Digital Hearts Hldgs.

Presentation Material

for the First Half of the Fiscal Year Ending March 31, 2020

2019/11/11

Tokyo Stock Exchange First Section : Code 3676

https://www.digitalhearts-hd.com/

Business Results for the First Half of FY2019

(The six months ended September 30, 2019)

Results for the First Half of FY2019

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Performance Overview

Net sales	10,222 Mln yen (YoY 109.5%)	Operating income	518 Mln yen (YoY 66.7%)

- **New Record high sales as the first half of the year, but operating income dropped by aggressive investments.**
- **Strong sales and profits of Debugging div. and System Testing div.**
- **Achieved Enterprise Business profitable for Q2 three months (July-September).**

Business Topics

- **Acquired LogiGear Groups with Testing Automation Technology.**
  ⇒ Consolidation : B/S from Q2, P/L from Q4 of FY2019
- **Establishing Joint venture with LAC Co., Ltd. to expand the cyber security business.**
  ⇒ Starting its business in December 2019

Stock relationships

- **Share Repurchase**
  Repurchase period: November 12, 2019 to February 6, 2020
  Total number of shares to be repurchased: 700,000 shares (maximum)
  ※ Total number of shares issued (excluding treasury shares): 3.18%
  Total value of shares to be repurchased: 500 million yen (maximum)

Summary of Business Results for the Six Months Ended September 30, 2019

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Net sales set a new record high in the first half, but operating income declined due to investments in human capital, etc.

(Mln Yen)	1H FY2018	1H FY2019	YoY Change	
Net sales	9,333	10,222	888	109.5%
Cost of sales	6,680	7,603	922	113.8%
Cost of sales (%)	71.6%	74.4%		+2.8 points
Gross profit	2,652	2,619	-33	98.7%
SG&A	1,875	2,100	225	112.0%
Operating income	777	518	-259	66.7%
Operating income margin	8.3%	5.1%		-3.3 points
Ordinary income	754	513	-241	68.1%
Profit attributable to owners of parent	508	277	-231	54.6%

Analysis of Changes in Operating income
- Compared with the previous year -

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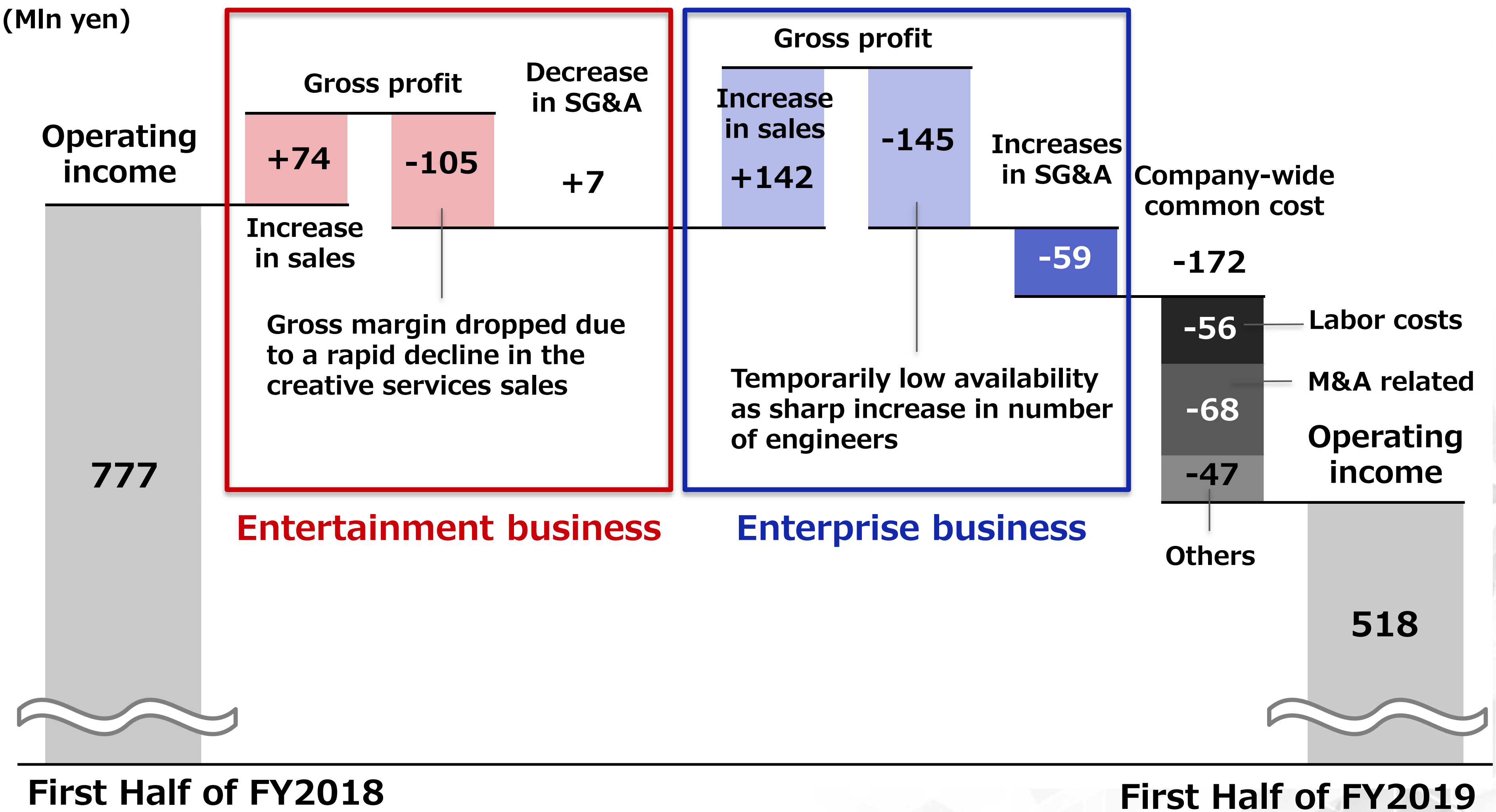
Decrease in operating income mainly due to increase in the large number of engineer hiring and in M&A costs



Analysis of Changes in Operating income
- Compared with the Q1 -

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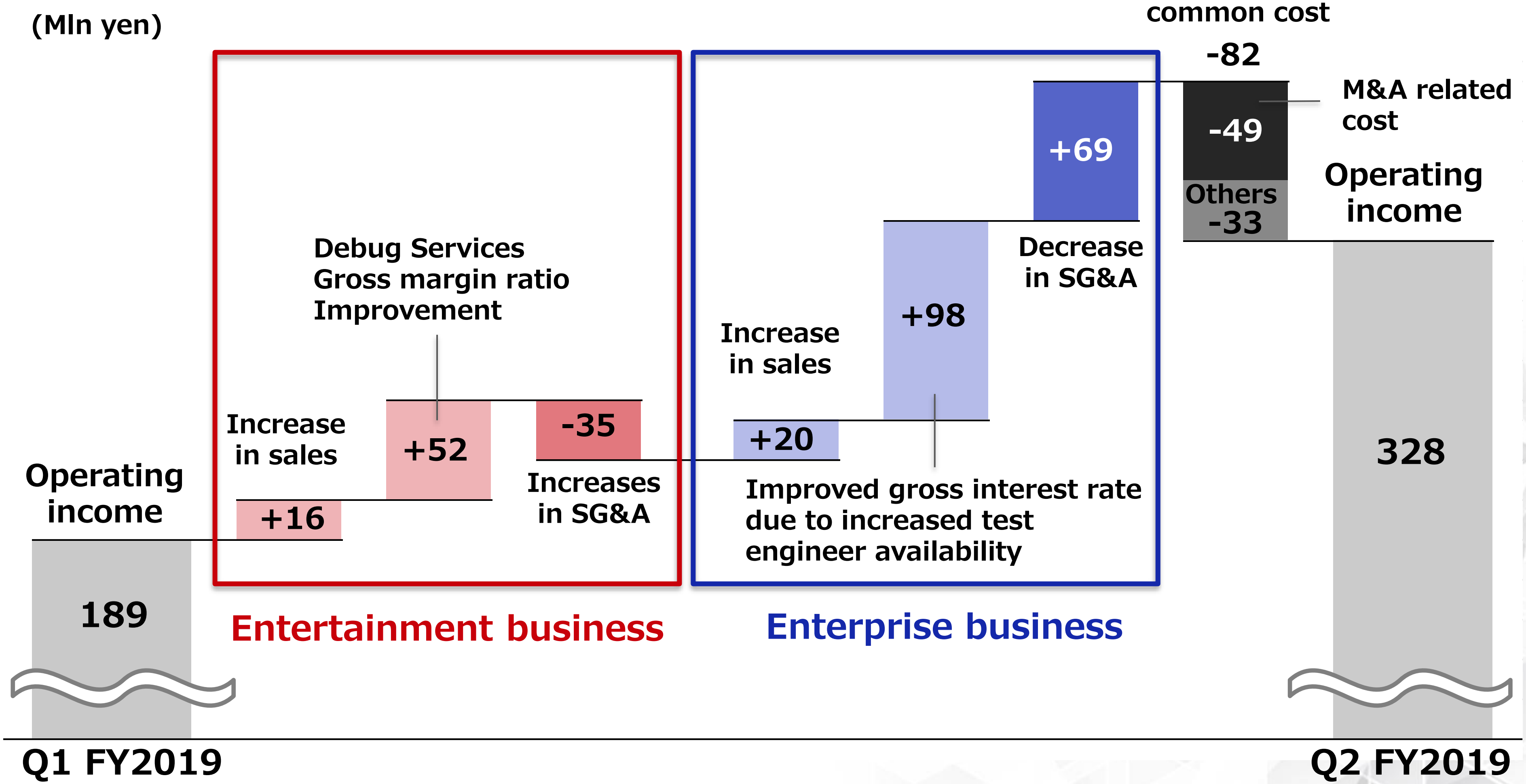
Enterprise business moved into black in Q2 three months.
Improve of sales and profits compared to the Q1 for both Entertainment and Enterprise business.



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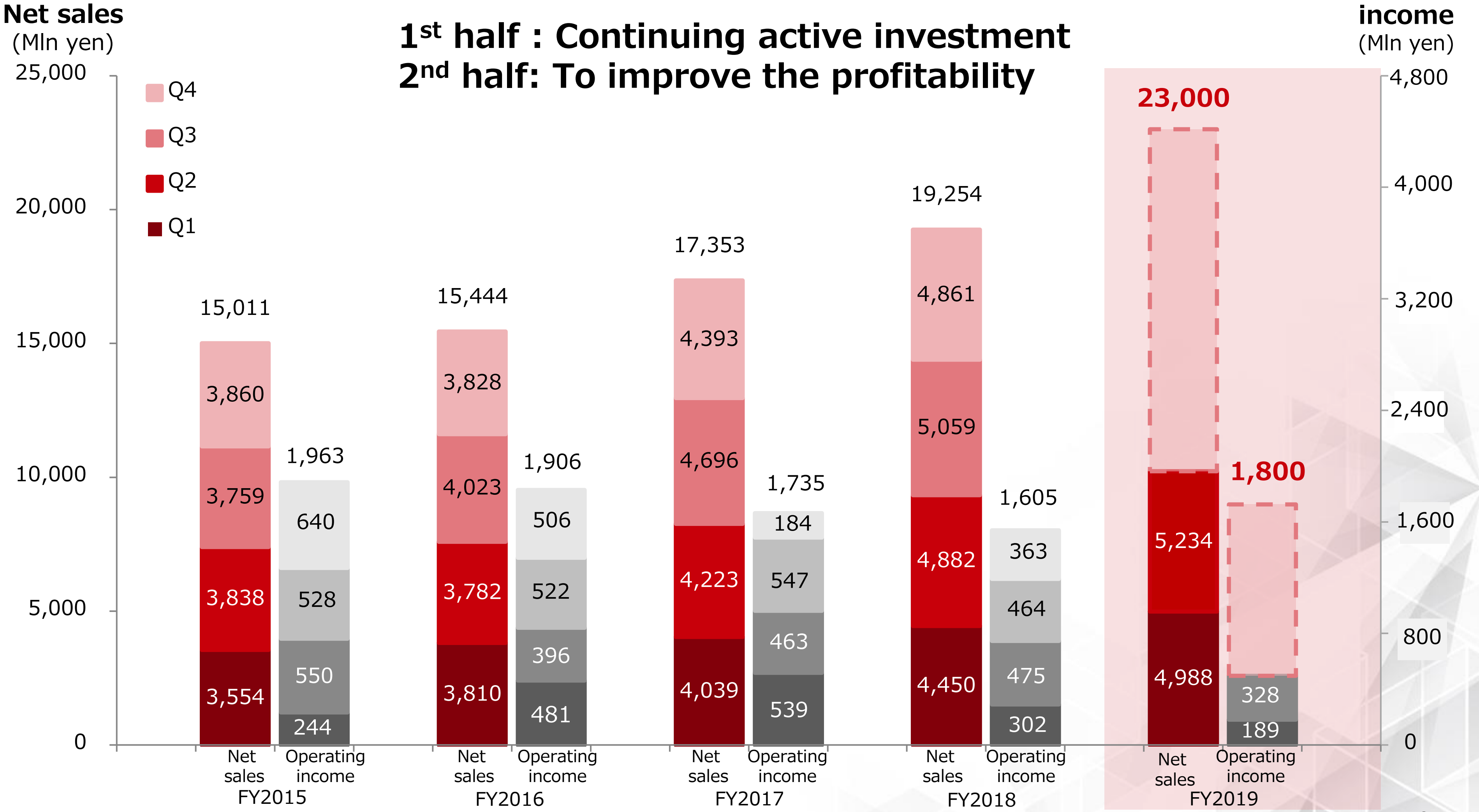
To achieve to increase in both net sales and operating income as a full year base



Consolidated Balance Sheets

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(Mln Yen)	Q4 FY2018 (As of March 31, 2019)	Q2 FY2019 (As of September 30, 2019)	YoY Change
Total assets	9,832	10,827	994
Current assets	7,403	7,574	170
Cash and deposits	4,197	3,849	-347
Notes and accounts receivable-trade	2,724	3,017	293
Noncurrent assets	2,428	3,252	824
Property, plant and equipment	558	646	88
Intangible assets	763	1,404	640
Investments and other assets	1,107	1,202	95
Total liabilities	4,819	5,304	484
Current liabilities	4,192	4,679	487
Short-term loans	1,704	2,504	799
Noncurrent liabilities	627	624	-2
Convertible bond-type bonds with subscription rights to shares	508	508	―
Total net assets	5,012	5,522	510
Shareholders' equity	4,763	5,039	275
Accumulated other comprehensive income	28	17	-10
Subscription rights to shares	13	13	―
Non-controlling interests	207	452	245
Total liabilities and net assets	9,832	10,827	994

Consolidated Statements of Cash Flows

DIGITAL HEARTS HLDGS.

(Mln Yen)	1H FY2018	1H FY2019	YoY Change
Net cash used in (provided by) operating activities	315	-5	-321
(*Cash flows before income taxes paid)	569	483	-86
Net cash used in investing activities	-449	-963	-514
Net cash provided by (used in) financing activities	-40	637	677
Effect of exchange rate change on cash and cash equivalents	2	-15	-17
Net decrease in cash and cash equivalents	-171	-347	-175
Cash and cash equivalents at the beginning of period	3,894	4,162	268
Increase in cash and cash equivalents from newly consolidated subsidiary	9	—	-9
Cash and cash equivalents at the end of period	3,732	3,814	82

Financial results of the First Half by Segment

[Notice regarding Earnings by Segment]
・Net sales by segment include inter-segment sales or transfers.
Segment income is based on operating income.
・Segments changed from Q1 FY2018. For this reason, the figures for FY2017 and earlier by segment are reclassified to reflect the change in segments, and comparisons are made.

Summary of Earnings by Segment

- Both the Entertainment Business and the Enterprise Business achieved higher sales than previous year.
- Operating income decreased due to aggressive upfront investment and M&A related expenses.

(Mln Yen)	1H FY2018	1H FY2019	YoY Change
Net sales	9,333	10,222	109.5%
Entertainment	7,874	8,127	103.2%
Enterprise	1,459	2,094	143.5%
Adjustments	-0	—	—
Operating income	777	518	66.7%
Entertainment	1,511	1,487	98.4%
Enterprise	-119	-181	—
Adjustments	-614	-787	—
Operating income margin	8.3%	5.1%	-3.3 points

Result of Entertainment Business

- Mainstay Debugging business kept increasing sales and profits.
- Segment income declined due to the impact of the significant decline in sales of Creative div.
- Debugging sales increased in all GC/MS/AM.

(Mln Yen)	1H FY2018	1H FY2019	YoY Change
Net sales	7,874	8,127	103.2%
Debugging	6,393	6,925	108.3%
Game Console (GC)	1,981	2,242	113.2%
Mobile Solutions (MS)	4,128	4,184	101.3%
Amusement (AM)	282	498	176.3%
Creative	1,073	657	61.3%
Media and others	408	544	133.5%
Segment income	1,511	1,487	98.4%

Entertainment Business – Debugging div.

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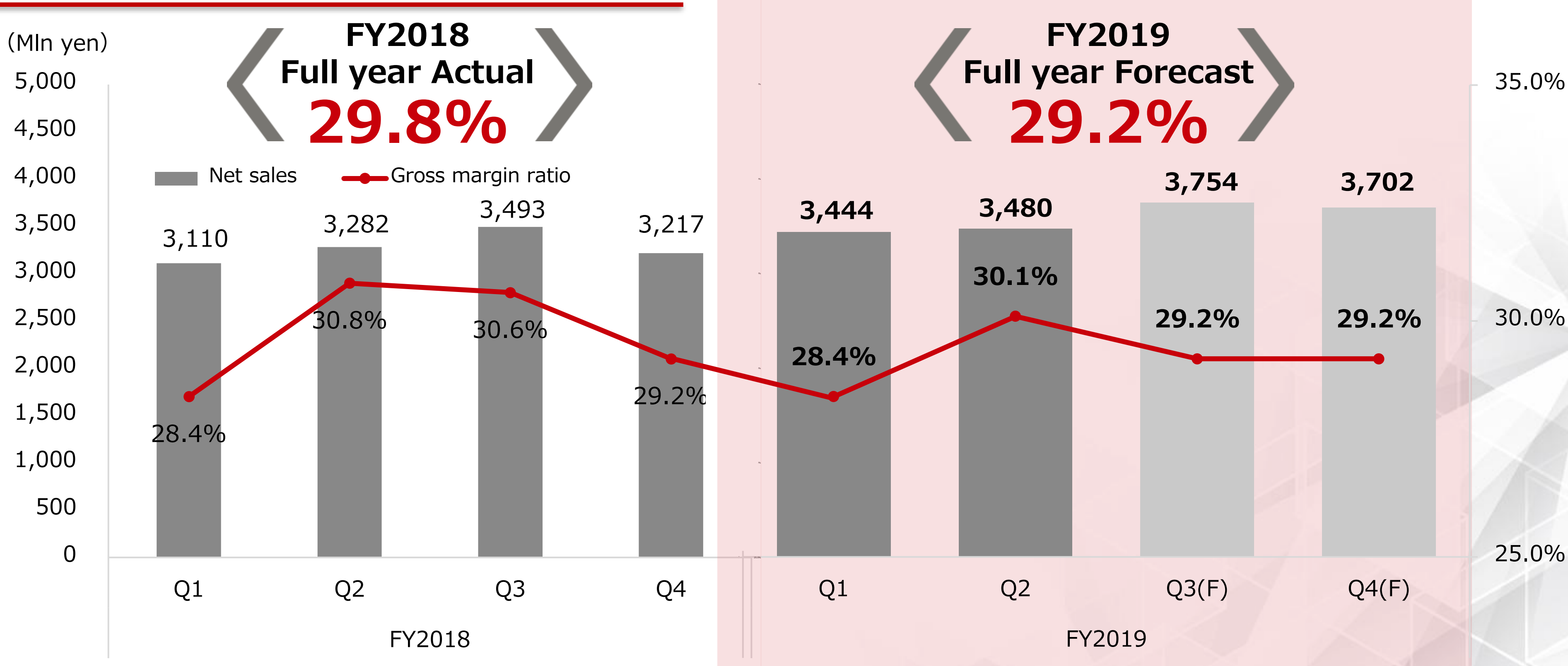
- **Sales Contribution of Orgosoft Co., Ltd. acquired in February 2019.**
- **Q2 gross margin recovered by improving of debugging operations.**
- **To keep almost same gross margin as previous year led by restructuring of test centers' operation even with raising labor cost in Japanese market.**

Quarterly results of Debugging div.

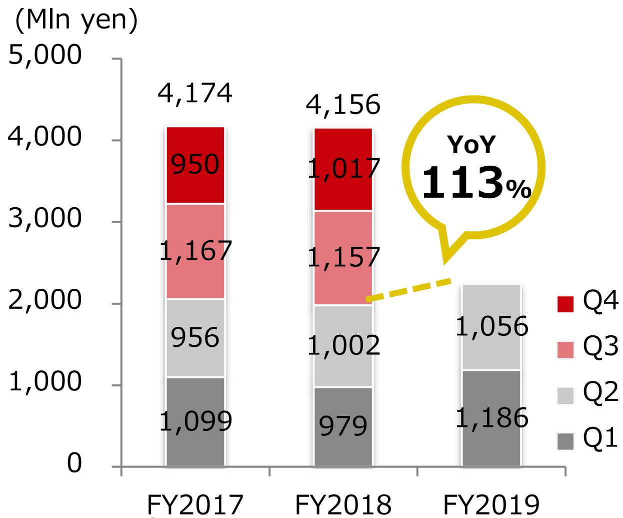


Entertainment Business – Debugging div.

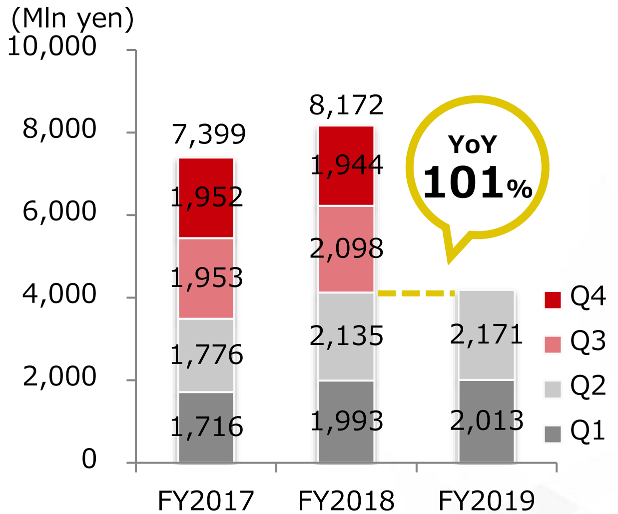
- **Game Console dept. (GC)**
  - Received orders for several large-scale titles, achieving a significant increase in sales, and Q3 is expected to be in the busiest period
- **Mobile Solutions dept. (MS)**
  - The growth rate slowing down due to the market environment, but it is also expected to keep growing stably in the 2nd half
- **Amusement dept. (AM)**
  - The market demand trend has become recovered slightly from the downtrend, but the market trends should continue to be watched closely

Quarterly sales

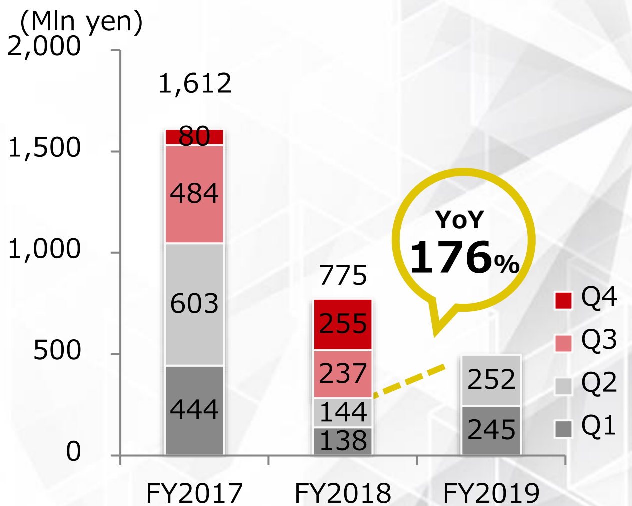
Game Console dept. (GC)



Mobile Solutions dept. (MS)



Amusement dept. (AM)



■ Creative

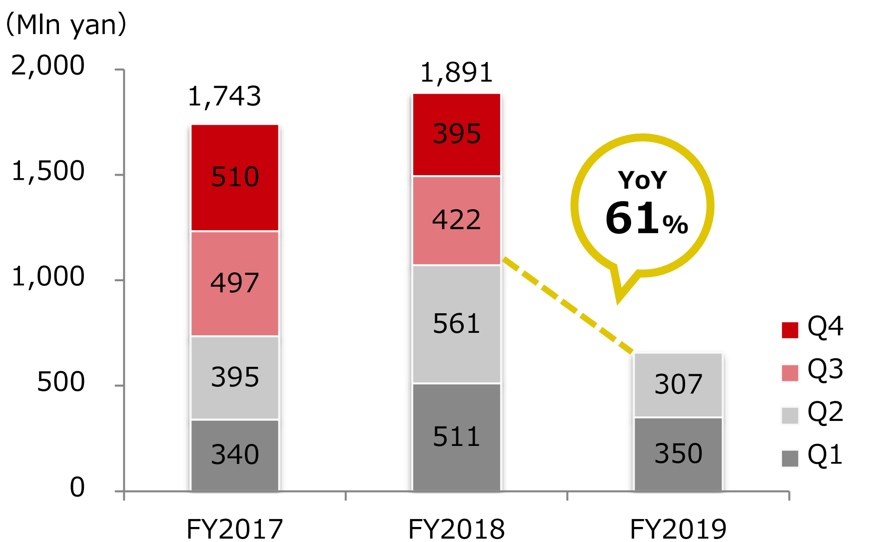
- Net sales declined sharply due to a decrease in the number of new mobile game titles developed by client companies.
- Strengthen collaboration with the debugging business and pursue further synergies.

■ Media and others

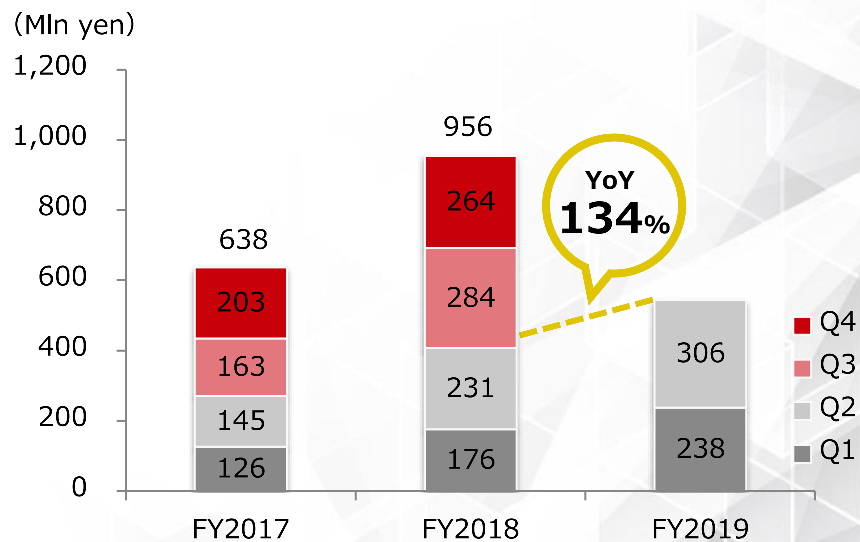
- Both “4Gamer.net” and Customer Support Services achieved higher sales.
- The outlook for the 2nd half also remains stable.

Quarterly sales

Creative



Media and others



Result of Enterprise Business

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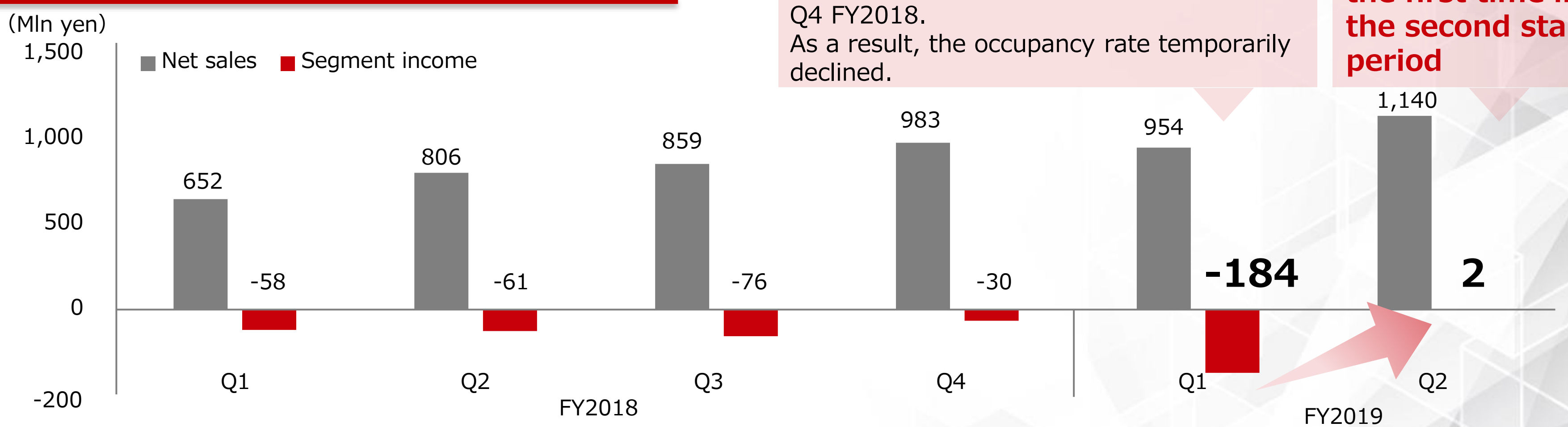
- Achieved high growth of sales and made new alliances and M&A for future expansion of the business.

(Mln Yen)	1H FY2018	1H FY2019	YoY Change
Net sales	**1,459**	**2,094**	**143.5%**
System Testing	545	1,001	183.4%
IT service / Security	913	1,093	119.7%
Segment income	**-119**	**-181**	—

Quarterly results of Enterprise Biz

By recruiting new graduates and mid-career hires, the number of test engineers has increased by about 40 from the end of the Q4 FY2018.
As a result, the occupancy rate temporarily declined.

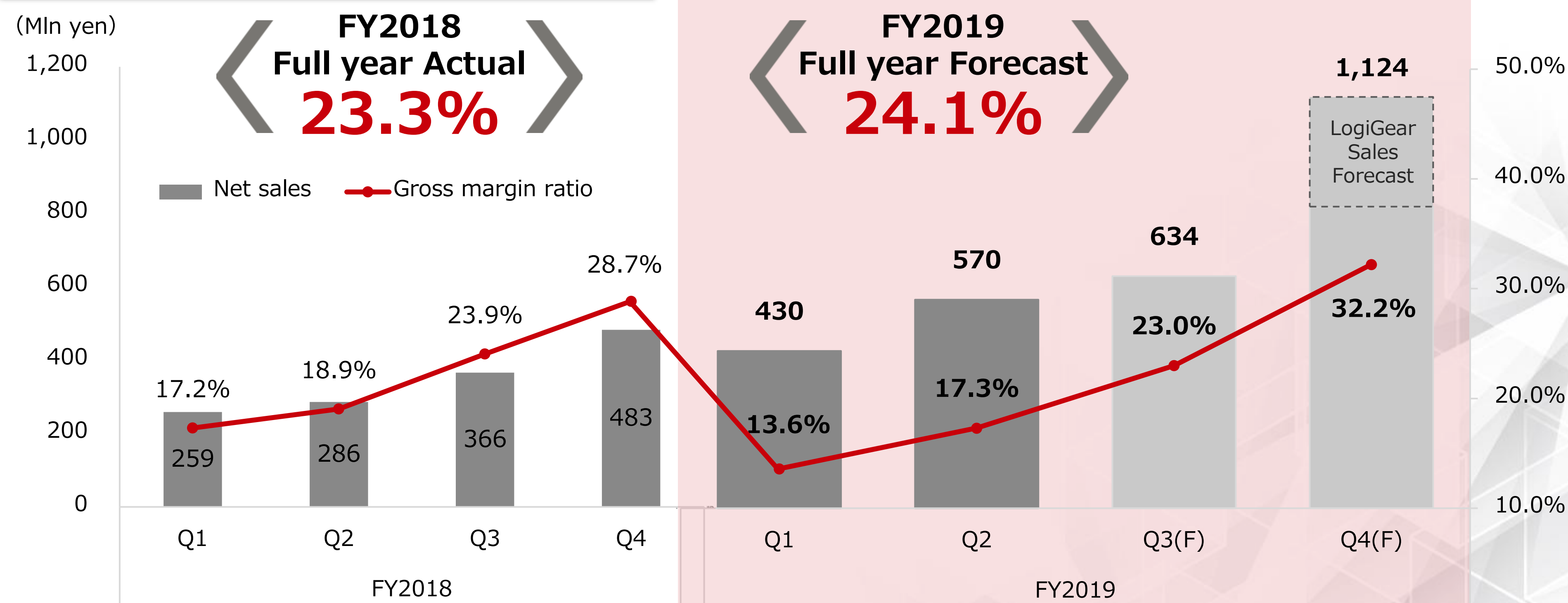
Achieved profitability for the first time in the second startup period



Enterprise Business – System Testing div.

- Q2 gross margin ratio improved due to an increase in capacity utilization rates in line with higher sales.
- The results of the LogiGear Group, which we acquired in Q2, are expected to be consolidated from Q4 of FY2019.
- Aiming for further improvement in sales and gross margin through contribution of LogiGear's test automation technology, etc.

Quarterly results of System Testing div.



Enterprise Business

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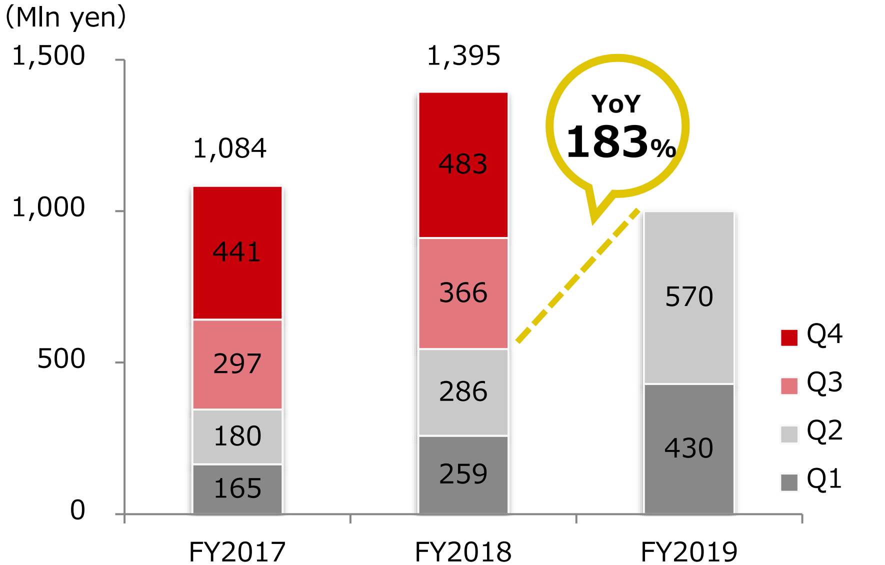
■ **System Testing**
Significant increase in sales due to the steady development of new customers and the expansion of transaction volume per company.

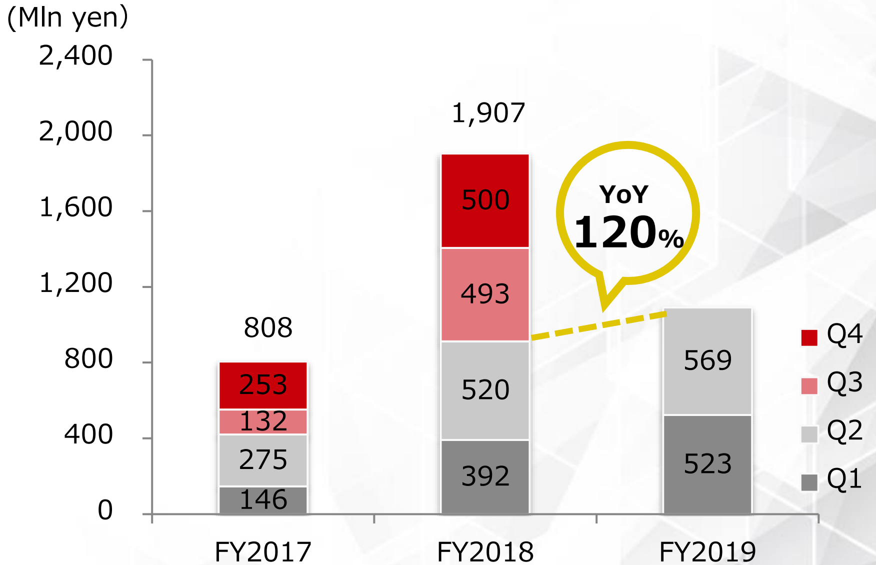
■ **IT service / Security**
Strong performance in system consignment development and acquisition of new orders for security services for major clients.

Quarterly sales

System Testing



IT service / Security

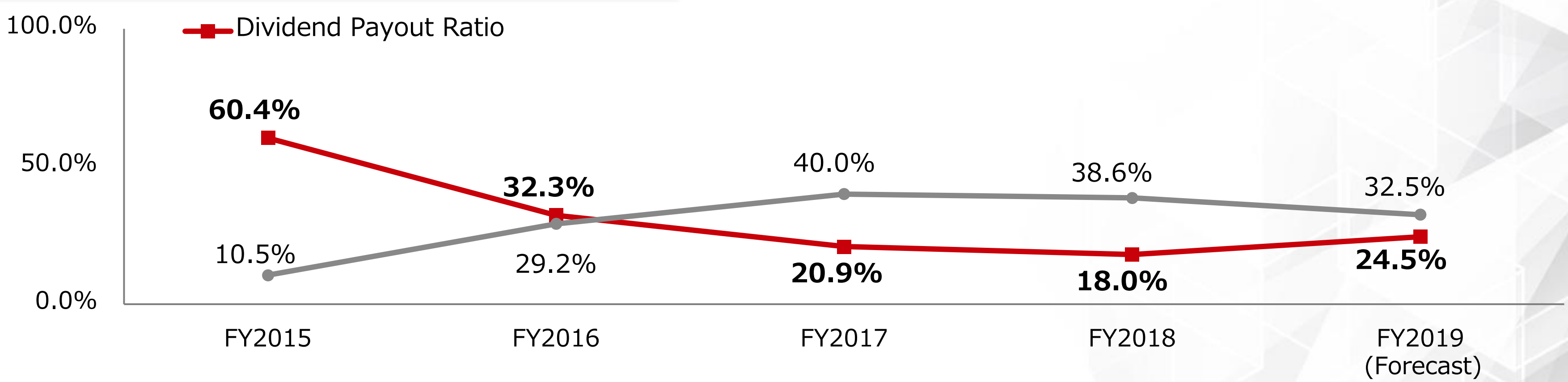


Dividend Trends

The interim dividend was 7 yen, an increase of 0.5 yen YoY
Year-end dividend is also expected to be 7 yen, an increase of 0.5 yen YoY

	FY2015	FY2016	FY2017	FY2018	FY2019 (Forecast)
Annual dividends	9.5 yen	11.5 yen	11.5 yen	13.0 yen	14.0 yen
(Interim dividends)	4.5 yen	5.5 yen	5.5 yen	6.5 yen	7.0 yen
(Year-end dividends)	5.0 yen	6.0 yen	6.0 yen	6.5 yen	7.0 yen

Dividend Payout Ratio/ROE Trends

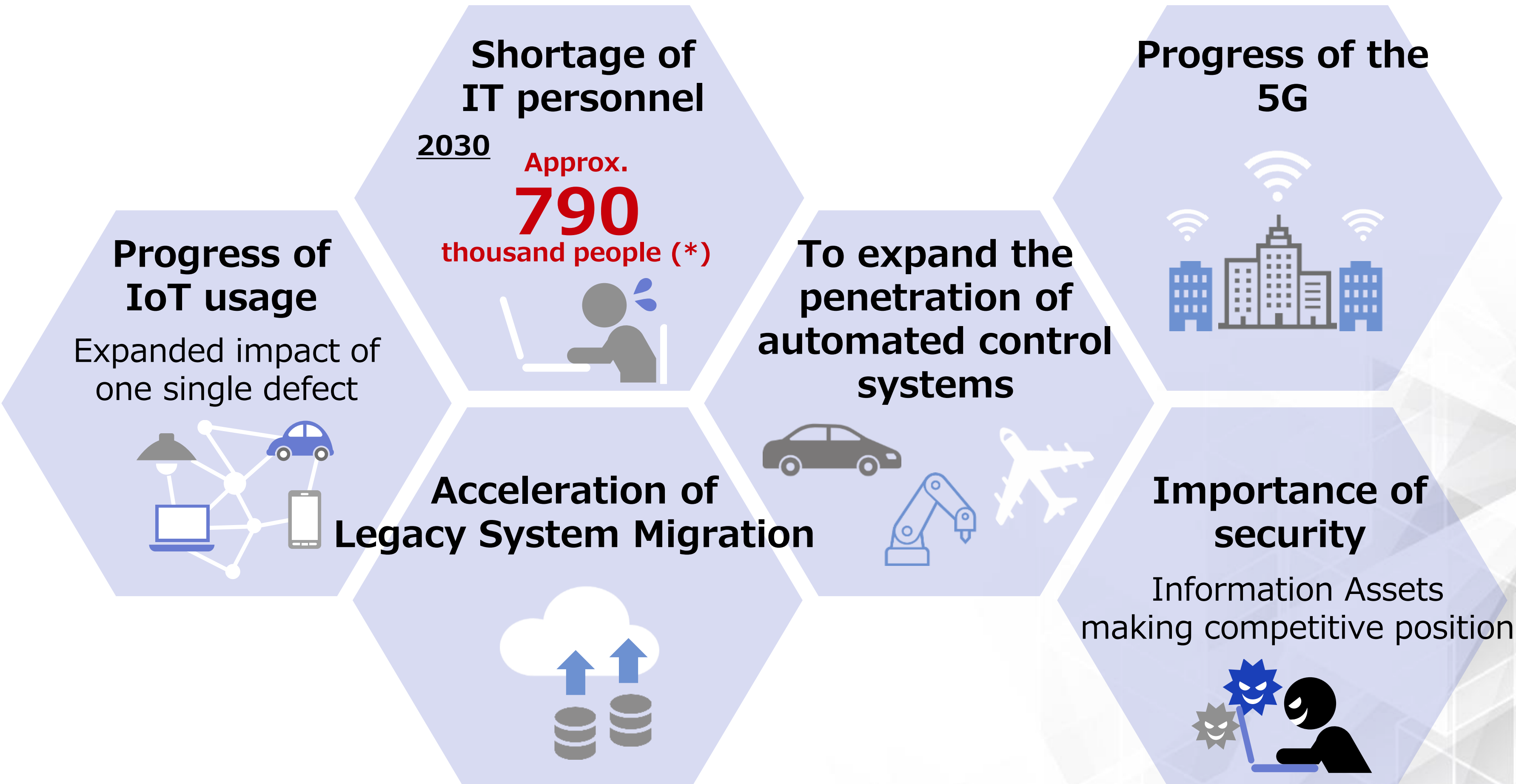


*As the company conducted a 2-for-1 common stock split , effective on October 1, 2016, dividends before the interim dividends for FY2016 are accordingly adjusted retroactively to reflect the share splits impact.

Financial Forecast for the Second Half of FY2019 and growth strategy

Market Environment in Japan

**System quality can't be ensured only by using in-house resources.
Testing from the Third Party perspective should be required.**



(※) Source: Ministry of Economy, Trade and Industry "Survey Results on the Current Trends of IT Human Resources and Projects"

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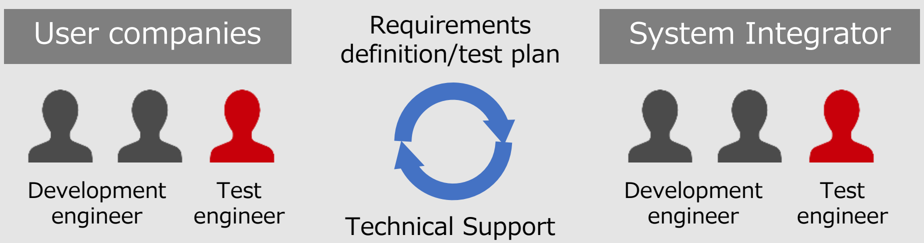
In an era where the service quality cannot be guaranteed without leaving the existing model of system development

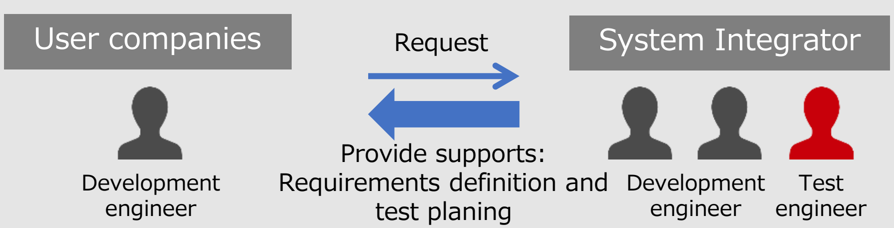
Ideal

- ✓ Users have engineers for both system development and test to take the lead in development and maintenance.



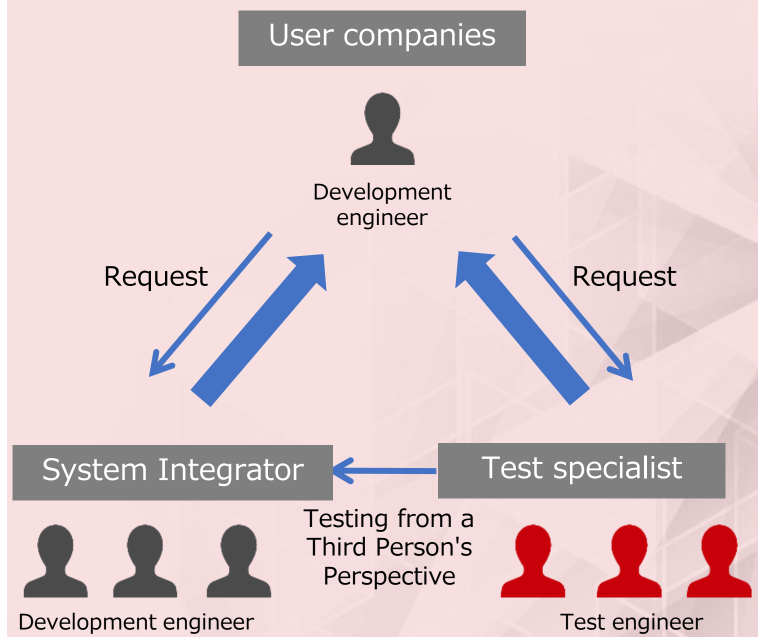
Current status

- ✓ Users facing the shortage of engineers and relying largely on the system integrators' resources.
- ✓ Testing performed by the system integrator might be only from developers' view, which may make it hard to detect fatal defects, etc.



New idea of relationship

- ✓ Improving quality through testing from the viewpoint of "third parties"
- ✓ Efficient and accurate testing with expert, knowledgeable test engineers

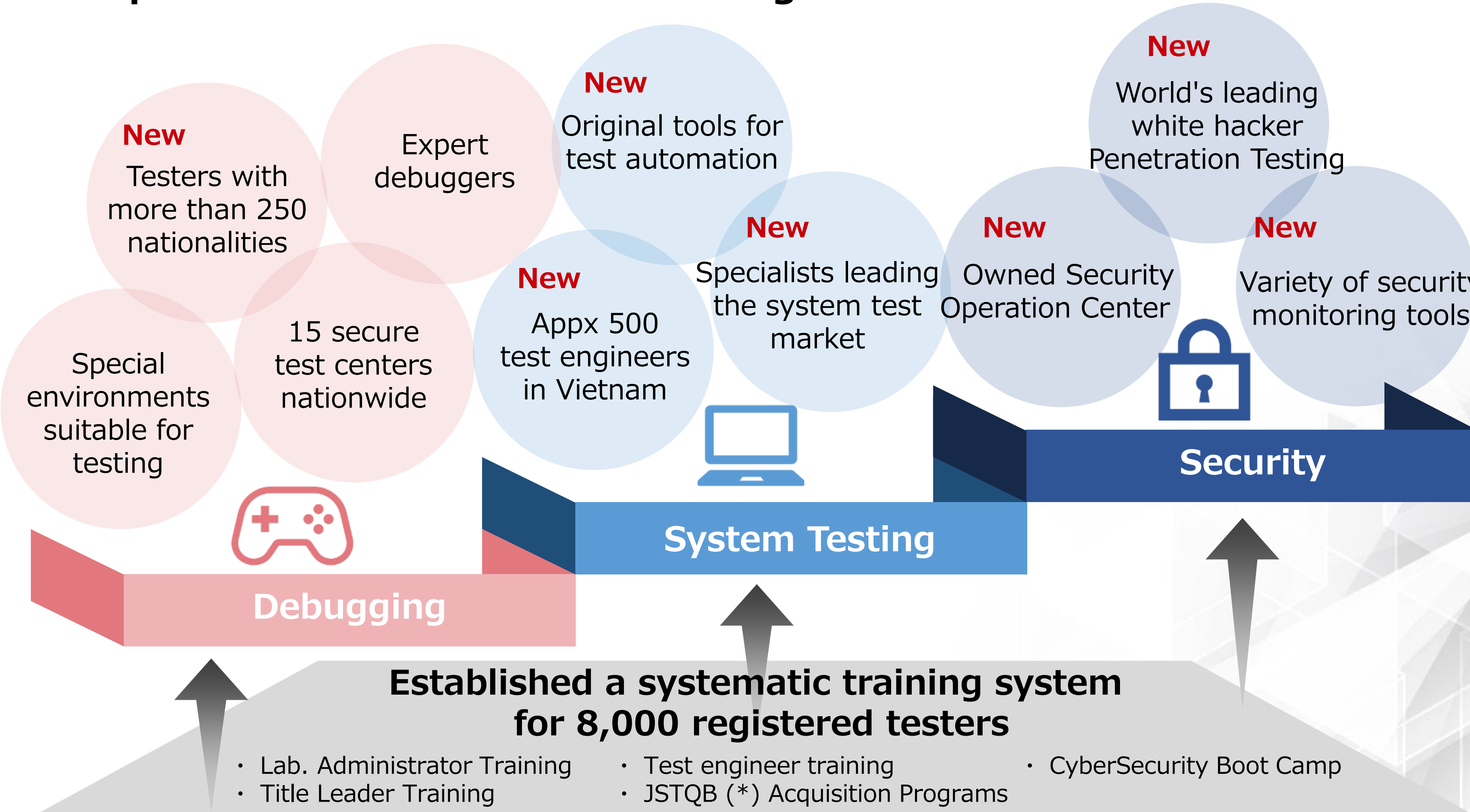


Target during the second startup period

To be the Asia‘s No.1 company for comprehensive testing Solutions

Human Capital × Technology

Strengthening of human capital and technologies to provide various services reacting to new demands in the market



* JSTQB...Software Testing Technician Qualification in Japan

Progress during the second start-up period

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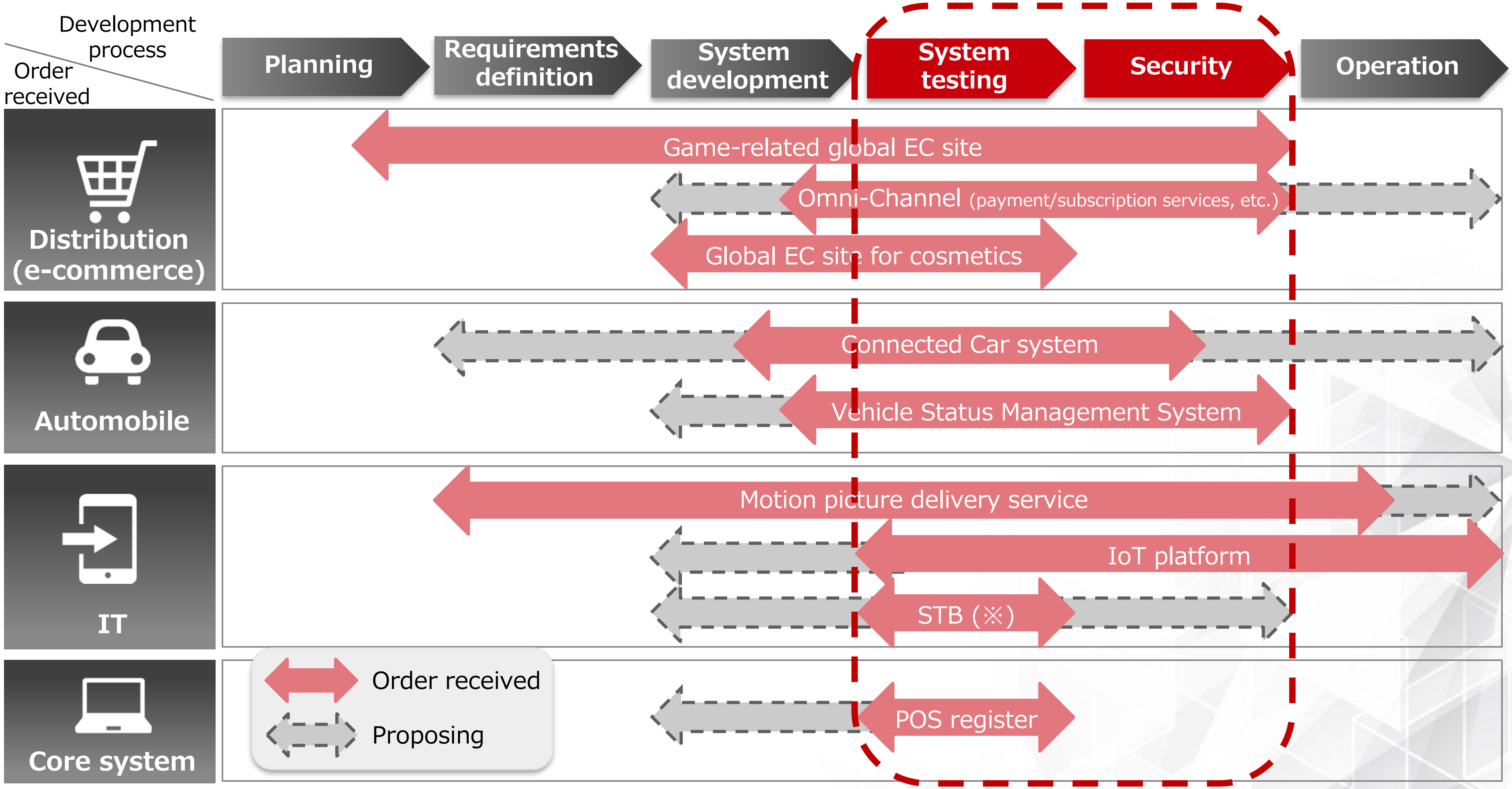
Increased number of projects acquired in a wide range of development processes as services are diversified and improved quality



※ STB (Set-Top Box)... a dedicated receiver for receiving digital multi-channel broadcasting via cable television

Business progress in 1H of FY2019

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	Debugging	System Testing	Security
Priority measures in FY2019	➢ Structural reform of Lab ➢ Boosting overseas operations	➢ Enhancement of human capital ➢ Promoting test automation ➢ Strengthening the Order System	➢ Business Strengthened

Upcoming Progress

Debugging

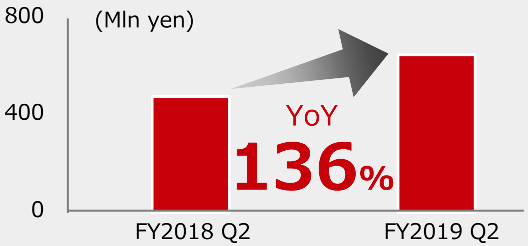
Effective development of structural reform of Lab.

YoY Change

Ratio of non-Tokyo region	+2.6 points
Variable expense ratio of labor expenses	+5.2 points

Sales of overseas biz increasing significantly

Overseas Business Sales



System Testing

Acquired LogiGear Group

Strengthening Technologies and Human Capital

500 test engineers × **Autonomic tool**

High Growth excluding M&A Effects

YoY Change

Sales volume	171%
Average transaction amount per company	164%

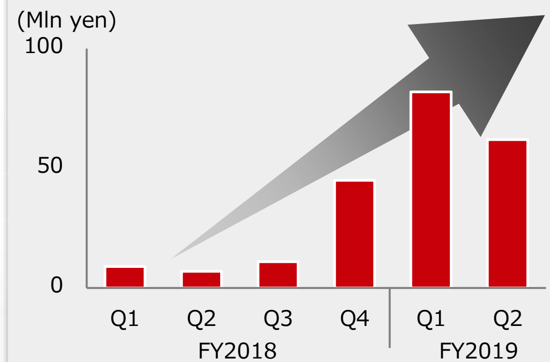
※ Express growth rate excluding M＆A effects

Security

Sales are from the previous year

Rapid expansion of 8 times or more

Quarterly Sales Trends



Project progress for test automation

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Orders for trial of test automation projects

■ Examples of Test Automation Trial Orders

	Case1 Mobility services software	Case2 Game Platform	Case3 Office Integration Software	Case4 Connected Car system
Test Description	Fatal Failure Detection	In the tutorial Test automation	Automating Regression Tests	Automating Regression Tests
Trial period	2 months	2 months	1 month	Undetermined
Status	Completion of the trial Entering into this Agreement	During a trial	Completion of the trial Negotiating for this Agreement	From the end of November 2019 Start Trial

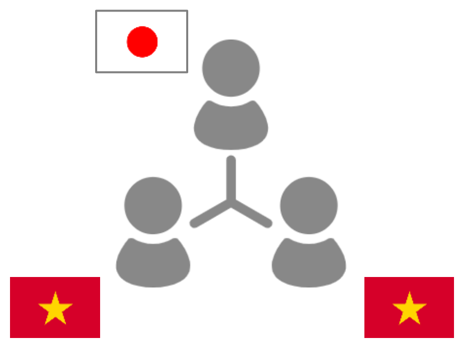
■ Client's expectations for our groups

1. **Improve product quality** : Automation of areas where testing was inadequate due to human and time constraints
2. **Knowledge of automation** : Technical support for companies that cannot automate because of lack of knowledge and know-how
3. **Improving test quality** : Execute highly accurate tests without human errors, etc.

Priority measures in 2H FY2019

Strengthened a cross-group service structure to acquire more test automation projects

Strengthening professional sales resources to suggest test automation	Increase in the number of bridge engineers connecting Japan and Vietnamese sites	Development of automation tools for the Japanese market



Strengthening professional sales resources to suggest test automation

- ✓ Periodic study sessions
- ✓ Developing Sales Engineers

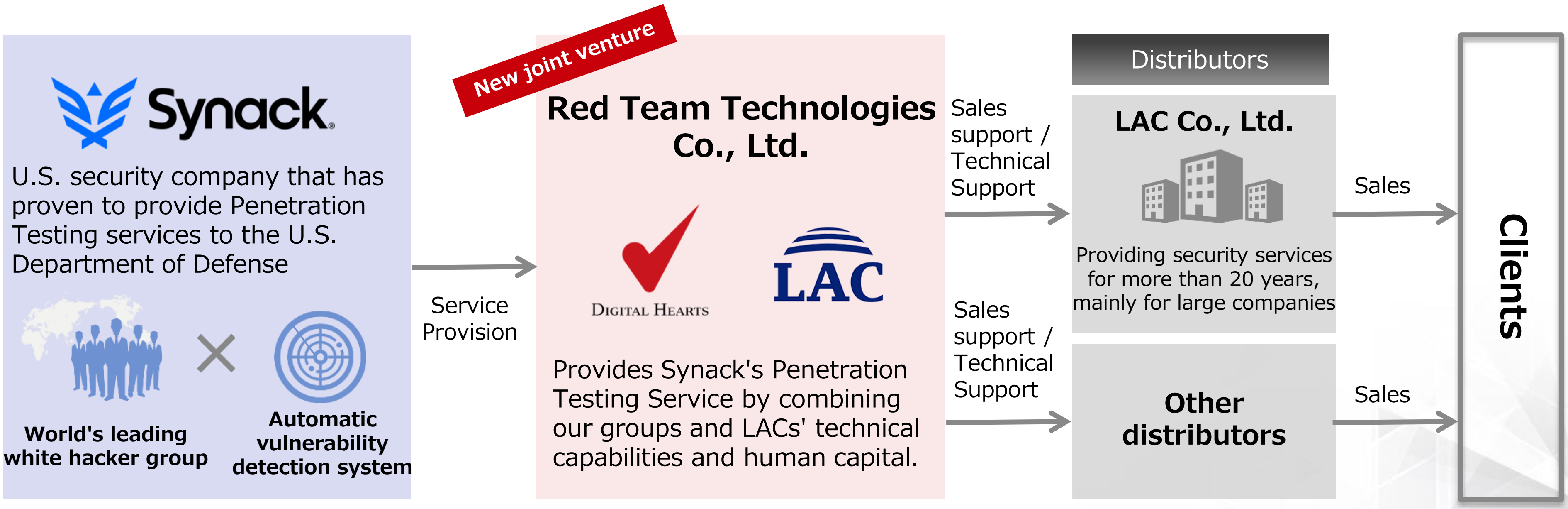
Increase in the number of bridge engineers connecting Japan and Vietnamese sites

- ✓ Strengthening the adoption of Vietnamese engineers in Japan
- ✓ Interchange of human resources between Japan and Vietnamese sites

Development of automation tools for the Japanese market

- ✓ To develop tools specifically for testing Japanese Web/ apps
- ✓ Collaboration of tools to automate the entire process of multi-terminal verification

Strengthening sales capabilities by establishing a joint venture company with LAC Co., Ltd. to further expand security business



Outline of Proposed Joint Venture

Company name	Red Team Technologies Co., Ltd.	Capacity	80 million yen (including 40 million yen for capitalization)
Location	3-20-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo	Incorporated	November 2019 (planned)
Representative	Takuya Okada	Investment Ratio	DIGITAL HEARTS HOLDINGS Co., Ltd.: 60.0% LAC Co., Ltd.: 40.0%
Business Activities	White hacker service and technical support		

Full year Forecast of FY2019

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**From the second half to the investment recovery phase.
Aiming for higher sales and profits year-on-year, while keeping the initial plan unchanged**

(Mln Yen)	Full year FY2018 (Actual)	Full year FY2019 (Forecast)	YoY Change
Net sales	19,254	23,000	119.5%
Entertainment	15,951	17,130	107.4%
Enterprise	3,302	5,870	177.7%
Operating income	1,605	1,800	112.1%
Operating income margin	8.3%	7.8%	-0.5 points
Ordinary income	1,651	1,830	110.8%
Profit attributable to owners of parent	1,575	1,250	79.3%

Forecast by segment of FY2019

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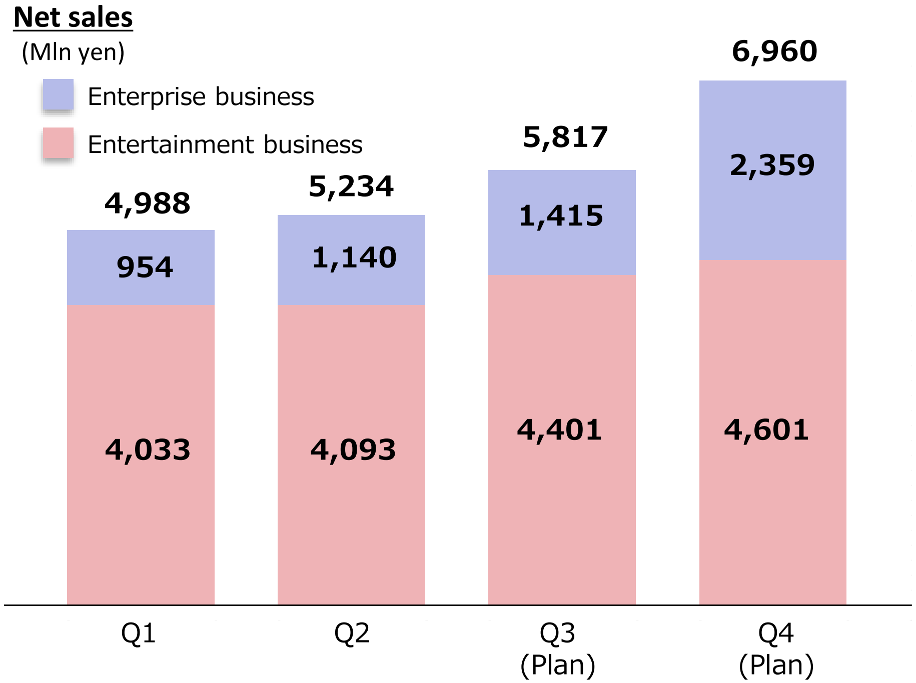
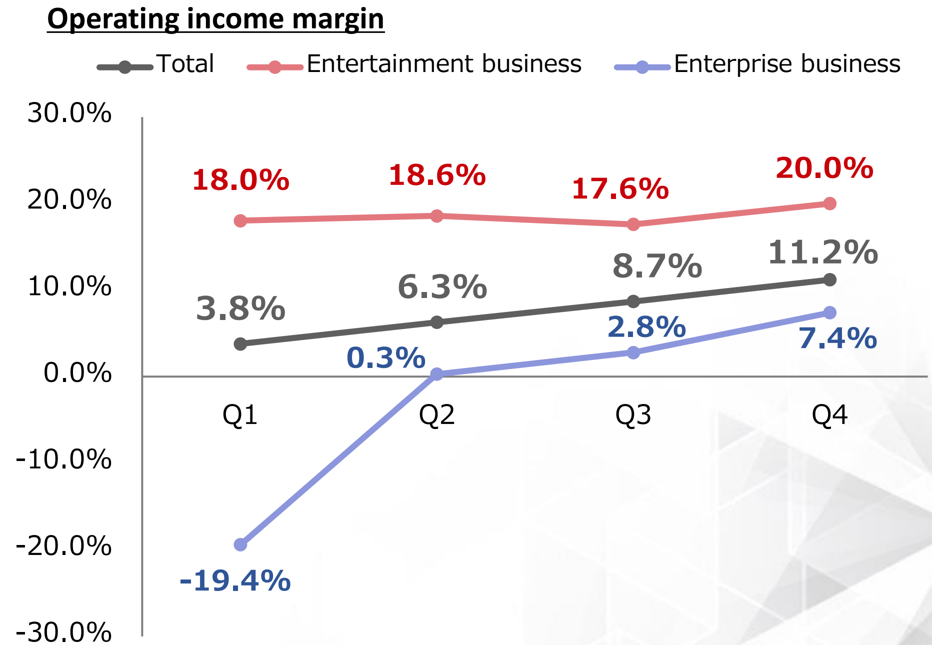
Net sales

Expect 125% growth in 2H compared with 1H

Operating income margin

Enterprise Business Making profit for 2nd half as well





(Second Half Outlook)

- ✓ Q3 to grow significantly due to the busy periods of debugging services
- ✓ Enterprise business continues to grow
- ✓ LogiGear groups consolidated in PL from Q4

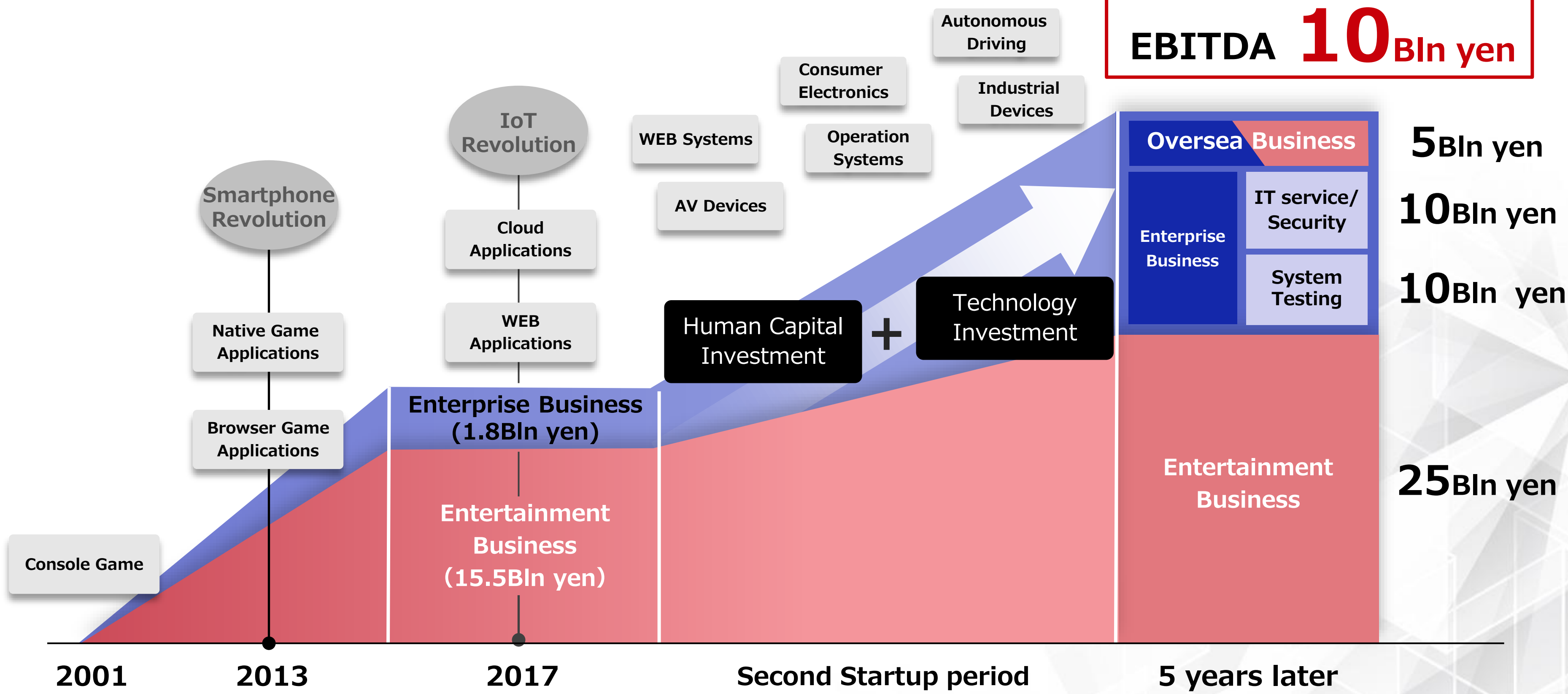
(Second Half Outlook)

- ✓ To make profits in Enterprise Business in 2H as well.
- ✓ Try to recover the creative service sales in Q4.
- ✓ The company-wide common expenses are expected to be around the same as 2H of the previous year.

To be the Asia's No.1 Company for Comprehensive Testing Solutions

Sales **50** Bln yen

EBITDA **10** Bln yen



Appendix

Why You Should Invest in DIGITAL HEARTS

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Employment creation for more than
8,000 testers

Ratio of external officers of
40.0%

One of the few
testing focusing companies
in Japan

Foreign staff members of more than
20 nationalities

High market growth rate* with
CAGR at **27.5%**

Business that supports
Digital security

*Data on the growth rate of the market of outsourced software testing services for 2017 to 2021, prepared by DIGITAL HEARTS in reference to a range of data.
(References)Websites related to Global Pure Play Software Testing Services Market 2017-2021 and Global Software Testing Market 2017-2021

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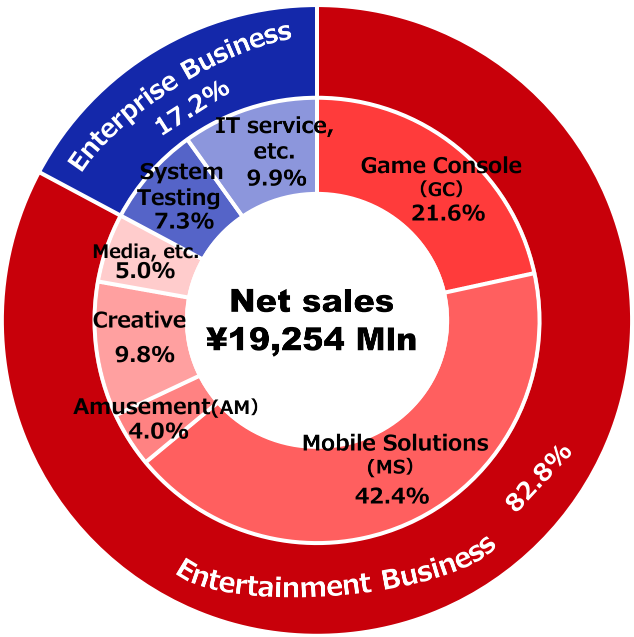
Debugging and System testing are our core business



Sales breakdown by segment (FY2018)

※Sales of each segment and unit include inter-company sales and/or transfers.

Entertainment Business	Debugging 68.0%	21.6%	**Game Console (GC)**	Debugging for console games, online games, and arcade games
		42.4%	**Mobile Solutions (MS)**	Debugging for mobile games
		4.0%	**Amusement (AM)**	Debugging for pachinko/slot machines
	Creative	9.8%		Game development and CG content development
	Media and others	5.0%		Managing one of Japan's largest game information site "4Gamer.net", customer support, etc.
Enterprise Business	System Testing	7.3%		Testing for enterprise system and Automobile driving test
	IT service / Security	9.9%		System development, IT support, Customer support , Security, etc.

Outline of Debugging and System Testing

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Our Services

Develop	Test	Maintain after a product release
Test Design ➢ Test consulting ➢ Planning for test and schedule ➢ Supporting for test automation	Running various tests ➢ Functional test ➢ Performance test ➢ Stress test ➢ Acceptance test ➢ Usability Test, etc.	Continuation test ➢ Operations management ➢ Evaluation and improvement ➢ Update

Outline of Services

Service	Description	Main client	Barriers to entry	Outsourced Projects Ratio
Debugging	Detection of bugs in games from a player's perspective.	– Game makers	High ↑A license for purchasing dedicated equipment for debugging is required. ↑Knowledge and expertise on human resource management to accommodate changeable development schedules are required.	High
System Testing	Detection of bugs in enterprise systems from a test-engineers' knowledge.	– SIers – Development vendors – Core system enterprises	Middle ↑Human resource shortage in IT Industry	Low

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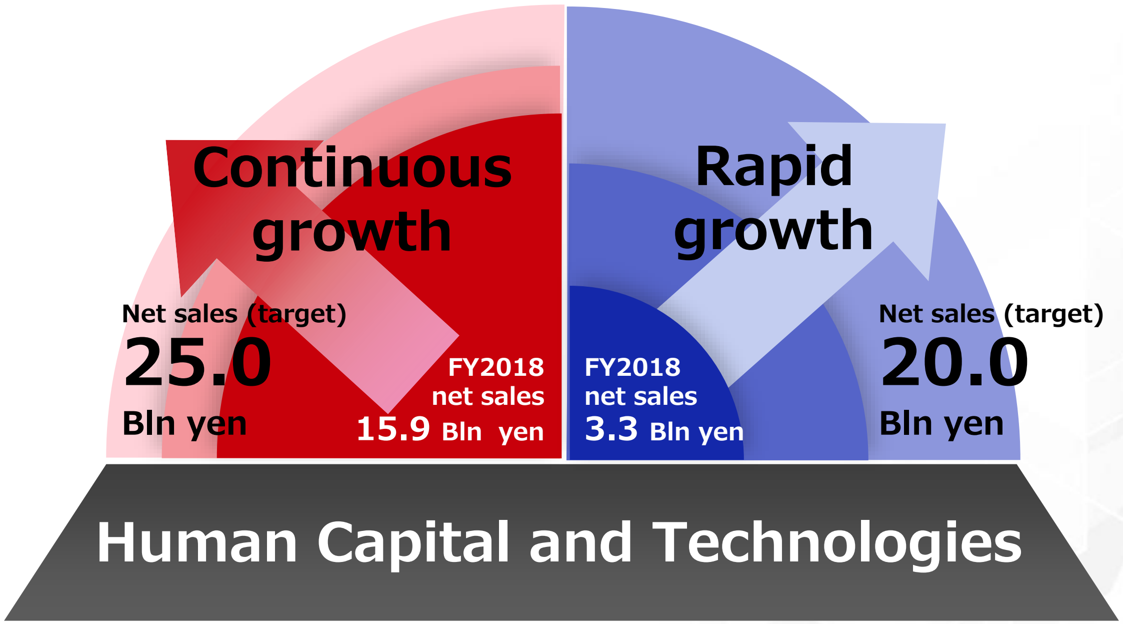
Pursue the growth of the mainstay Entertainment Business and make the Enterprise Business another primary source of revenue

Entertainment Business

- ■ The game market is growing steadily
- ◆ Strengthen collaboration within the Group to provide comprehensive support for game development, including not only debugging but also the development of outsourced services and localization
- ◆ Continue expanding the business, targeting net sales of 25.0 billion yen

Enterprise Business

- ■ The outsourcing of test processes is accelerated, due in part to the serious human resources shortage in the IT industry
- ◆ Accelerate investment in human capital and technologies for business expansion
- ◆ Position this field as the growth driver and aim for net sales of 20.0 billion yen



Business Risks

Major risks	Countermeasures
1. Leakage of confidential information	- Prohibiting staff members from bringing personal items into the test room - Physical security measures including access control with fingerprint authentication and the installation of security cameras - Introduction of a personal reference system that applies to all registered testers
2. Obsolescence of existing services by technological innovation	- Focusing on the application of the latest technologies, including a test automation project - Focusing on the development of new services to improve added value
3. Reduction of productive population in Japan	- Developing internal training programs that will enable the active participation of members with diverse generational, racial, and other backgrounds - Securing human resources strategically by using overseas offices as well
4. Expansion of corporate acquisition and new businesses	- In-depth market research and due diligence - Reducing risks by building a system for appropriate business management after acquisition

Summary of Earnings by Segment

DIGITAL HEARTS HLDGS.

(Mln yen)			FY2014	FY2015	FY2016	FY2017	FY2018
Entertainment Business		**Net sales**	**11,609**	**12,696**	**13,544**	**15,568**	**15,951**
		Segment income	**1,915**	**2,379**	**2,453**	**2,966**	**3,086**
	Debugging	Net sales	9,430	10,455	11,524	13,186	13,103
	Game Console (GC)	Net sales	3,604	3,449	3,483	4,174	4,156
	Mobile Solutions (MS)	Net sales	3,554	4,994	6,262	7,399	8,172
	Amusement (AM)	Net sales	2,272	2,012	1,778	1,612	775
	Creative	Net sales	1,675	1,729	1,465	1,743	1,891
	Media and others	Net sales	504	512	554	638	956
Enterprise Business		**Net sales**	**1,713**	**2,382**	**1,952**	**1,892**	**3,302**
		Segment income	**50**	**71**	**203**	**-14**	**-226**
	System Testing	Net sales	380	681	758	1,084	1,395
	IT service / Security	Net sales	1,333	1,701	1,193	808	1,907
	Inter-segments adjustments	Net sales	-39	-70	-52	-108	-0
		Segment income	-447	-486	-750	-1,215	-1,254
	Consolidated total	Net sales	13,285	15,011	15,444	17,353	19,254
		Operating income	1,517	1,963	1,906	1,735	1,605

DIGITAL HEARTS HLDGS.

Review of shareholder return policy

Actively invest in medium- and long-term growth as the second startup period. Change the shareholder return policy for this purpose in consideration of the balance between internal reserves and shareholder returns.

■ FY2018 or before:

Paid stable dividends in accordance with the consolidated business results, with DOE of 7% as a guide. Also provided shareholder benefits to shareholders who held our shares as of March 31 every year.

■ FY2019 and after:

Pay stable dividends in accordance with the consolidated business results, with the lower limit of the dividend payout ratio at 20%. Abolish the shareholder benefit plan from the viewpoint of shareholder equity.

Shareholder returns in FY2019

	Interim dividends	Year-end dividends	Annual total dividends	Shareholder benefits
FY2018	6.5 yen	6.5 yen	13.0 yen	(Holders of one or more units of shares) **Rice gift cards (3 kg)** (Holders of two or more units of shares) **Rice gift cards (6 kg)**
FY2019 (forecast)	7.0 yen	7.0 yen	14.0 yen Up 1.0 yen	—

* We will acquire treasury shares flexibly by considering the necessity in light of our capital policy, the impact on our financial strength, and other factors, after securing funds for investment in growth.

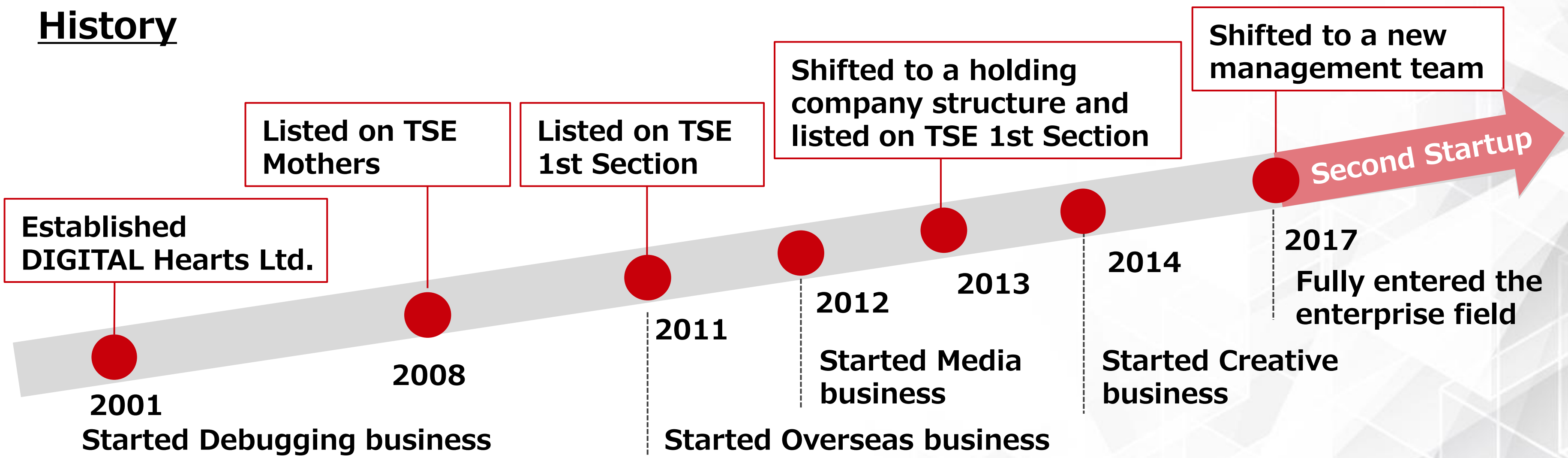
Corporate Profile

DIGITAL HEARTS HLDGS.

Company Name	DIGITAL HEARTS HOLDINGS Co., Ltd.	Capitalization	¥300,686,000
Location	3-20-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo	Shares Issued	23,890,800 Shares
Incorporated	October 1, 2013	Fiscal year end	March 31
Representative	President and CEO, Genichi Tamatsuka	Number of Employees	1,319 (Consolidated)
Stock Exchange	Tokyo Stock Exchange The 1st Section (code : 3676)	Group Companies	Domestic:7 Overseas:6

(As of September 30, 2019)

History



Group Companies

DIGITAL HEARTS HLDGS.

(As of June 30, 2019)

DIGITAL HEARTS Co., Ltd.

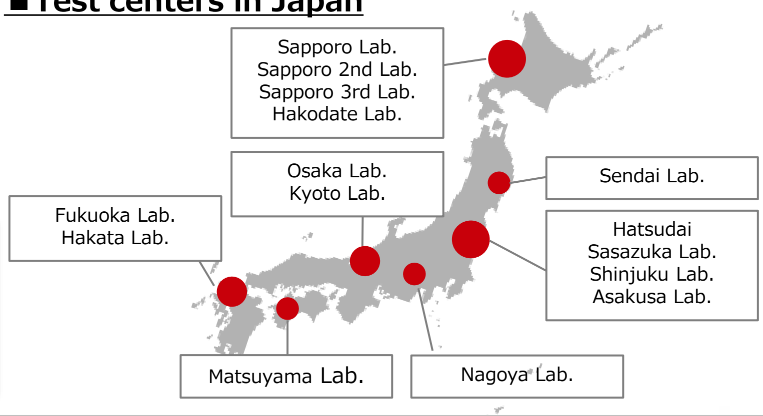
Entertainment Business | Enterprise Business

Business Activities : Game debugging, Localization, System testing, System development, Security, etc.

[Strengths]

- **Over 8,000** registered testers
- **Over 1.5 million** bug data
- **15** test centers (Lab.)
- **Over 4,000** equipment for testing

■Test centers in Japan



DIGITAL HEARTS USA Inc.

Entertainment Business

Business Activities : Localization, etc.

DIGITAL HEARTS (Shanghai) Co., Ltd.

Entertainment Business

Business Activities : Game debugging, Localization, etc.

Orgosoft Co., Ltd.

Entertainment Business

Business Activities : Game debugging, Localization, etc.

ANET Corporation

Enterprise Business

Business Activities : System testing, System development, etc.

LOGIGEAR CORPORATION

Enterprise Business

Business Activities : System Testing, Test Automation Support, System Development, etc.

DIGITAL HEARTS GNT VIET NAM COMPANY LIMITED

Enterprise Business

Business Activities : System testing, etc.

FLAME Hearts Co., Ltd.

Entertainment Business

Business Activities : Game development and CG content development

Aetas, Inc.

Entertainment Business

Business Activities : Operation of a game information site, "4Gamer.net", etc.

ZEG Inc.

(Affiliated company)

Enterprise Business

Business Activities : Driving test and data collection for the automotive industry

DIGITAL HEARTS HLDGS.

<Contact>

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