

Presentation Material

for the First Half of the Fiscal Year Ending March 31, 2021

2020/11/10

Tokyo Stock Exchange First Section: Code 3676 https://www.digitalhearts-hd.com/



Business Results for the First Half of FY2020

(The six months ended September 30, 2020)

Business Highlight for the First Half of FY2020



New Record High Sales

as the first half of the year

Net sales

10,531 Min yen

(YoY 103.0%)

- Sales in the mainstay Entertainment Business declined due to the impact of COVID-19, etc.
- The Enterprise Business, the second pillar of the group, continued to grow by about 1.5 times YoY.

Profit Increased

despite the impact of COVID-19

Operating income

527 Mln yen

(YoY 101.8%)

- The profitability of the Enterprise Business improved significantly with the increase in sales.
- In addition to the elimination of M&A-related expenses in FY2019, promoted cost reductions in each business.

First half progressed according to plan and aiming to

Achieve the Full-year Forecasts

Full-year Forecast

Net sales

23,080 Mln yen

Operating income

1,600 MIn yen

- In the first half, both businesses saw sales progress almost in line with plan, and profits exceeded plan.
- Sales and profits are expected to grow significantly in the second half as the busy season.

Summary of Business Results for the Six Months Ended September 30, 2020



Despite the impact of COVID-19, achieved higher sales and profits than the previous year, with expanding sales and recovering profit of our developing Enterprise Business.

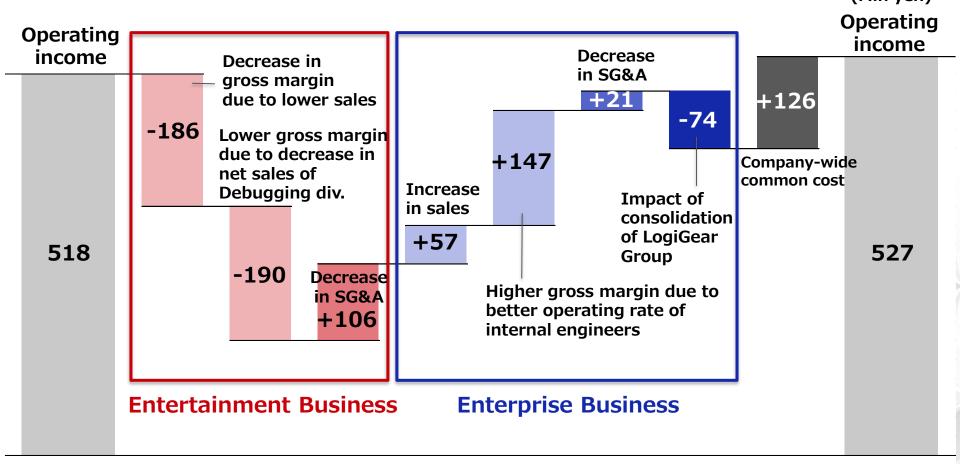
(Mln Yen)	1H FY2019	1H FY2020	YoY Cha	nge
Net sales	10,222	10,531	308	103.0%
Cost of sales	7,603	7,820	217	102.9%
Cost of sales (%)	74.4%	74.3%		-0.1 points
Gross profit	2,619	2,710	90	103.5%
SG&A	2,100	2,182	81	103.9%
Operating income	518	527	9	101.8%
Operating income margin	5.1%	5.0%		-0.1points
Ordinary income	513	570	56	111.1%
Profit attributable to owners of parent	277	355	78	128.1%
EBITDA	687	753	66	109.6%

Analysis of Changes in Operating Income



Despite a sharp decline in profits in Debugging div. of the Entertainment Business due to the impact of COVID-19, the Enterprise Business achieved a significant improvement in its profitability.

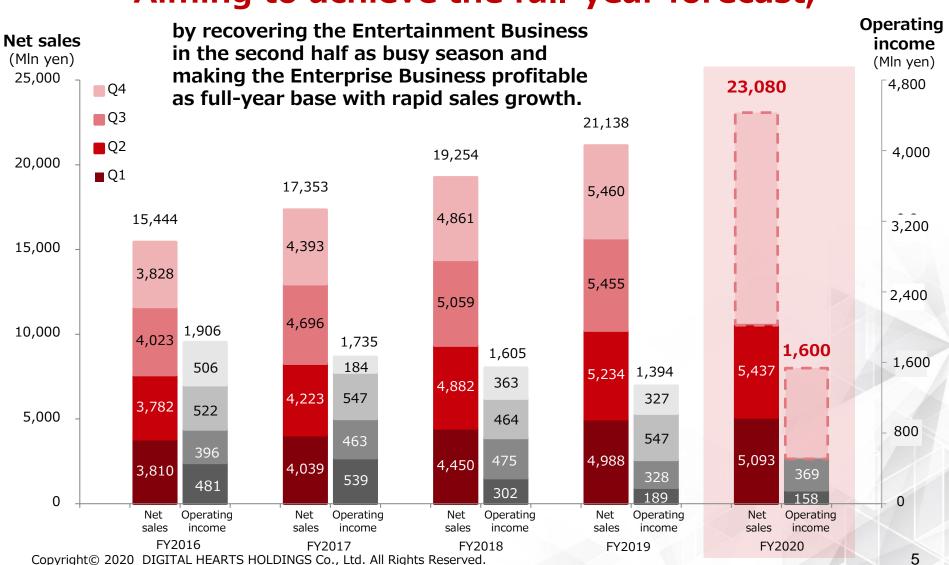
(Mln yen)



Trend in Net Sales and Operating Income



Aiming to achieve the full-year forecast,



Consolidated Balance Sheets



(MIn Yen)	Q4 FY2019 (As of March 31, 2020)	Q2 FY2020 (As of September 30, 2020)	YoY Change
Total assets	10,637	10,459	-177
Current assets	7,453	7,291	-161
Cash and deposits	3,739	3,482	-256
Notes and accounts receivable-trade	2,985	3,099	114
Noncurrent assets	3,183	3,167	-16
Property, plant and equipment	579	549	-29
Intangible assets	1,379	1,424	45
Investments and other assets	1,225	1,193	-32
Total liabilities	5,198	4,788	-409
Current liabilities	5,134	4,655	-478
Short-term loans	2,546	2,551	4
Noncurrent liabilities	63	132	69
Total net assets	5,438	5,670	232
Shareholders' equity	4,898	5,172	274
Accumulated other comprehensive income	24	20	-3
Subscription rights to shares	13	13	_
Non-controlling interests	502	463	-39
Total liabilities and net assets	10,637	10,459	-177

Consolidated Statements of Cash Flows



(MIn Yen)	1H FY2019	1H FY2020	YoY Change
Net cash provided by (used in) operating activities	-5	101	107
(*Cash flows before income taxes paid)	483	317	-165
Net cash used in investing activities	-963	-261	701
Net cash used in (provided by) financing activities	637	-90	-727
Effect of exchange rate change on cash and cash equivalents	-15	-2	13
Net decrease in cash and cash equivalents	-347	-252	94
Cash and cash equivalents at the beginning of period	4,162	3,704	-458
Decrease in cash and cash equivalents resulting from exclusion of subsidiaries from consolidation	_	-3	-3
Cash and cash equivalents at the end of period	3,814	3,447	-367



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.

Summary of Earnings by Segment



(Mln Yen)	1H FY2019	1H FY2020	YoY Change
Net sales	10,222	10,531	103.0%
Entertainment	8,127	7,466	91.9%
Enterprise	2,094	3,064	146.3%
Adjustments	_	_	_
Operating income	518	527	101.8%
Entertainment	1,487	1,217	81.8%
Enterprise	-181	-28	
Adjustments	-787	-660	
EBITDA	687	753	109.6%
Entertainment	1,587	1,278	80.5%
Enterprise	-131	122	

Financial Result of Entertainment Business



- Debugging sales and profits declined sharply due to some delays and postponements in clients' title development affected by COVID-19.
- Creative, Media and others achieved increases in profits.

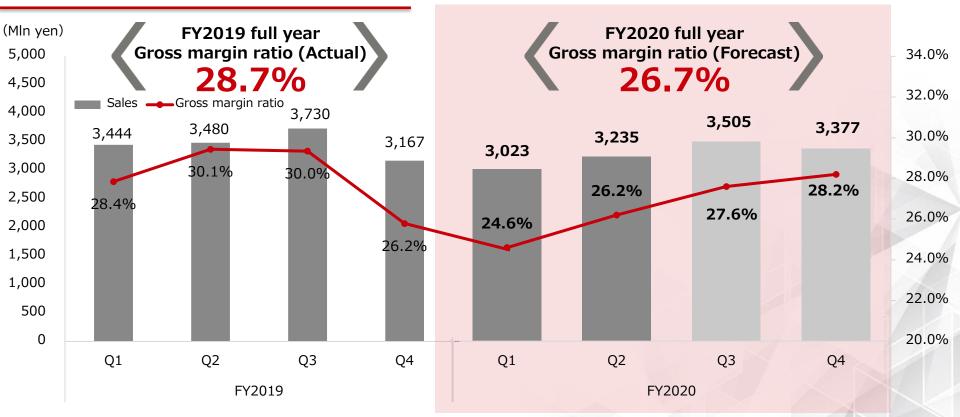
(Mln Yen)		1H FY2019	1H FY2020	YoY Change
Net sales		8,127	7,466	91.9%
	Debugging	6,925	6,258	90.4%
	Game Console (GC)	2,242	2,170	96.8%
	Mobile Solutions (MS)	4,184	3,778	90.3%
	Amusement (AM)	498	309	62.1%
	Creative	657	679	103.2%
	Media and others	544	529	97.2%
Segment income		1,487	1,217	81.8%
EB	ITDA	1,587	1,278	80.5%

Entertainment Business – Debugging div.



- Gross margin declined due to a decrease in the operating rate of Lab. due to the impact of COVID-19.
- With game titles to be launched during the year-end busiest season and next spring, the demand of Debugging mainly for GC is expected to recover in the second half.
- Gross margin ratio is also expected to improve due to the strong cost controls.

Quarterly results of Debugging div.



Entertainment Business – Debugging div.



■ Game Console dept. (GC)

- Maintained sales at almost the same level as the previous fiscal year when we achieved good sales due to some large-scale title projects.

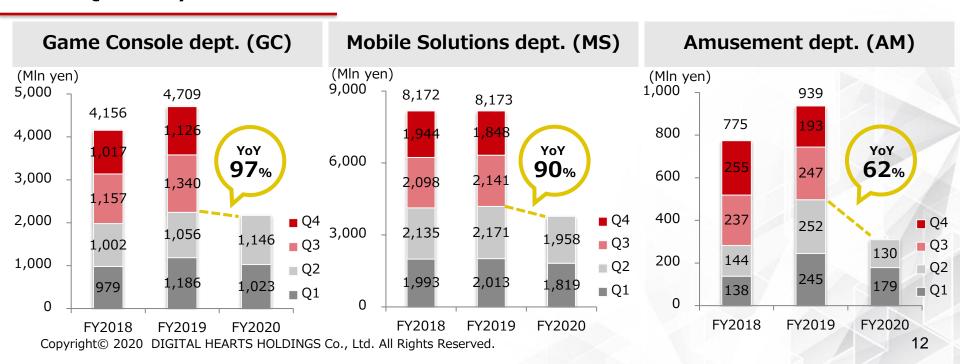
■ Mobile Solutions dept. (MS)

- Debugging demand shrank due to the impact of COVID-19 and changes in the business environment.

Amusement dept. (AM)

- The market environment continues to be harsh, and regulatory and customer trends require close monitoring.

Quarterly sales



Entertainment Business - Creative div. Media and others div.



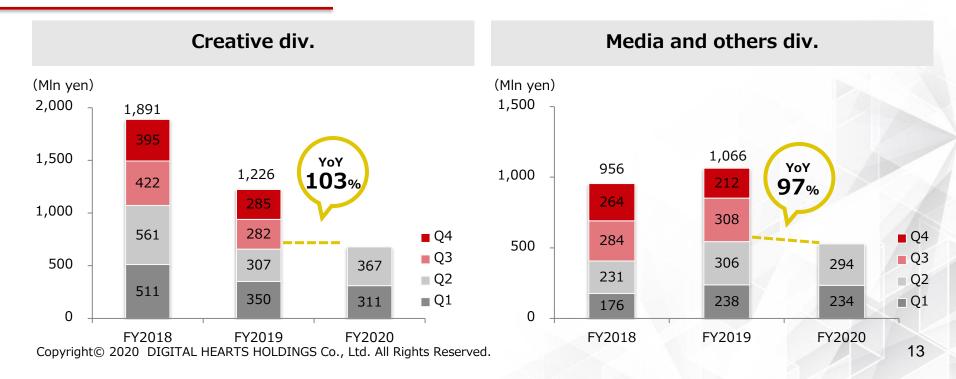
Creative div.

- Achieved higher sales and profits than previous year by acquiring new projects for game development and strengthening cost control.

Media and others div.

- Despite a decline in event-related sales at "4Gamer.net", customer support services performed steadily.

Quarterly sales



Financial Result of Enterprise Business



■ Segment income improved significantly YoY, and EBITDA has remained positive since FY2019 Q2.

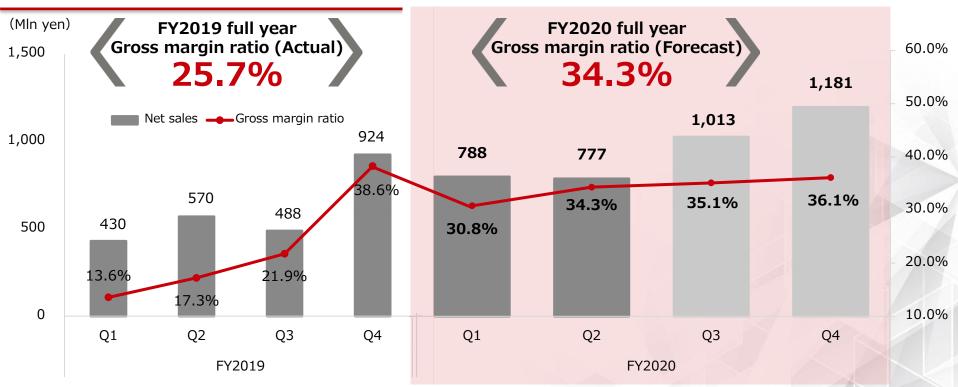
(Mln Yen)		1H FY2019	1H FY2020	YoY Change
Net sales		2,094	3,064	146.3%
System T	esting	1,001	1,565	156.4%
IT service	e / Security	1,093	1,499	137.1%
Segment in	ncome	-181	-28	_
EBITDA		-131	122	_
,	ts of Enterprise B	Biz.	due to the	ew significantly realization of benefits.
Quarterly resul (Mln yen) 200 Segment		 139	due to the investment	realization of
(Mln yen)		139 100	due to the investment	realization of
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(Mln yen) 200 ■ Segment 100 -184 -155	income EBITDA 2 EBITDA 14 FY2019	139 100	due to the rinvestment	realization of benefits.

Enterprise Business – System Testing div.



- Net sales and gross margin grew significantly YoY due to contributions from LogiGear Group, which began to be consolidated from FY2019 Q4, and the sales growth of existing testing businesses.
- Although sales in Q2 declined slightly QoQ with the temporarily shrink in U.S. due to COVID-19, sales are expected to recover to grow steadily in Q3 and Q4.
- Aiming to achieve a gross margin ratio of 34.3% for the full fiscal year, with higher sales and gross margin in Q3 and Q4.

Quarterly results of System Testing div.



Enterprise Business



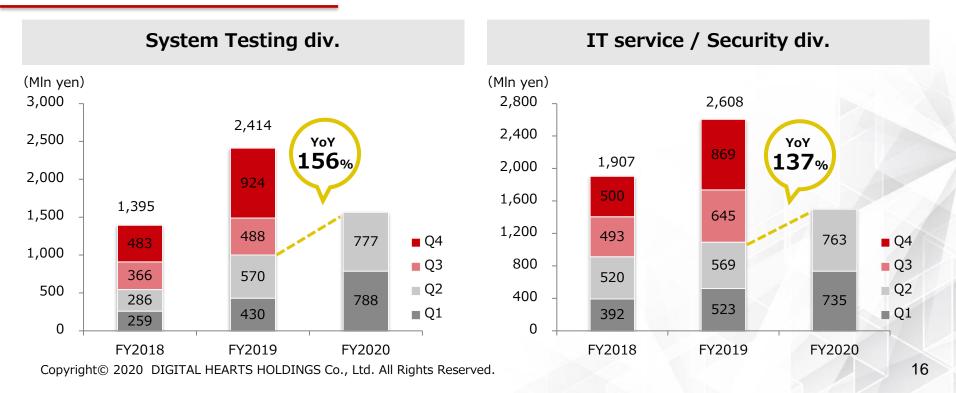
System Testing div.

- Despite stagnant economic activities due to the impact of COVID-19, we have steadily captured demand by providing services with ensuring safety of operations.

■ IT service / Security div.

- Achieved higher sales in all categories such as system development, maintenance and operation, and cyber security services.

Quarterly sales



FY2020 Consolidated Financial Forecast



- Planning higher sales and profits due to growth in the Enterprise Business.
- Despite the impact of COVID-19, the Entertainment Business will maintain almost the same amount of sales as the previous fiscal year.

(Mln Yen)	Full year FY2019 (Actual)	Full year FY2020 (Forecast)	YoY Change
Net sales	21,138	23,080	109.2%
Entertainment	16,115	15,885	98.6%
Enterprise	5,022	7,195	143.3%
Operating income	1,394	1,600	114.8%
Operating income margin	6.6%	6.9%	+0.3points
Ordinary income	1,372	1,600	116.6%
Profit attributable to owners of parent	792	1,100	138.9%
EBITDA	1,732	1,927	111.2%

2H in FY2020 Consolidated Financial Forecast

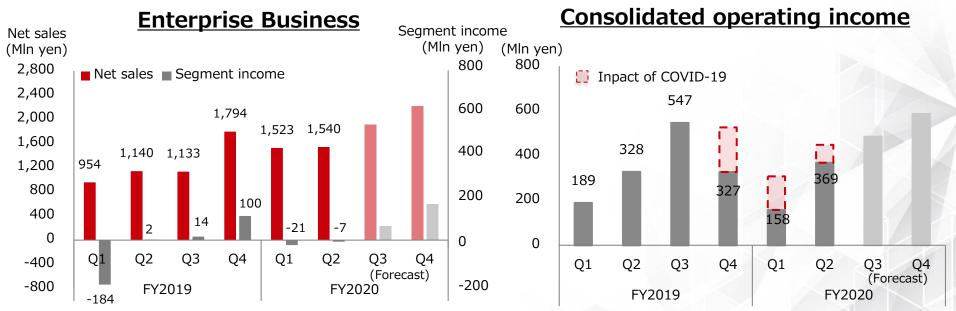


Net sales

- ✓ The Entertainment Business is expected to have a busy period as usual in 2H with active development of titles launching around and after the year-end sales season.
- ✓ The Enterprise Business continued to grow steadily, thanks to contributions from LogiGear Group, which consolidated in FY2019 Q4, and by new initiatives to strengthen the business.

Operating income

- ✓ The Enterprise Business is expected to contribute to profits for the first time as the full year base in the 'Second Founding' Period.
- ✓ It is expected to recover to see the ordinary business condition in Q3 and Q4, although it has been affected by COVID-19 since FY2019 Q4.



Dividends Forecast of FY2020

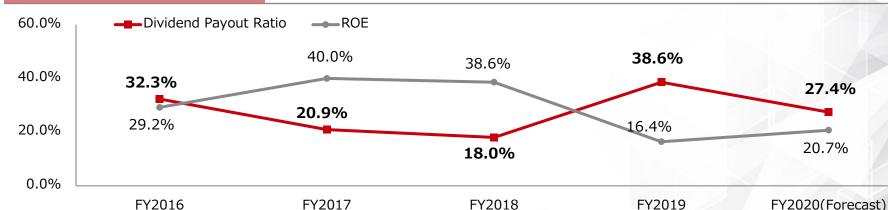


The interim dividends are 7.0 yen with the basic policy of stable dividends. Annual dividends are expected to be 14.0 yen unchanged from FY2019.

Basic Policy to Return Profits to Shareholder

While securing sufficient internal reserves to invest in business growth and strengthen our management structure, stable dividends to shareholders with a payout ratio of 20% as the minimum target

(Yen)	FY2016	FY2017	FY2018	FY2019	FY2020 (Forecast)
Annual dividends	11.5	11.5	13.0	14.0	14.0
(Interim dividends)	5.5	5.5	6.5	7.0	7.0
(Year-end dividends)	6.0	6.0	6.5	7.0	7.0



^{*}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.



Actions in the 'Second Founding' Period

Progress of the 'Second Founding' Period



Toward the Next Stage of Growth.

Completed building a foundation for the Enterprise Business's growth.

Challenging to capture new demand with Digital transformation (DX) and various changes in the market.



Popularization of agile type development



Shortage of IT human resources



New Challenge

Developing solutions to improve comprehensively quality and security of our client's business itself.

Next Stage of Growth of the 'Second Founding' period

Growth of console game market



Growth of mobile game market



Established the foundation of business in the enterprise domain, such as System Testing and Cyber Security services.

Starting

of the 'Second Founding' period

Developed business for the entertainment industry, focusing on game debugging.

'First Founding' Period

Changes in Software Development Method



By software development methods have changed to accommodate the rapidly changing business environment, the needs for quality assurance has also diversified as well.

	Conventional method (Waterfall type)	To be increased in future (Agile type)
Specification changes	Make decisions of specification before starting the development and cannot make changes during development	Flexible change of specification even during development period
Implementing method	Implement the all functions according to the total plan	Divided into small units for implementation
Release timing	Release after completion of all processes	Released in a short period of time by each function
Test timing	Conducted collectively before release	Frequently tested in each process
Test method	Mainly by manual testing	Uses manual testing in conjunction with automated testing

Similarity between "Game" and "Agile"



The process of game software development has many common points with agile type of system development.

Our group, with the strong core Entertainment Business, may have the similarity in terms of its culture and others.

Game software development



Common point

Quality during use

Emphasis on user experience

Flexible response to specification changes

Continued development after release

Emphasis on speed

Engineer-led development

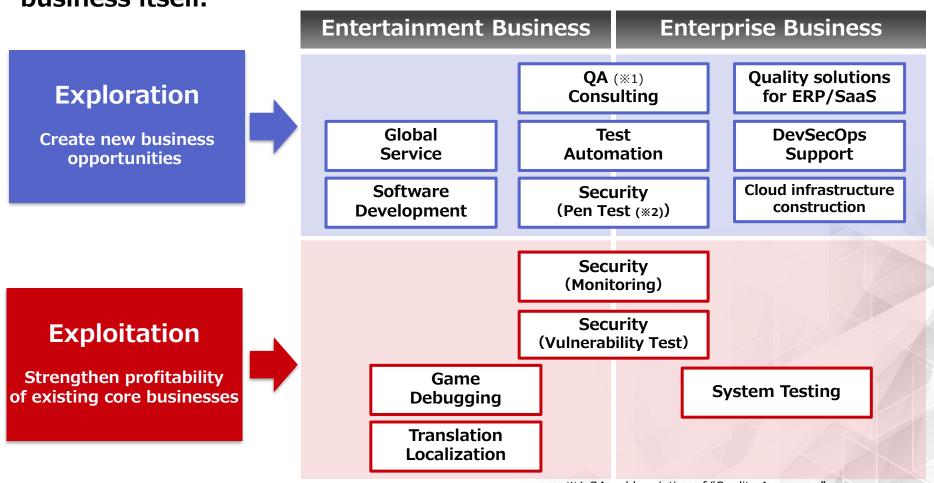
System development (Agile type)



Exploration and Exploitation



Challenging to become the comprehensive solution provider not just to execute System Testing and detect software defects, but to contribute to improve the quality and the security of our client's business itself.



^{※1} QA…abbreviation of "Quality Assurance"

^{※2} Pen Test …abbreviation of "Penetration Testing"

The Most Recent Project Cases



Steady progress in sales activities related to new services.

Target software

EC/omni channel

Service provided

System Testing

Test Automation

Target software

Web ordering system

Service provided

System Testing

Test Automation

Vulnerability Testing Target software

School operation information system

Service provided

Cloud Infrastructure Construction

System Testing

Vulnerability Testing Target software

Business operation system

Service provided

ERP Migration

ERP quality Solutions

System Testing

Target software

Content delivery system

Service provided

Cloud Infrastructure Construction

System Testing

Commissioned Development

System Testing

Test

Automation

Service provided

Target software

Automotive

equipment system

To Enhance Human Resources



Strengthening the recruitment and training system to enhance various type of engineers for our new services.

Various types of engineers

QA consultant

Personnel engaged in quality design, quality standards, and QA strategies, etc.

Test engineer

Engineers to make test plans and carry out execution of tests

Cloud infrastructure engineer

Engineers engaged in cloud migrations, such as AES and GCP, and support these operations

Security engineer

Engineers who performs vulnerability diagnosis, security monitoring, etc.

recruitment

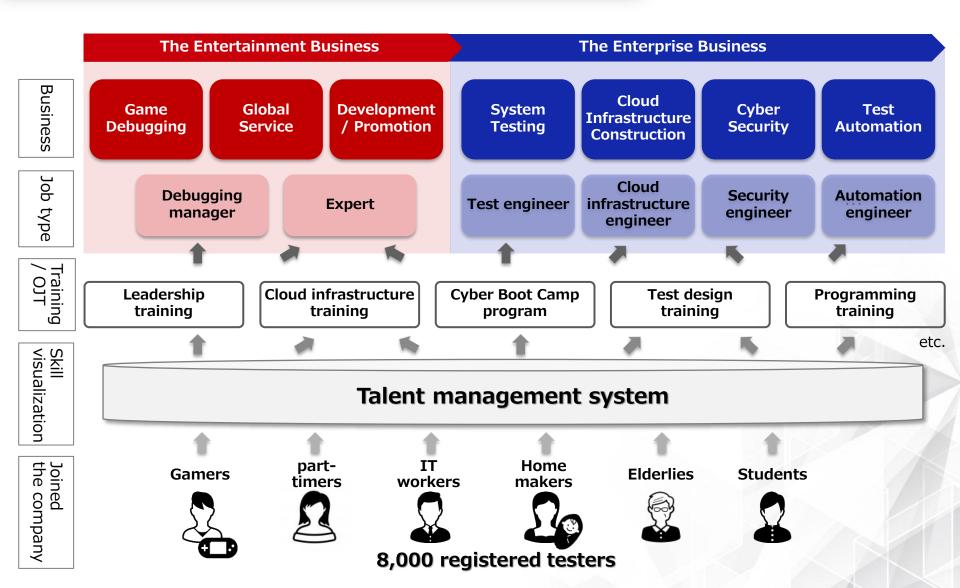
- Renovation of corporate branding
- Introduction of new recruiting methods utilizing SNS and engineer events
- Reinforcement of referral recruitment
- Utilization of M&A

training

- > Strengthen in-house human resource development with its original talent management system
- Enhancement of in-house training system with alliance partners

Flow of Human Resource Development

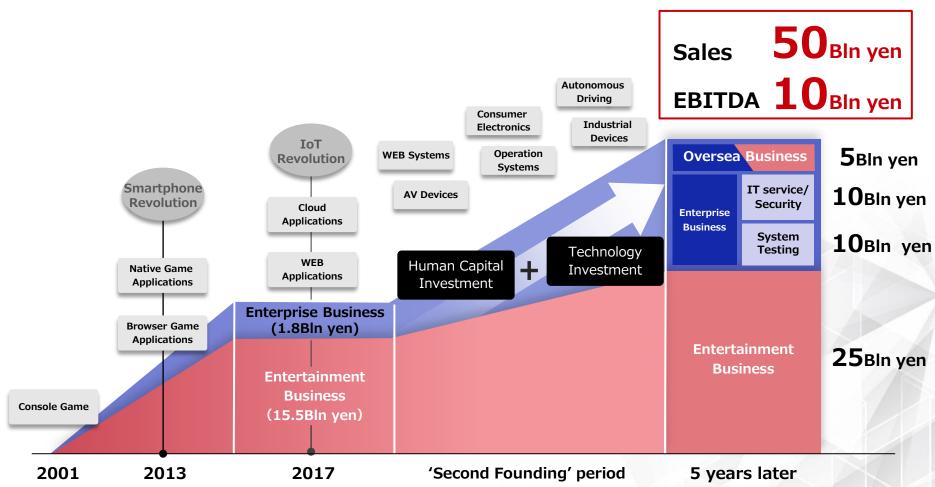




(Ref.) Mid-term Roadmap



To achieve net sales of 50 billion yen and EBITDA of 10 billion yen.



(Ref.) Our Aims for Sustainable Value Creation



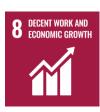
Our Major Initiatives and Sustainable Development Goals (SDGs)

Human resource

To resolve the shortage of IT human resource

- In-house support system for all employees (incl. part-timers) to acquire the test engineer's qualification "JSTQB".
- Ethical hacker training courses and engineer training programs for employees.
- Opened a free school for engineers in collaboration with WORKPORT, inc.
- Project to discover and foster potential ethical hacker candidates among high school students in collaboration with HASSYADAI.social.





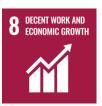


Human resource

Workplace for diverse human resources

- Provide workplaces for diverse people such as students, part-timers, young actors and musicians, and people with disabilities at test centers with over 3,000 people every day.
- Employ foreign nationalities of more than 20 countries/areas, such as Asia, Europe and the U.S., who engage in translation/linguistic debugging service, etc.







Technology

To realize a secure and safe digital society

- Contribute to improve quality of various kinds of software through game debugging, system testing, and other services.
- Preservation of information assets in the net society through cyber security services.
- Challenges for technological innovation through research and development on test automation and AI utilization.

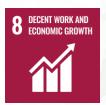




Communities

To revitalize local community and resolve IT disparities

- Create jobs through out nationwide test centers (Lab.) and promote teleworking/ work-from-home style by Remote Debugging service.
- Implemented "Cyber Security Support Team for SMEs in Tohoku region" as one of projects of Information-technology Promotion Agency, Japan (IPA)









Appendix

Why Invest in DIGITAL HEARTS



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 **12**%

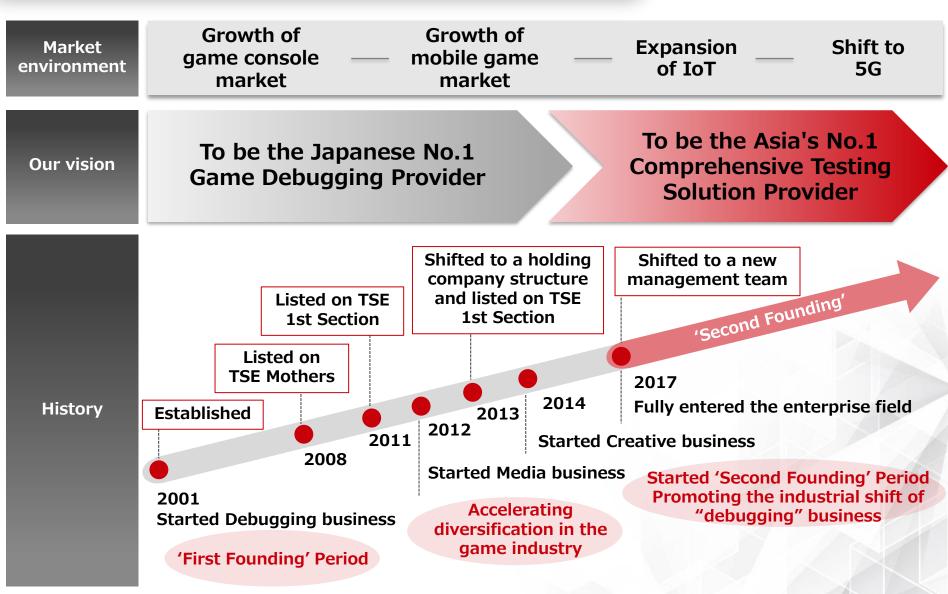


*Data on the growth rate of the market of software testing services for 2019 to 2023 (References)Websites related to "Global Software Testing Services Market 2019-2023"

Business that supports
Digital security

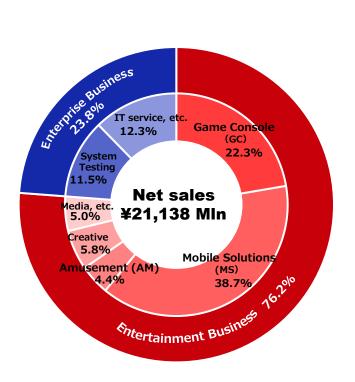
Corporate Profile





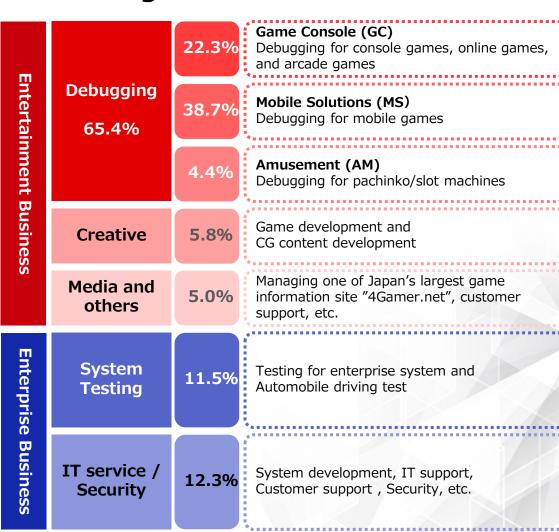


Debugging and System Testing are our core business



Sales breakdown by segment (FY2019)

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



Outline of Debugging and System Testing



Our Services

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

Outline of Service	es			Outsourced
Service	Description	Main client	Barriers to entry	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.	SIersDevelopment vendorsCore system enterprises	Middle ↑ Human resource shortage in IT Industry	Low

Growth Strategy



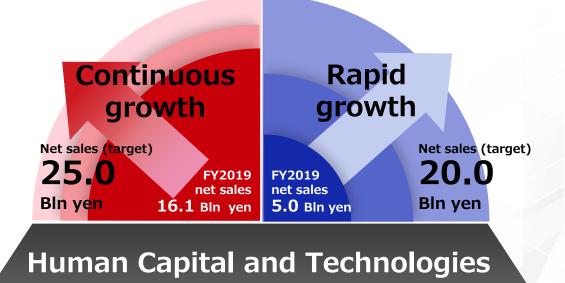
Pursue the growth of the mainstay Entertainment Business and make the Enterprise Business another primary source of revenue

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





Major risks

Countermeasures

- 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
- 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

- 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



(Mlr	ı yen)		FY2015	FY2016	FY2017	FY2018	FY2019
Ente	ertainment Business	Net sales	12,696	13,544	15,568	15,951	16,115
EIIC	ertaininent business	Segment income	2,379	2,453	2,966	3,086	2,964
	Debugging	Net sales	10,455	11,524	13,186	13,103	13,823
	Game Console (GC)	Net sales	3,449	3,483	4,174	4,156	4,709
	Mobile Solutions (MS)	Net sales	4,994	6,262	7,399	8,172	8,173
	Amusement (AM)	Net sales	2,012	1,778	1,612	775	939
-	Creative	Net sales	1,729	1,465	1,743	1,891	1,226
-	Media and others	Net sales	512	554	638	956	1,066
		Net sales	2,382	1,952	1,892	3,302	5,022
Ente	erprise Business	Segment income	71	203	-14	-226	-67
	System Testing	Net sales	681	758	1,084	1,395	2,414
	IT service / Security	Net sales	1,701	1,193	808	1,907	2,608
		Net sales	-70	-52	-108	-0	
	Inter-segments adjustments	Segment income	-486	-750	-1,215	-1,254	-1,503
-		Net sales	15,011	15,444	17,353	19,254	21,138
	Consolidated total	Operating income	1,963	1,906	1,735	1,605	1,394

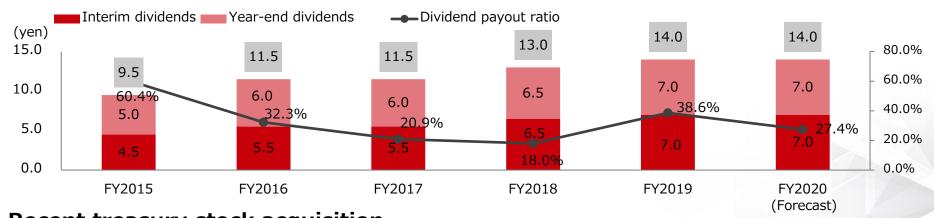
Shareholder Returns



Basic Policy to Return Profits to Shareholders

While securing sufficient internal reserves to invest in business growth and strengthen our management structure, stable dividends to shareholders with a payout ratio of 20% as the minimum target

Changes in dividends



Recent treasury stock acquisition

We 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.

Acquisition period	Acquired shares	Total Purchase Amount
November 12, 2019 - February 6, 2020	474,700 shares	499 Mln yen
February 20, 2017 – April 28, 2017	664,500 shares	999 Mln yen

Group Companies



(As of September 30, 2020)



Entertainment Business

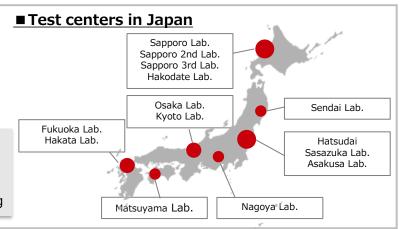
Enterprise Business



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

[Strengths]

- > Over 8,000 registered testers > Over 2.0 million bug data
- **▶ 14** test centers (Lab.)
- > Over 4,000 equipment for testing



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

LOGIGEAR VIETNAM CO., LTD.

Enterprise Business



Business Activities: System Testing, Test Automation Support

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.

Red Team Technologies Co., Ltd.

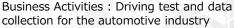
Enterprise Business

Business Activities: White hacker service and technical support

ZEG Inc.

(Affiliated company)

Enterprise Business





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