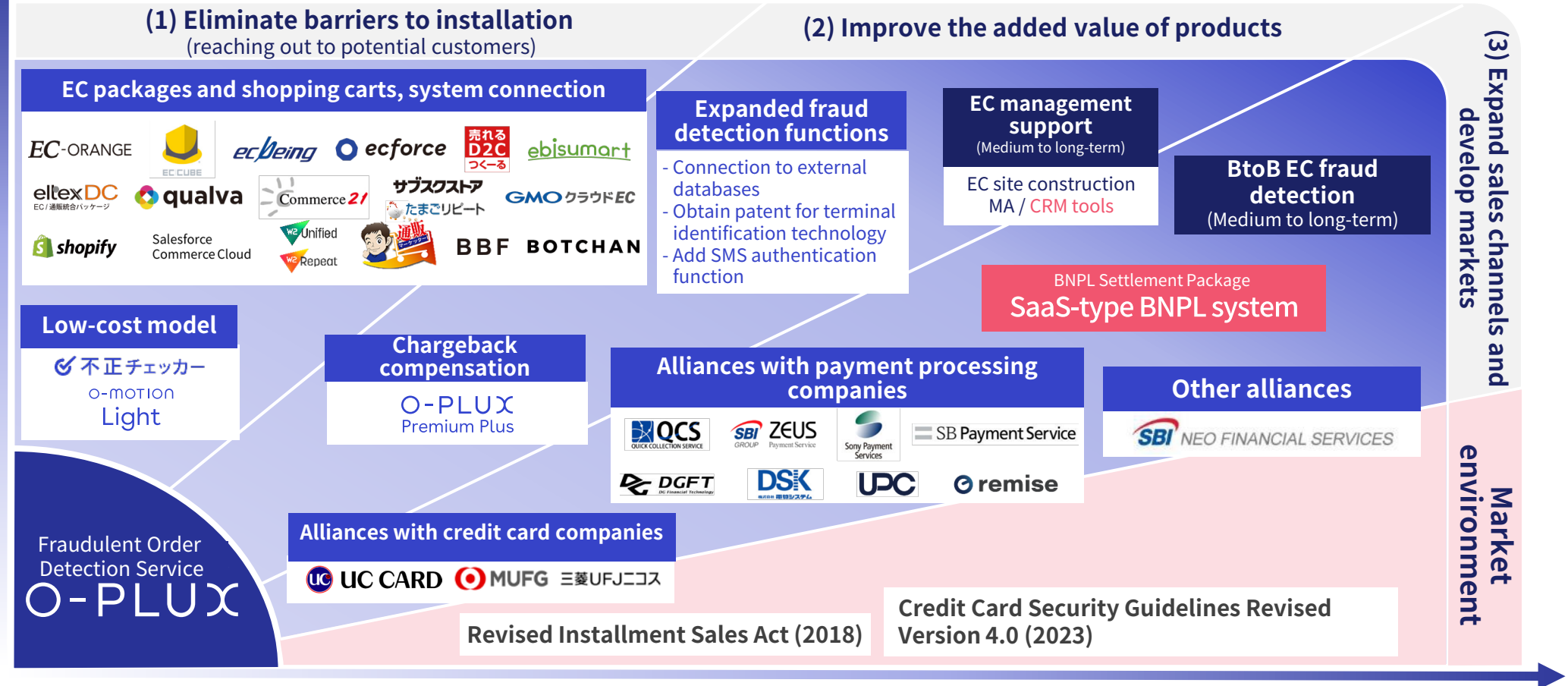
Growth Strategies / Expansion of EC Fraudulent Detection Domain

-Growth strategy for O-PLUX, the fraudulent order detection service-

Expansion of EC Fraud Detection Domain

It is assumed that demand for fraud detection will steadily increase in the future due to the social problem of fraudulent damage, stricter regulations, etc.

Three strategies will be implemented to achieve further growth of O-PLUX.

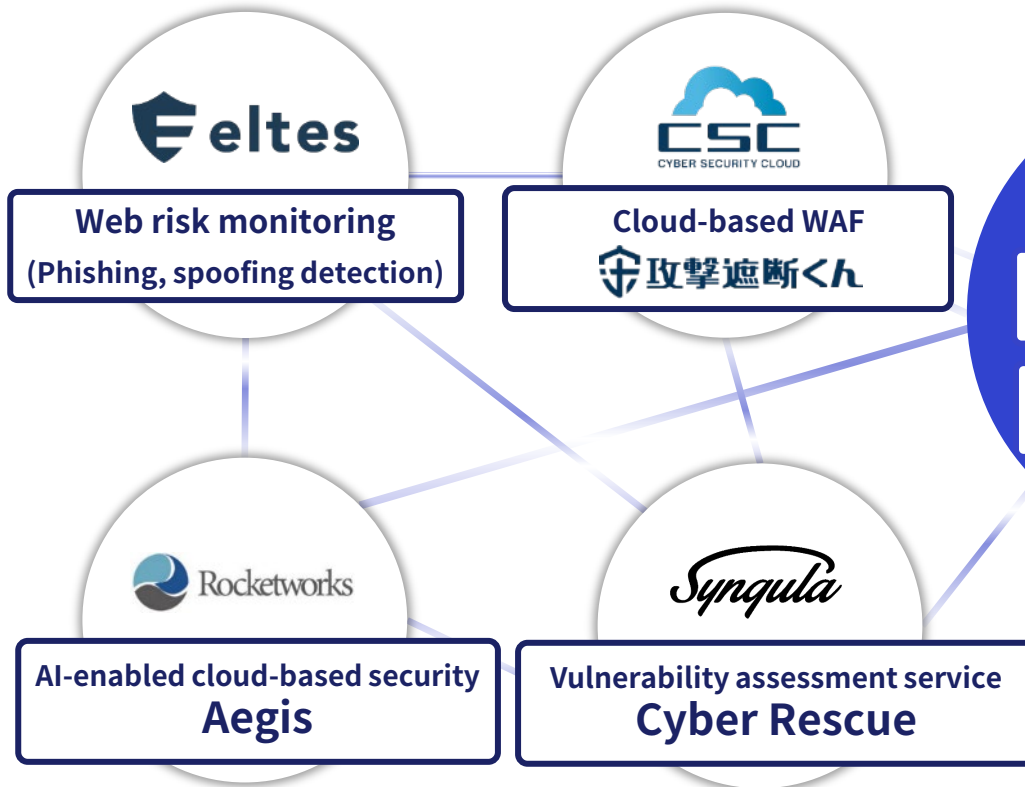


Growth Strategies / Expansion into Cyber Security Domain

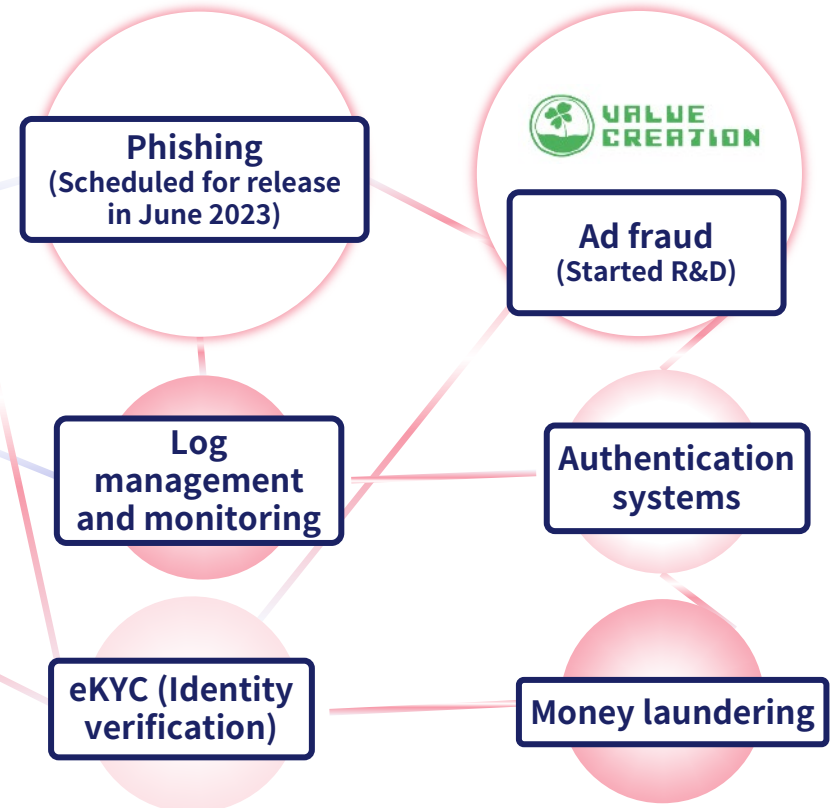
Expansion into
the Cybersecurity
Domain

We will expand business into the cyber security domain with an eye on M&A and alliances as well as technological development.

Existing Alliances



New Domains



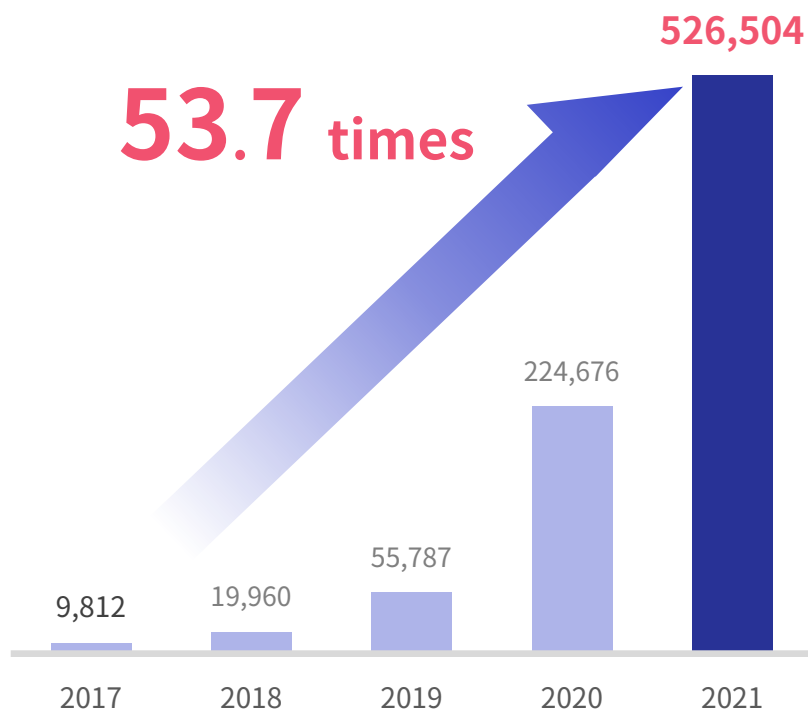
Growth Strategies / Provision of an Anti-Phishing Package with O-MOTION at Its Core

Expansion into
the Cybersecurity
Domain

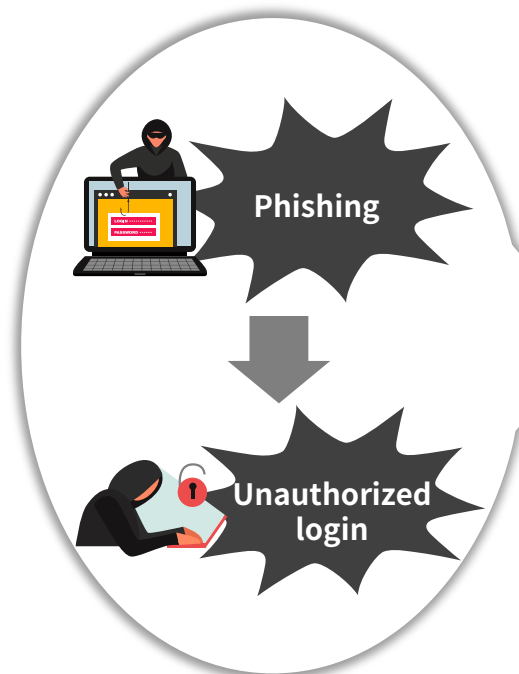
As a countermeasure against phishing fraud, which has been rapidly increasing in recent years, the Company is preparing to offer an anti-phishing package with the O-MOTION unauthorized access detection service at its core (scheduled for release in June 2023).

Number of phishing reports

(cases)



Source: Monthly Report of the Council of Anti-Phishing Japan



Unauthorized Access Detection Service

O-MOTION

Anti-phishing package

Phishing e-mail
detection



Phishing site
detection



Multi-factor
authentication
(risk-based
authentication)



Various options
Takedown service
Vulnerability
assessment, etc.

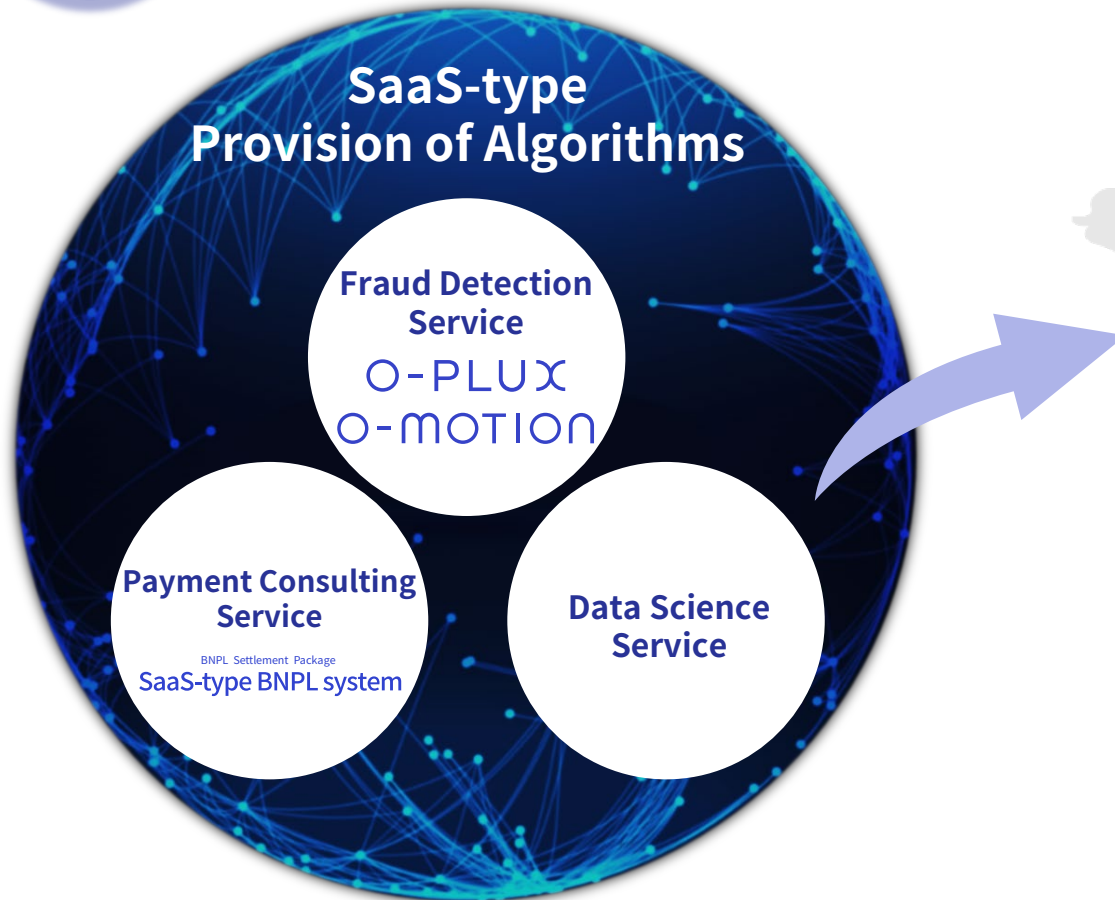


Provide a comprehensive and effective countermeasure service against phishing through **O-MOTION**, enabling the prevention of damage caused by phishing from the border of your systems.

Growth Strategies / Overseas Expansion



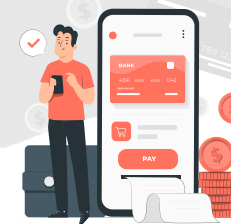
Utilizing the services and know-how that the Company has accumulated, we are preparing to expand into the EC and financial domains in Southeast Asia.



Loan funding



E-Commerce



Mobile payment and
BNPL



Crypto assets

Growth Strategies / Roadmap for Overseas Expansion



Currently working on developing local distributors in parallel with negotiations with local companies considering service test introduction for creating local use cases in Indonesia.
Also preparing to develop CRM tools for e-commerce based on data science.
Started research in another Southeast Asian country in addition to Indonesia.



Growth Strategies / Create a New BNPL Market, Release a SaaS-type BNPL System



Release a SaaS-type BNPL System based on our extensive BNPL credit experience and settlement consulting know-how.

- By minimizing initial investment and operating costs, the barriers to entry into BNPL will be lowered, and then a new BNPL market will be created by expanding BNPL to non-payment providers that have been unable to enter or adopt BNPL.

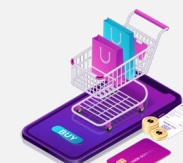
Features of ^{BNPL Settlement Package} SaaS-type BNPL system

	In-house development	Third party settlement/OEM use	^{BNPL Settlement Package} SaaS-type BNPL system
Initial investment	System investment of more than 100 million yen is needed.	Small initial investment due to use of third party settlement.	Available with initial cost starting from 2 million yen due to SaaS-type service.
Time to service launch	More than 1 year for system development	Possible to be launched only with system connection	Possible to be launched only with system connection
Profitability	Possible to control profitability under in-house operation.	Low profitability due to operation costs to be paid	Secure profitability over and above fees with lower operation costs.
Utilization of BNPL settlement data	Possible to utilize settlement data due to in-house operation.	Impossible to utilize settlement data	Possible to leverage settlement data for marketing
Meeting specific needs	Possible due to in-house development	Not customizable on request	Customizable on request

What the SaaS-type BNPL system should be



BNPL expansion into overseas markets with a focus on Southeast Asia.



BNPL expansion not only for payment service provider **but also for EC shopping carts, major EC operators, etc.**

Market Scale of BNPL settlement in Japan

2026: **Approx. 2.0 trillion yen**

2023: **Approx. 1.5 trillion yen**

* Source: Yano Research Institute, "Current Status and Future Forecast of Online Payment Service Providers, 2023 Edition"

Growth Strategy / Market Scale / Growth of the Japanese EC Market and the Expansion of Fraud Damage

CACO

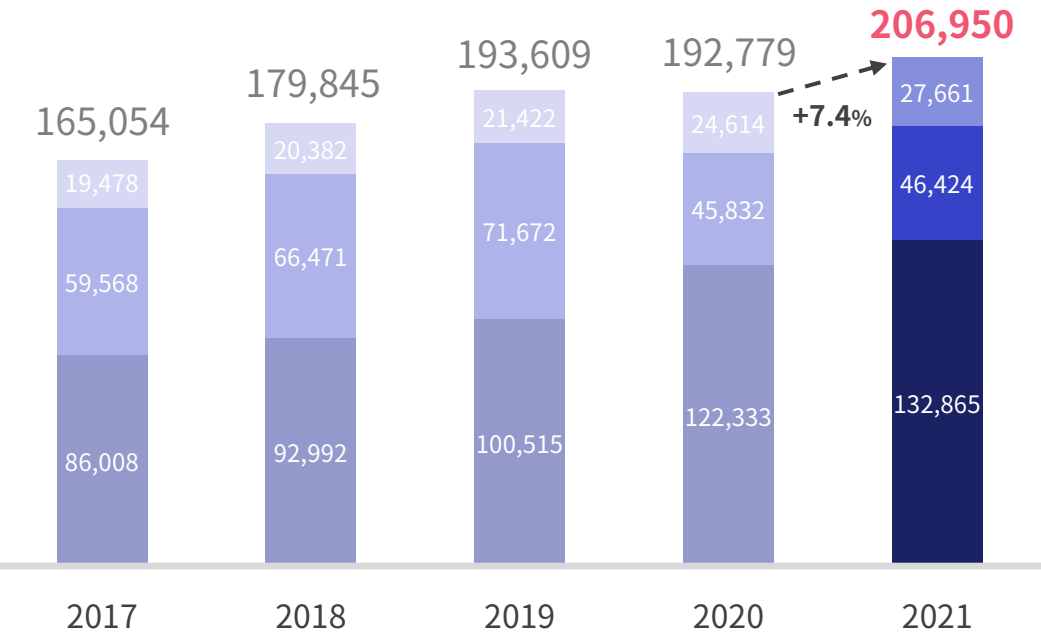
Credit card fraud (number theft) is increasing proportionally with the growth of the EC market.

- Social demand for anti-fraud measures, such as the revision of the Installment Sales Act and publication of the “Credit Security Measures Vision 2025,” is increasing

Scale of BtoC and EC Market in Japan

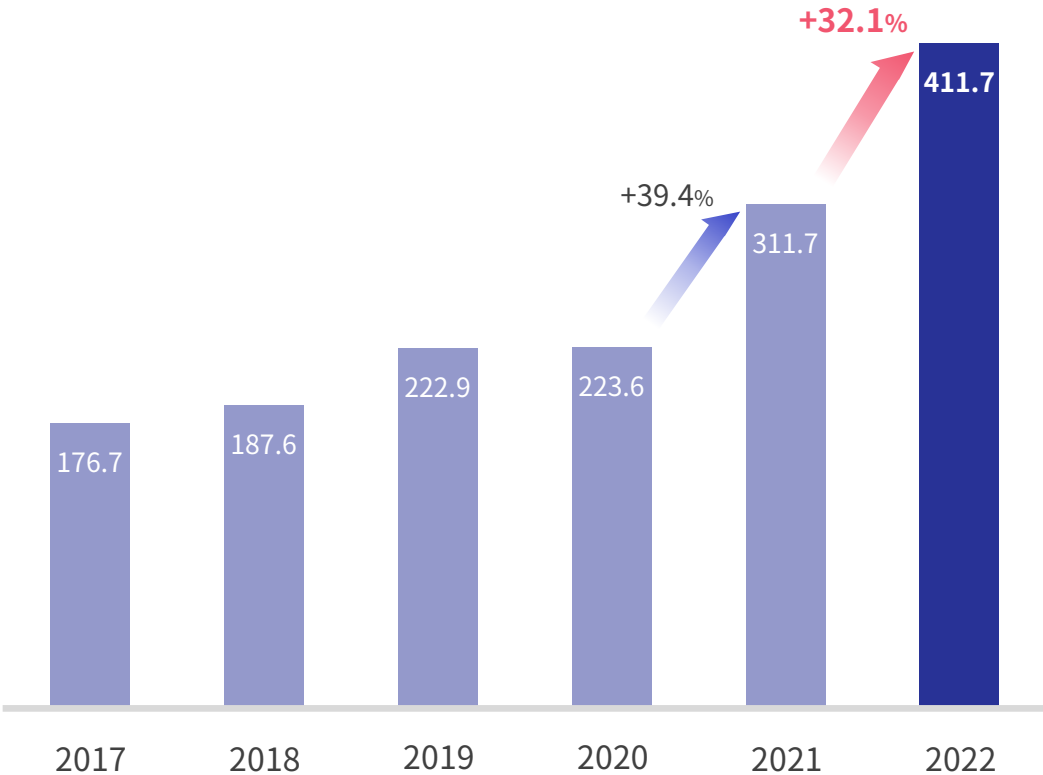
(Unit: 100 million yen)

- Scale of BtoC and EC market for product sales industry
- Scale of BtoC and EC market for service industry
- Scale of BtoC and EC market for digital industry



The Amount of Credit Card Fraudulent Damage in Japan (Number Theft)

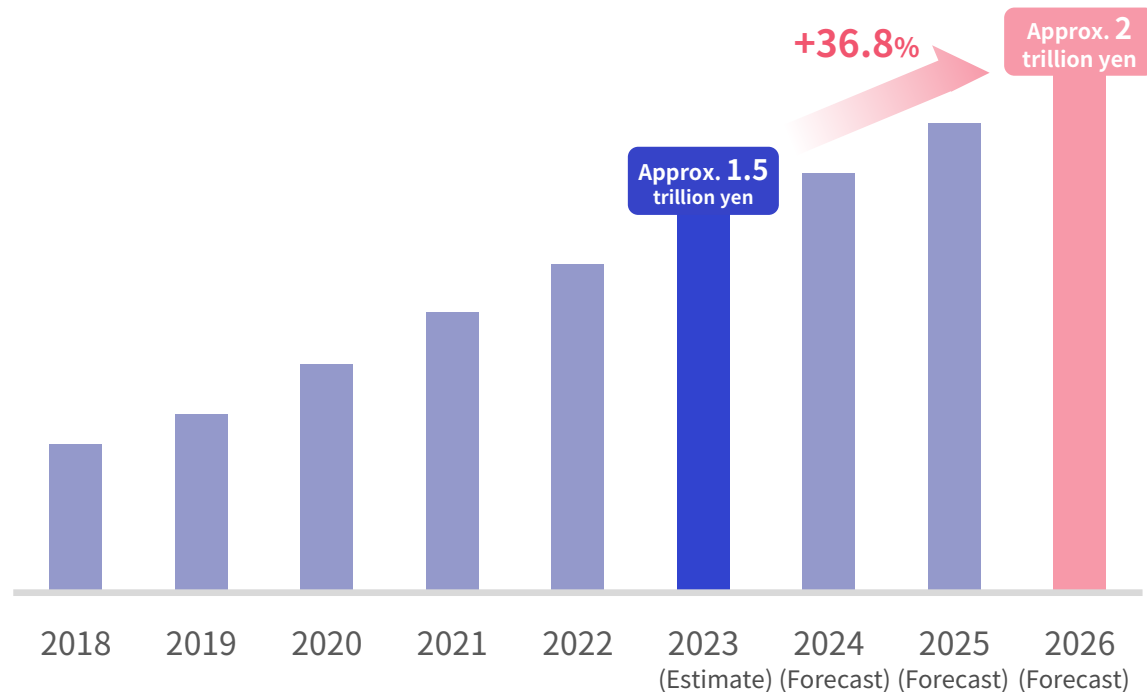
(Unit: 100 million yen)



Growth Strategy / Market Scale / Expansion of the BNPL Market

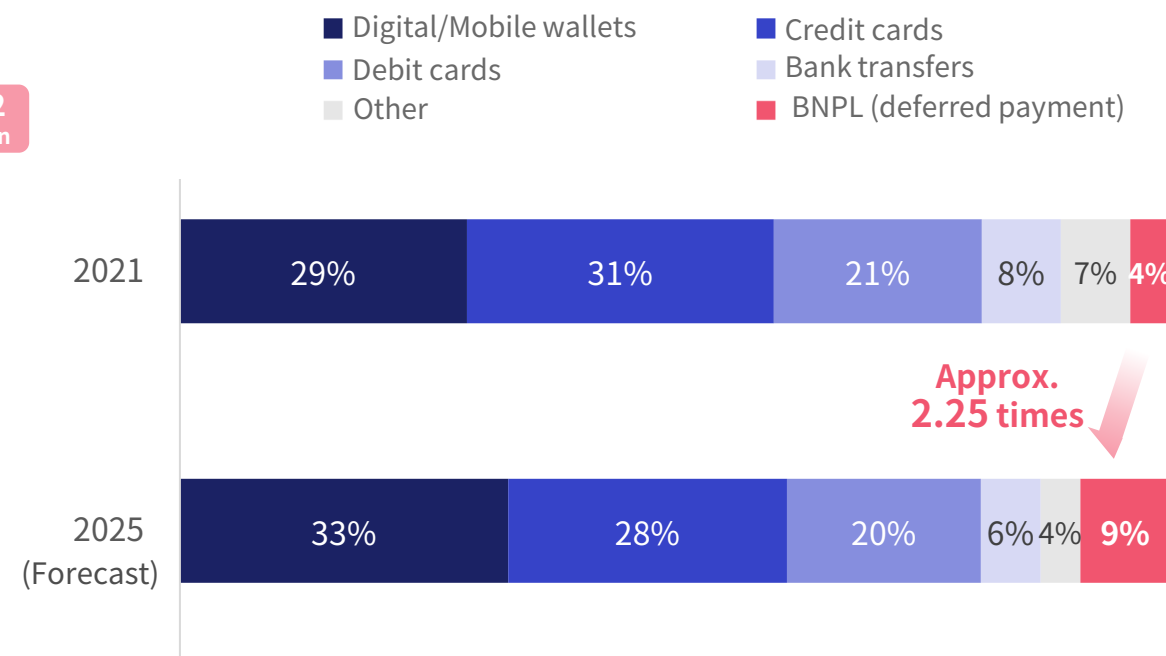
The BNPL market is growing continuously both domestically and internationally, and its use is expected to expand further in the future.

Domestic BNPL Market Trends



Source: Yano Research Institute, "Current Status and Future Forecast of Online Payment Service Providers, 2023 Edition"

Forecast of BNPL Utilization in North America



Source: Worldpay, "Global Payments Report 2022"

Growth Strategy / Market Scale / Increase in Damage from Unauthorized Access in Japan

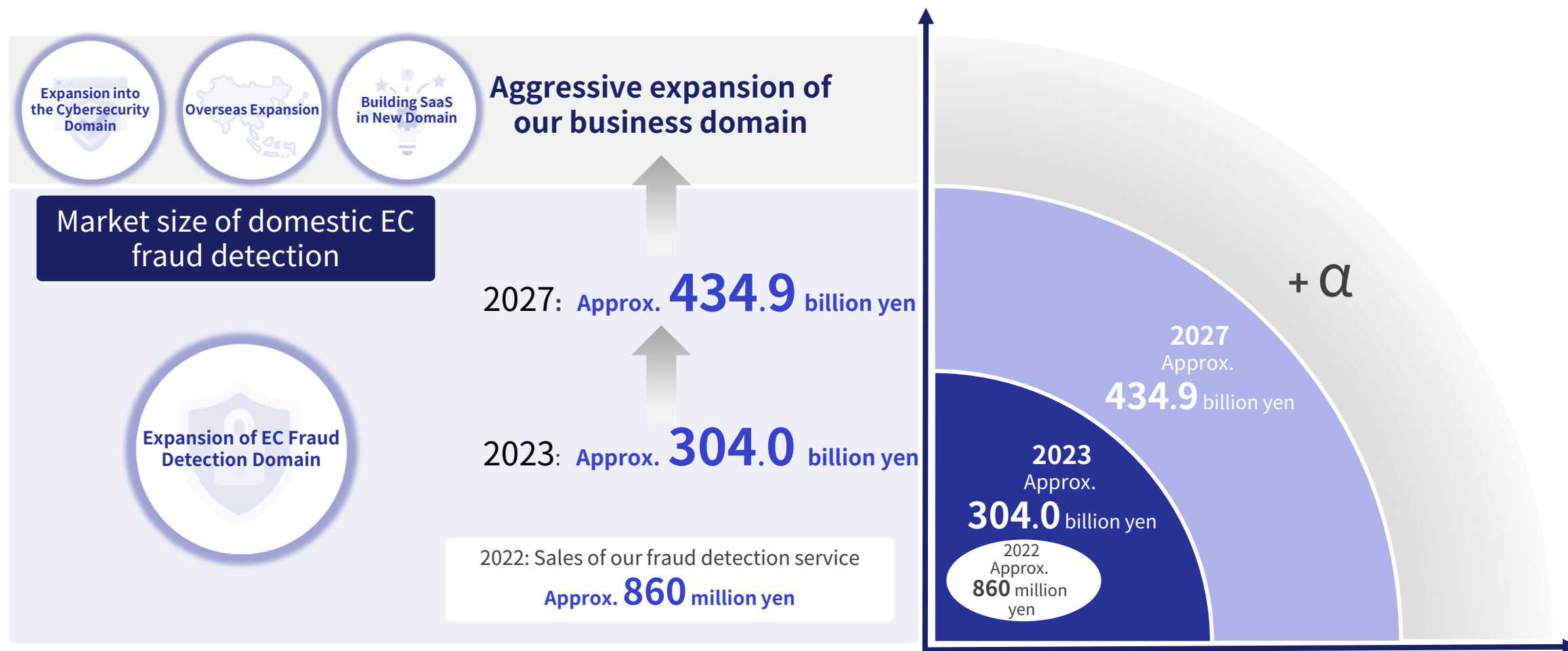
About 70% of frauds committed after unauthorized access are in the financial services and EC sectors.
In addition, there is no end in sight for damages caused by information leaks, such as the divulgence of personal information caused by unauthorized access.

Ranking of Fraudulent Activities after Unauthorized Access Has Occurred		
1st place	Unauthorized remittances through Internet banking	49.8%
2nd place	Unauthorized purchases from Internet shopping	10.3%
3rd place	Unauthorized acquisition of information, such as snooping on e-mails	9.8%
4th place	Tampering with online gaming and community sites	2.9%
5th place	Sending information while pretending to be an acquaintance	2.3%
6th place	Unauthorized operations at crypto asset exchanges, etc.	1.5%
7th place	Website tampering and deletion	0.8%
8th place	Other	8.6%

Examples of Damage Caused by Unauthorized Access (Extract from 2023)		
Time of occurrence	Business affected	Description
March 2023	Major communications company	The personal information of up to approx. 5,290,000 users may have been leaked from the computers of a company to which the company outsources its services.
February 2023	Major clothing company	The online store operated by the company came under cyber attack, and there is concern that the information of 62,575 users who have registered as members or made purchases on the affected site at least once in the past has leaked out.
February 2023	Major retail company	Due to an external cyber attack on an online store operated by the company, there is a possibility that the credit card information of 9,416 users and 49,330 personal information of some users who had made credit card payments at the affected site in the past have leaked out.
February 2023	Major IT company	Due to unauthorized access to the official website by unknown persons, there is a possibility that 112,132 items of customer card information and 120,982 items of personal information have leaked out.
February 2023	University	Due to a cyber attack by a third party on the university's education and research system, there is a possibility that a total of 36,692 email addresses of university employees and students belonging to the university have leaked out.
January 2023	Major automobile company	Due to a cyber attack on an outside company to which the company outsources personal information management, there is a possibility that a total of approximately 50,000 items of information, including customer information, have leaked out.
January 2023	Major education company	Due to an external cyber attack on some of the servers operated by the company, there is a possibility of unauthorized deletion of information and leakage of 17,935 items of personal information.
January 2023	Major life insurance company	Due to unauthorized access by a third party to the servers of an outside contractor, the personal information of up to 2,080,931 policyholders and past policyholders held by the two companies was leaked.

Growth Strategy / Market Scale / Expansion of Fraud Detection Services Market

While focusing on the domestic EC fraud detection domain, which is expected to expand, we will actively expand our business domain to develop our business in an even larger market.



Source: "FRAUD DETECTION AND PREVENTION Global Market Trajectory & Analytics GLOBAL INDUSTRY ANALYSTS. INC. May 2021" (Calculated at \$1 = ¥110)

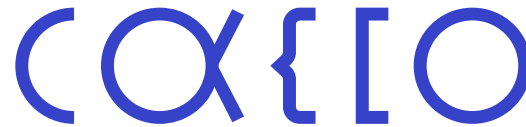
Appendix



Appendix / Entered into a capital and business alliance with Value Creation Inc. (Release on February 15, 2023)



Invested in Value Creation Inc. and entered into a capital and business alliance in the marketing DX domain



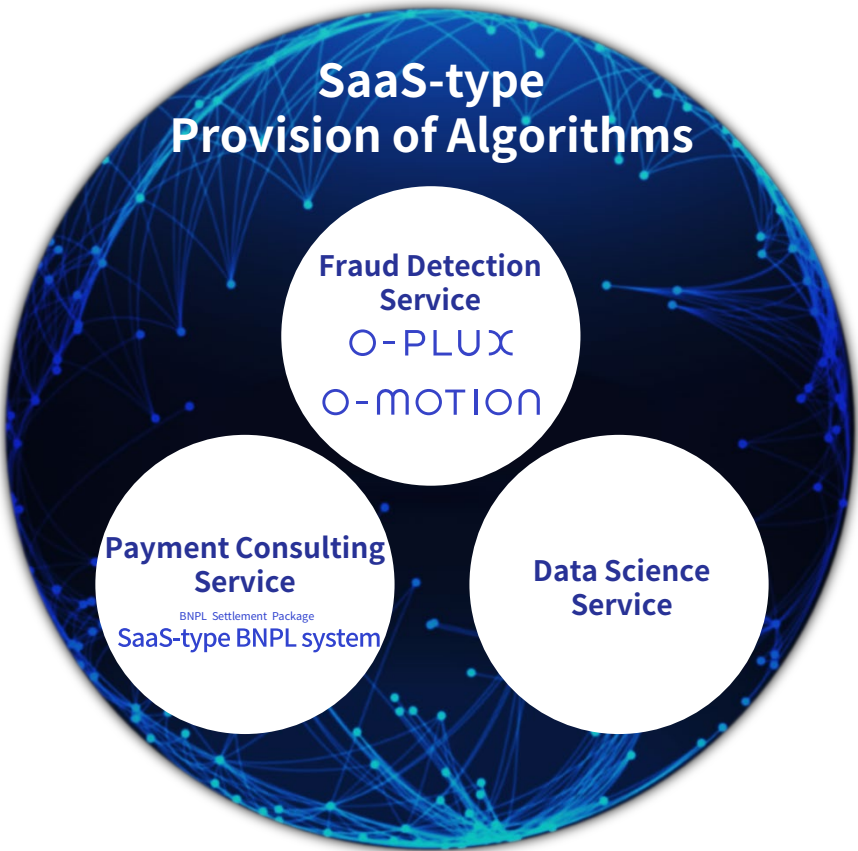
Amid the continued growth of the Internet advertising market, the total amount of damage caused by ad fraud is expected to increase to approximately 50 billion dollars (approximately 5,418.8 billion yen) by 2025, according to the World Federation of Advertisers (WFA). Furthermore, the funds obtained through ad fraud have become a social problem, as they are sometimes used as a source of funding for antisocial forces. In Japan, the Ministry of Internal Affairs and Communications discussed the direction of countermeasures and published “Digital Ad and Digital Market Competition Council Final Report” (April 2021).

With this background, Value Creation Inc., which provides services to a wide range of industries in the marketing DX business by realizing highly accurate targeting based on visit data, and Cacco, which has supported measures against fraudulent orders and unauthorized access/logins in online transactions centered on online shopping with its technology and know-how in security payment data science, have formed a business tie-up. We will leverage the strengths of both companies to develop a wide range of services, including measures against ad fraud such as online ad fraud and unauthorized clicks for affiliate commissions, as well as new initiatives that utilize data science services.

Company name:	<u>Cacco Inc.</u>
Representative:	Hiroyuki Iwai, Representative Director, President and CEO
Business description:	Provision of SaaS-type Algorithms (Fraud detection services, payment consulting services, and data science services)
Capital:	365,637,235 yen
Listed on:	Tokyo Stock Exchange, Growth Market (Stock Code 4166)
Founded on:	January 28, 2011
Address/TEL:	1-5-31, Motoakasaka, Minato-ku, Tokyo, JAPAN TEL: 03-6447-4534
Patents:	Patent #6534255, #6534256, and #6860156
Certifications:	ISMS (Information Security Management System) ISO/IEC 27001:2013 JIS Q 27001:2014 Registration number: IA120255 Privacy Mark® #10824248 (05)

History

2011	January	Establishment of business (Fraud prevention consulting)
	November	Start of payment consulting service (BNPL* Payment system development and consulting for business operators)
2012	June	Release of O-PLUX, a fraudulent order detection service
2015	January	Start of data science service (Data analysis and algorithm development for industries including retail and manufacturing)
2016	July	Release of O-MOTION, unauthorized access detection service
2020	December	Listed on the TSE Growth Market
2021	October	Formed a capital and business alliance with Eltes Co., Ltd.
2022	December	Release the <u>SaaS-type BNPL system</u> , a package service that enables BNPL settlement
2023	February	Entered into a capital and business alliance with Value Creation Inc.



* BNPL: Abbreviation for Buy Now Pay Later, post-payment settlement

1

Expertise in data science and advanced technical capabilities in the security domain

(Three patents obtained: Patent #6534255, Patent #6534256, and Patent #6860156)

2

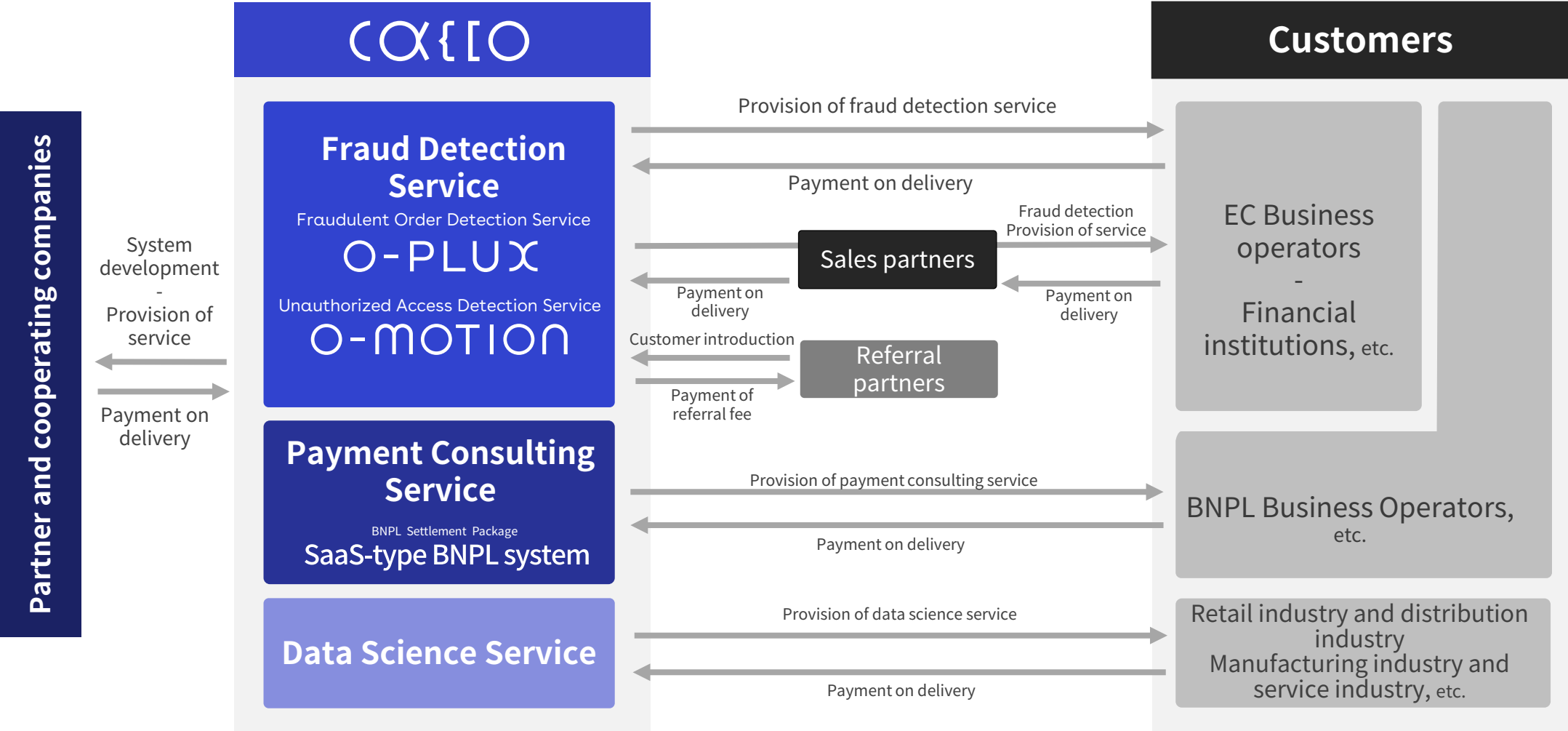
Top* selling services in the EC and payment domains in Japan

(*Based on “Survey on the number of EC sites in Japan introducing paid fraud detection services” (as of the end of May 2022) performed by TOKYO SHOKO RESEARCH, LTD.)

3

Steady growth in recurring revenue due to increased use of O-PLUX, our core service

(Recurring revenue accounted for 74.8% of our total sales in FY2023 1Q)

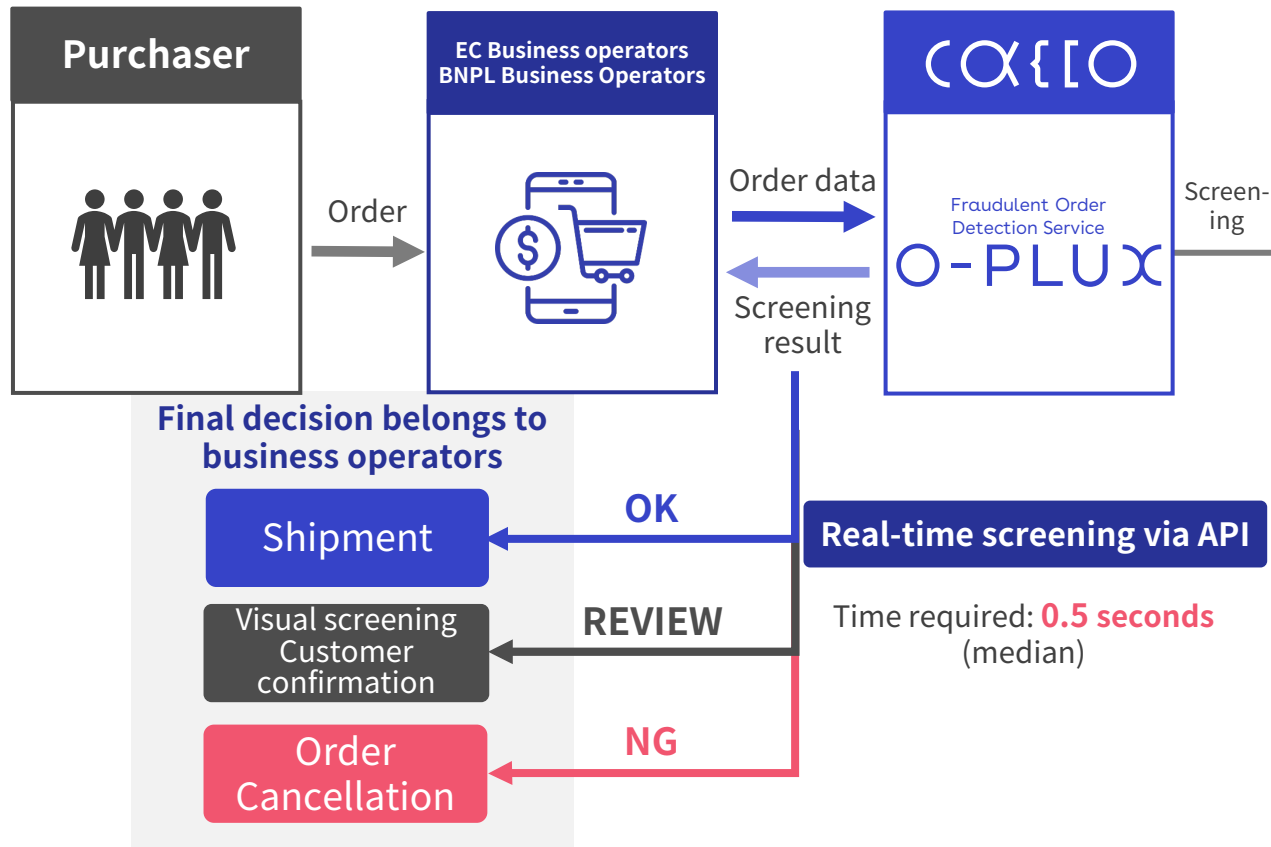


Appendix / Overview of O-PLUX Fraudulent Order Detection Service



SaaS-type service that uses a unique screening model to detect fraudulent orders in real time such as payments in arrears in EC.

Screening Process



Main Screening Functions

Normalization of name and address notation



Utilize the same address and last name with different notation after normalization process.

ex: 3-2, Akasaka 4-chome
4-3-2 Akasaka

Device Information



External DB Linkage



Behavioral Analysis



Shared Negative Data



- Address confirmation service (detection of fictitious addresses)
- Identification by IP and cookies
- Detection of access from overseas
- Detection of impersonation by a non-Japanese person based on language setting, time zone, etc...
- Vacancies detection (weekly apartments or hotels)
- Detection of overseas forwarding services
- Validation of phone numbers, etc...

Detection of fraudsters by analyzing information and behavioral patterns that are characteristic of fraudsters, such as large numbers of purchases over a short period of time and identity theft.

Finding matches with the negative database shared among user companies.

Differentiating Factors in Products

1

High fraud detection accuracy through possession of a large volume of domestic fraudulent order data

*No. 1 in Japan in terms of number of installations



2

Building a unique detection model with data science, security technology, and know-how

3

Speedy and flexible monitoring and support system that only domestic and in-house products can provide

Positive Growth Cycle in which Competitive Advantage is Maintained

**No. 1 in Japan
in terms of
installation***

Fraudulent Order Detection Service

O-PLUX

**Accumulate
and verify
large amounts
of data**

**Accelerated
installations**

**Improved
detection
accuracy**

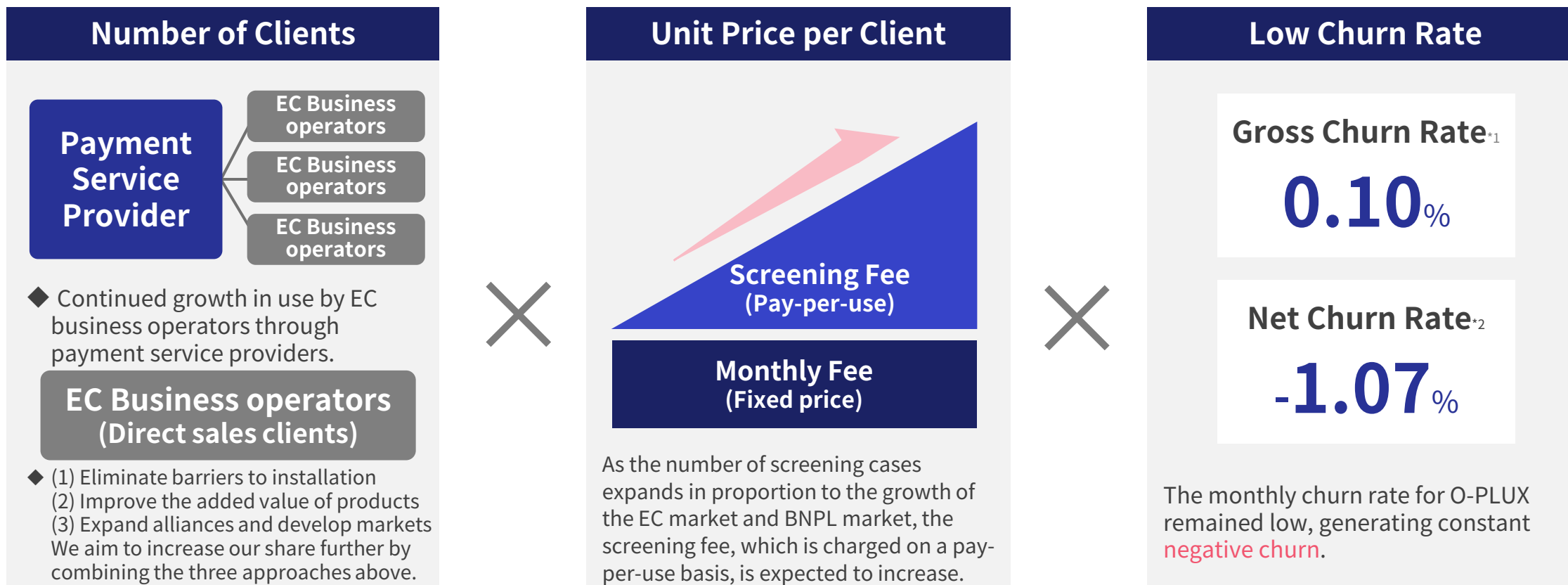
* TOKYO SHOKO RESEARCH, LTD., "Survey on the number of EC sites in Japan introducing paid fraud detection service," (as of the end of May 2022)

Appendix / O-PLUX Fraudulent Order Detection Service | Revenue Structure



A stable revenue structure in which **about 70%** of total sales comes from **recurring revenue**, which is the sum of pay-per-use and fixed fees.
In addition, the pay-per-use billing system enables us to capture the upside potential associated with **the expansion of the EC market and BNPL market**.

Three Reasons Why Recurring Revenue of O-PLUX Is Growing



*1 Gross churn rate = annual average of MRR from the clients who churned the current month / MRR at the beginning of the current month

*2 Net churn rate = (annual average of MRR from the clients who churned in the current month – MRR from new contracts for current month) / MRR at the beginning of the current month

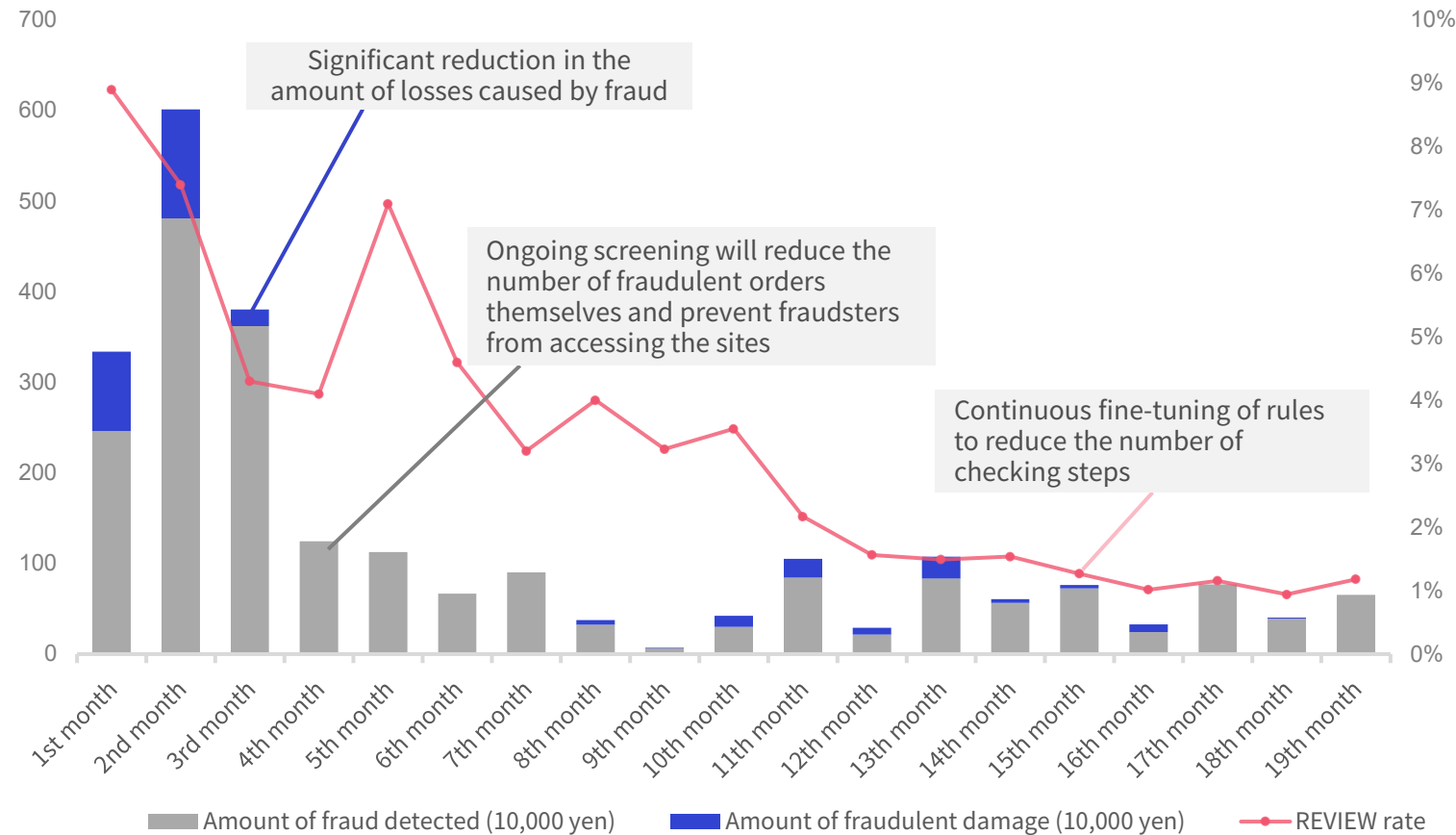
*3 Churn rates shown in *1 and *2 are as of December 31, 2022.

Appendix / O-PLUX Fraudulent Order Detection Service | Installation Example



O-PLUX has detected approximately 250 million yen in fraudulent credit card use in EC over a five-year cumulative period.

General Retailing	
Annual distribution amount	7 billion yen per year
Challenges faced by customers	Fraudulent use of credit cards in EC (Maximum 10 million yen per month)
Achievement	Detected fraudulent uses worth 100 million yen in the first year of installation Cumulative total of approximately 250 million yen was detected over a period of approximately five years.



* The amount of fraud detected is the total amount of transactions that are confirmed as fraudulent (negative registration) before chargeback due to failed screening results, card attribute discrepancies in “REVIEW” screening results, and failed identity verification before shipment.

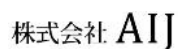
* The REVIEW rate is the ratio of the number of REVIEWS to the total number of screening results.

Appendix / O-PLUX Fraudulent Order Detection Services | Corporate Clients

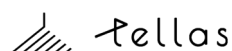


O-PLUX has been installed in various industries and is the No. 1 solution in terms of the number of installations in Japan (*1). It promotes the development of a safe infrastructure for e-commerce by preemptively preventing losses from fraudulent orders.

Hobby



Cosmetics and hair care



Online shopping malls, MVNO, and others



Video and audio equipment

Hosting

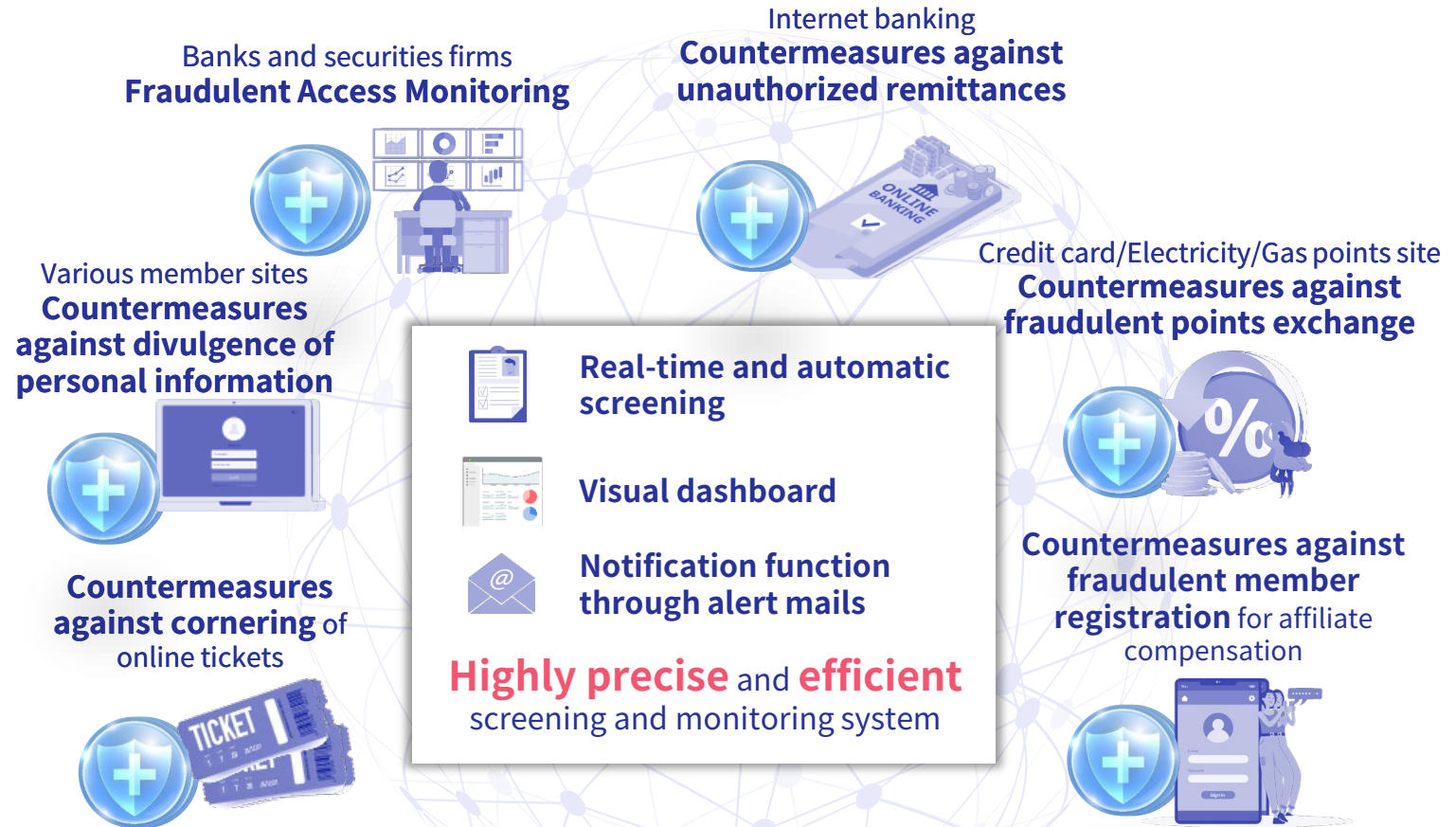
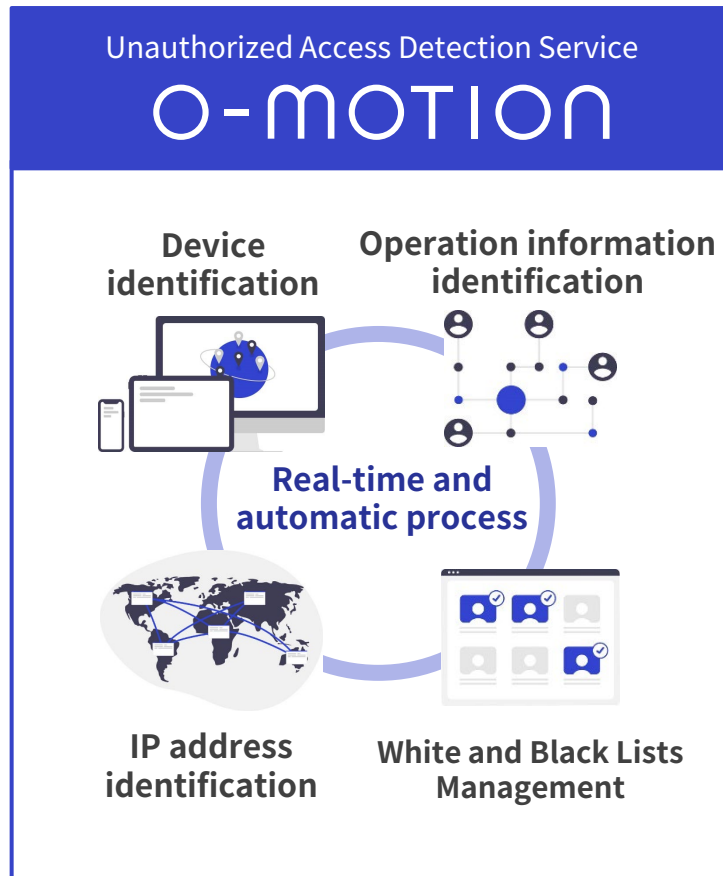
*1 TOKYO SHOKO RESEARCH, LTD., "Survey on the number of EC sites in Japan introducing paid fraud detection service," (as of the end of May 2022)

*2 Only selected companies with permission to be listed are included. As of end of April, 2023.

Appendix / O-MOTION Fraudulent Access Detection Service



Real-time analysis of the operation information and device information of users who access websites. The system identifies identity theft and prevents fraudulent activities (divulgence of personal information, unauthorized purchases, etc.) resulting from unauthorized access.



Appendix / Companies introducing O-MOTION Fraudulent Access Detection Services



Financial institutions, ticket sites, and various point and membership sites have introduced O-MOTION.

Finance



Ticket sites



NFT games



EC site



EC cart/EC package



Other (Company name not disclosed)

Major bank
Online brokerage firm
Credit card company, etc.

*1 Only selected companies with permission to be listed are included. As of the end of April 2023.

Appendix / Lineup of Fraud Detection Services with Price Flexibility

By introducing a new lineup that takes advantage of the architecture renewal, the company will flexibly respond to the needs of potential customers to develop new customer segments and expand its market share.

不正チェッカー

Fraudulent
order detection

Offers certain O-PLUX functions at **the lowest price in the industry**.^{*} For online shopping businesses that are still small in scale, or for businesses that have not yet suffered major damage but need to prepare for the possibility of further damage.

Basic monthly charge
from **4,000** yen
(Includes screening costs for 1,000 cases)

o-motion Light

Unauthorized
access
detection

Detects brute force attacks by automated programs (Bots) and spoofing by unauthorized persons using other people's IDs and passwords.

Basic monthly charge
from **100,000** yen
(There is a cap on the number of accesses.)

O-PLUX Premium Plus

Fraudulent
order detection
+
Chargeback
compensation

Covers the amount of damage caused by fraudulent use of credit cards, **with no upper limit**. (Shipping decision agent service)

Basic monthly charge
from **100,000** yen

^{*} Based on our research as of December 31, 2022

Appendix / Partner and Alliance Companies

We will continue to promote partnerships and alliances, eliminate barriers to installation, and expand our sales channels to increase our market share.

EC package, shopping cart and chatbot



Credit card companies



Payment Service Providers (PSPs)



Security service vendors



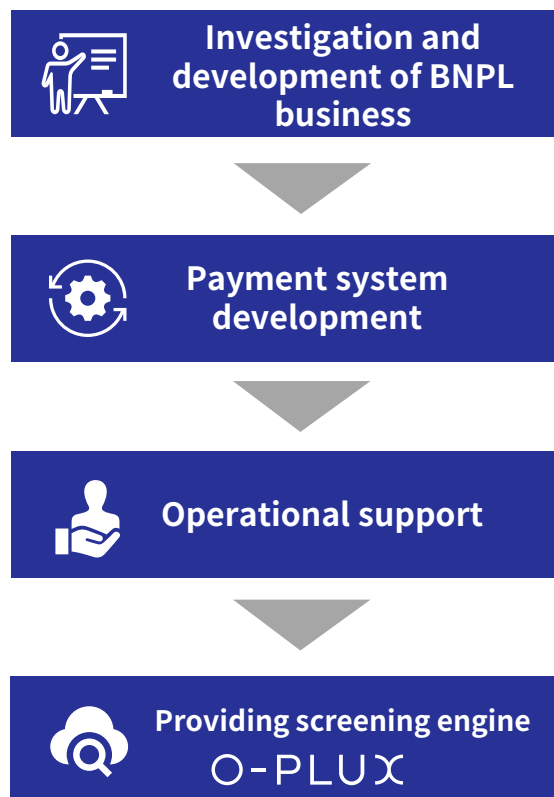
*1 EC-CUBE is a trademark of EC-CUBE Co., Ltd.

*2 As of the end of April 2023.

Appendix / Payment Consulting Service

We provide one-stop support for the establishment and launch of BNPL, including service construction, payment system development, and operational support.

We offer the O-PLUX fraudulent order detection service as the screening engine.



Point
1

Experience in setting up and developing systems for multiple BNPL businesses

- Experience in constructing payment systems that handle several million transactions per month
- Experience in supporting the launch of BNPL businesses (business planning, preparation of various requirement definitions, etc.)
- Experience in post-launch support (credit lines, operation process development, etc.)

Point
2

Support from consultants with experience in BNPL operations

Consultants with extensive experience in BNPL operations provide optimal proposals from the customer's perspective.

Point
3

Fraudulent order detection using O-PLUX, the No. 1 solution in terms of the number of installations in Japan*

We have achieved a great deal of success in fraud detection in the financial and settlement fields, where strict accuracy is required. O-PLUX, our fraudulent order detection service, is the No. 1 solution in terms of installation numbers in Japan*.



* As of the end of May 2022 (TOKYO SHOKO RESEARCH, LTD., "Survey on the number of EC sites in Japan introducing paid fraud detection service")

Appendix / Data Science Service

Based on the technologies of AI, statistics, and mathematical optimization, we develop and provide algorithms that contribute to the core of corporate activities, such as modeling predictions and automation by applying machine learning.

Our approach

SAKIGAKE KPI



Our service includes data aggregation and visualization, factor analysis, KPI calculation, analysis reporting, and subsequent proposals. A data analysis service that provides up to 100 million records in 30 business days at a cost of 2 million yen.

Data Science Branch Office



Data science resources that can be utilized on a monthly contract basis as if it were a company division. It realizes the concept of a “data science branch office” to meet all kinds of analysis needs at various stages.

Algorithm development



Development of algorithms that seek to increase profits by processing business operations, including optimization beyond the employees’ own experience, productivity improvement through automated processing, and forecasting of demand and risk.

Case studies

Optimization

Wall material manufacturer with annual sales of 119 billion yen

Created production plans for 1,700 products and 12 production lanes. Made a production order plan to maximize production volume and minimize losses while observing complex conditions.

Annual cost reductions of up to 130 million yen

Statistics/AI

Stationery manufacturer with annual sales of 5.5 billion yen

Developed algorithms for demand forecasting and production instructions that can maximize profits on calendars, organizers, and stationery. Minimized opportunity losses due to shortages

70% reduction in sales opportunity losses

Optimization

Call center

Established automatic prediction of demand on a daily and hourly basis for the following month and generated a staffing plan to satisfy multiple constraints such as management indicators, employee work preferences, and working conditions.

Annual cost reductions of 60 million yen



Cacco's Social Value Creation Process (ESG Initiatives)

We set Cacco Evolutionary Purpose (EP) “Shaping the ‘Let’s Do It’ for a next game changer” as our management vision and have been helping companies solve problems and take on new challenges. EP embodies our hope to contribute to the development of the Japanese economy by supporting people and companies that are taking on the challenge of making the world a better place. When the company was founded, there was little fraud in Internet transactions, and there were no fully functional fraud detection services in the world. But we believed that in the near future, there would be a wide variety and high volume of fraudulent activities in all Internet transactions, including e-commerce. Almost a decade later, as we predicted, fraud continues to occur in any and all Internet transactions, and its method has become more complex, evolving, and expanding.

Since the release of O-PLUX in 2012, we have continued to develop it so that it can adequately respond to evolving threats, and as a result, it is currently the No. 1* installed security solution in Japan.

We will continue to enhance to a higher level of the human capital of our employees, which are directly related to strengthening and expanding our business foundation and establishing our human resource base. Specifically, we will strive to pursue a comfortable and motivating working environment that supports unique way of working and autonomous actions for employees to take on new challenges and grow as a company and as individuals, and to foster an organizational culture that respects each and every employee with diverse backgrounds in terms of age, origin, nationality, and other characteristics.

In this Sustainability Report, we have endeavored to report to our stakeholders as comprehensively and concisely as possible, focusing on the initiatives we have undertaken from the previous year to this year. We hope this report helps you evaluate our company.

March 31, 2023

Cacco Inc.

Hiroyuki Iwai, Representative Director, President and CEO



* Based on “Survey on the number of EC sites in Japan introducing paid fraud detection services” (as of the end of May 2022) performed by TOKYO SHOKO RESEARCH, LTD.

CEO Message	Framework for Promoting Sustainability Activities	Environment	Social	Governance
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We have established a Sustainability Promotion Office.

It consists of Hiroyuki Iwai, Representative Director, President and CEO as the Director General and the Directors and Executive Officers as the main members of the promotion team.

The Sustainability Promotion Office establishes policies related to other practices based on our management vision “Shaping the ‘Let’s Do It’ for a next game changer” and acts as the core organization to ensure continuity in the promotion of sustainability activities throughout the company.



Support in breaking away from the resource-intensive industrial model by promoting DX

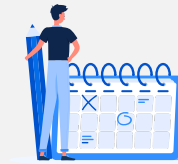
By supporting DX with our data science services, we are promoting the optimization and efficiency of production, sales, and distribution, and contributing to breaking away from the resource-intensive industrial model.

Sales forecast for an apparel brand with annual sales of 70 billion yen



- ◆ Provided a service that calculates projected future number of sales by product based on actual sales.
- ◆ Calculated the decision-making factors for product planning, production quantity, and order quantity decisions.

Optimized production planning for a wall material manufacturer with annual sales of 119 billion yen



- ◆ Created production plans for 1,700 products and 12 production lanes.
 - No overtime operation for each lane
 - No production below the minimum lot size for each product
 - Only certain lanes can produce each product
- Under the above constraints, we maximized production volume and planned a production sequence that minimized losses, contributing to an annual cost reduction of 130 million yen.

Optimized call center staffing



- ◆ Established automatic prediction of demand on a daily and hourly basis for the following month and generated a staffing plan to satisfy multiple constraints such as management indicators, employee work preferences, and working conditions, contributing to reduce annual cost of 60 million yen in a call center.

Optimized production planning for a stationery manufacturer with annual sales of 5.5 billion yen



- ◆ Prepared production plans for organizers and calendars that must be produced in sufficient quantities at certain times of the year and sold out during the sales season, based on demand forecasts.
- ◆ Developed an inventory planning algorithm to minimize opportunity loss due to shortages in standard products sold throughout the year. The above activities contributed to a 70% reduction in sales opportunity loss.

Build a secure infrastructure for EC and online transactions

Our fraud detection services detect fraudulent activities such as spoofing and unauthorized access for credit cards, and contribute to building a secure infrastructure for EC, online transactions, and cashless payments.

Credit card fraud prevention



- ◆ According to the “Amount of Damage Caused by Unauthorized Credit Card Use (March 2023)” released by Japan Consumer Credit Association, the “damage caused by theft of numbers” where credit card numbers or other information are stolen for unauthorized use reached the record high amount of 41.1 billion yen in FY2022. On the other hand, our fraudulent order detection service O-PLUX detects in advance credit card fraud and other fraudulent orders worth 73.1 billion yen,* including malicious resale and refusal of cash on delivery.

* Calculated from the total value of the orders that were judged NG by O-PLUX in FY2022.

Anti-fraud awareness campaigns



- ◆ Conducted awareness-raising activities by communicating fraudulent damage schemes and trends through broad collaboration with related ministries and industry organizations.

Our member organizations:

- Public Interest Incorporated Association, Japan Direct Marketing Association (JADMA)
- General Incorporated Association, Japan Consumer Credit Association
- General Incorporated Association, Safer Internet Association
- General Incorporated Association, Digital Risk Association
- General Incorporated Association, Fintech Association of Japan
- General Incorporated Association, Cyber Security Alliance

Human capital

With the spread of COVID-19, online communication has become essential to cope with the new normal and to improve operational efficiency. Under these circumstances, we have promoted initiatives based on our valued “Let’s Do It” philosophy to both streamline operations and revitalize communication, including outside of work, which is often lacking due to the online-oriented work style. These initiatives have led to the following results.

Average overtime hours (FY2022 actual)

4.2 hours

* Full-time and contract employees, excluding directors and managers.

Percentage of employees receiving paid leave (FY2022 actual)

59.7%

* Full-time and contract employees, excluding directors.

Percentage of employees returning to work after childcare leave (to FY2022 actual)

100.0%

* Full-time and contract employees, excluding directors and managers.

Percentage of child-rearing generation (FY2022 actual)

36.4%

* Percentage of full-time and contract employees, excluding directors, with dependent children (up to compulsory education generation) and nondependent children.



* Ranked in the 2022 edition of “Best Workplaces in Japan” by the Great Place to Work® Institute Japan.

Percentage of males and females (FY2022 actual)

Male: 66.2%
Female: 33.8%

* Employees in all employment categories excluding directors.

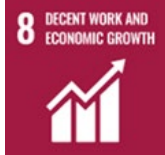
Percentage of workers outside the Kanto region (FY2022 actual)

20.8%

* Employees in all employment categories excluding directors.

Percentage of female managers (FY2022 actual)

20.0%



Human capital —Shift to flexible work styles—

Revision of work system

In March 2020, core hours were abolished, and the number of telework sessions was also made unlimited, allowing for full telework.

Support to develop telework environment

For all employees (including contract employees, interns, and part-time workers), we began providing a telework allowance from September 2020 to partially cover the cost of telecommunications, utilities, and other equipment necessary for telework.

Promote recruitment and education based on telework

As a result of the full teleworking availability, we are now able to accept students from all over Japan as well as those living abroad, and training and joining programs are now online. In May 2021, we also introduced an “in-house coach system” that allows employees to take coaching from professional coaches online, providing an opportunity for personal growth even in telework.

Activate online communication

In principle, regular meetings of each department and monthly all-employee meetings are now online. Amid concerns about the lack of communication due to the shift to online working, we regularly provide opportunities for cross-departmental interaction, and have held online lunches, online cooking classes, and even our 10th anniversary party online.

Support for women and child-rearing generation

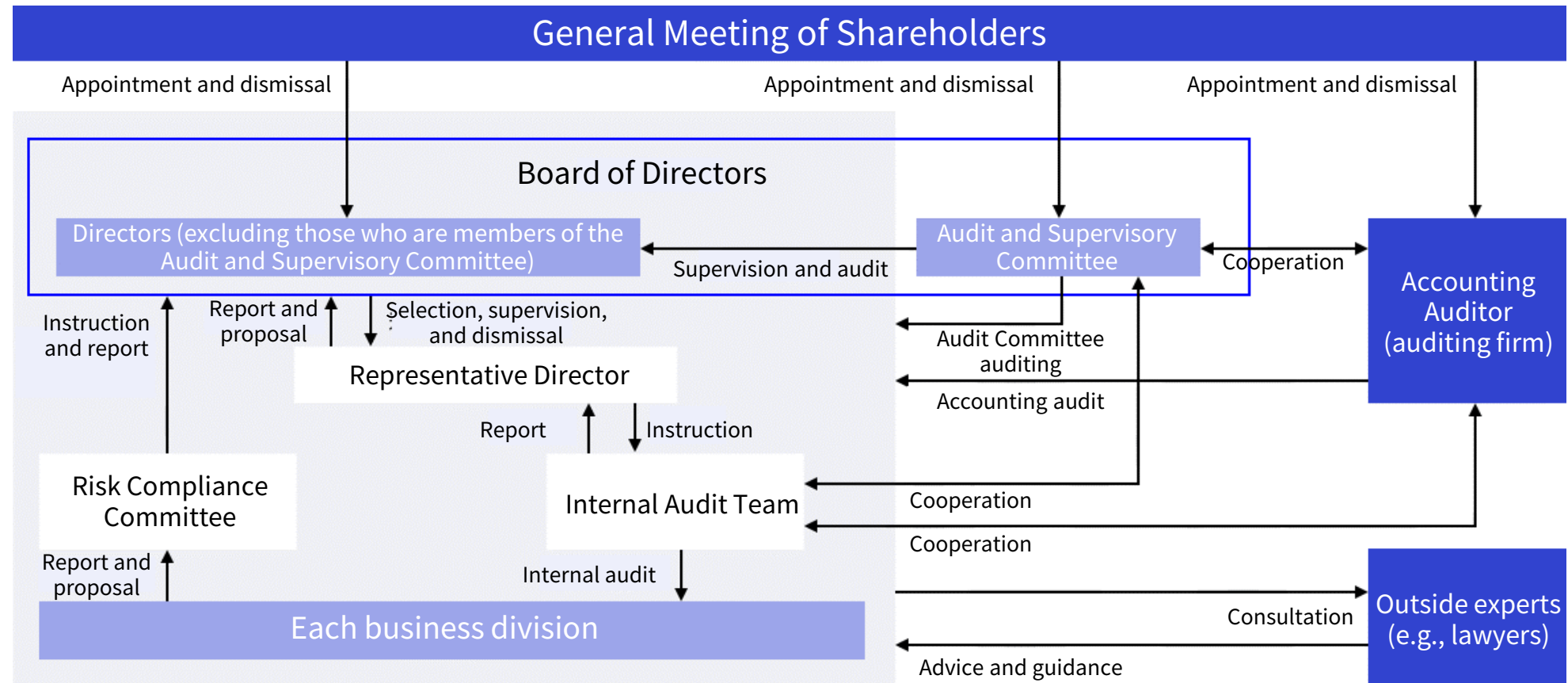
We have an environment in which employees can play an active role regardless of gender and age, and depending on the agenda, managers other than executive officers also participate in the Board of Directors meetings. In addition, 30% of all employees are of child-rearing generation, and by teleworking and dividing duties appropriately, they are able to work while balancing urgent family matters and school events.

Promote office DX

Although the transition to full telework has been made, work that involves commuting to the office has not been reduced to zero. We are continuing our initiatives to streamline our office with DX, utilizing call receptionist services and electronic contracting services to reduce the amount of work that requires commuting to the office as much as possible.

Strengthen corporate governance and compliance systems

We believe that it is essential for sustainable growth to improve management efficiency and at the same time, to enhance the soundness, transparency and compliance of management to fulfil the trust of society. We are committed to strengthening corporate governance on a daily basis based on the recognition that the results of such efforts will enhance corporate value and lead to the return of profits to various stakeholders, including shareholders, creditors, and employees.



Strengthen corporate governance and compliance systems

We recognize that the appropriate protection of all information assets handled in the planning, development, operation, maintenance, and sales of IT systems is one of the most important management issues for building lasting relationships of trust with our customers, and therefore we will act in consideration of information security based on the following information security policy.

Thorough information security system

ISO27001 (Information Security Management System) certification

We have acquired both ISO/IEC 27001:2013 certification, an international standard for ISMS (Information Security Management System), and JIS Q 27001:2014 certification, a domestic standard. We recognize that the appropriate protection of all information assets handled in the planning, development, operation, maintenance, and sales of IT systems is one of the most important management issues in building lasting relationships of trust with our customers, and therefore we will act in consideration of information security.

ISMS (Information Security Management System)
ISO/IEC 27001:2013 JIS Q 27001:2014 Registration number: IA120255



Acquired Privacy Mark certification

We have obtained Privacy Mark certification from General Incorporated Foundation Japan Information Processing and Development Center (JIPDEC) as of January 6, 2015.

Privacy Mark certifies that its holder has a system in place to take appropriate protection measures for personal information and is compliant with JIS standards (JIS Q 15001) regarding personal information.

Privacy Mark® 10824248 (05)



Disclaimer and Cautionary Statement Regarding Forward-Looking Statements

This document may contain projections based on assumptions, forecasts and plans related to the future as of the announcement date. These forward-looking statements are based on information currently available to us and certain assumptions that we consider reasonable, and we do not promise that they will be achieved.

Actual results may differ materially from these forecasts due to various factors in the future, including changes in economic conditions, changes in customer needs and user preferences, competition with other companies, and changes in laws and regulations.

For inquiries and requests for individual interviews, please contact the following IR department.

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Shaping the “Let’s Do It”
for a next game changer