

## **Presentation Material**

for the Nine Months Ended December 31, 2022

2023/2/9

Tokyo Stock Exchange Prime Market: Code 3676

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



## **Q3 FY2022 Financial Results**

(The nine months ended December 31, 2022)

## **Business Highlight for Q3 FY2022**



Both businesses achieved **Significant Increases in Sales** 

**Net sales** 

¥26,879 mn

(YoY 126.5%)

- The Enterprise Business, our focus business, continued to grow at a high rate of about YoY 1.5 times, backed by the acceleration of DX.
- The Entertainment Business also achieved a double-digit growth due to strong sales for console games.
- Sales of the both businesses have exceeded company forecasts.

**Profit Increased**despite strategic investment

**Operating income** 

**¥2,140** mn (YoY 100.8%)

- Achieved new record high profit.
- The Enterprise Business invested mainly in 1H, then cost controls and better sales made profit growth in Q3 three months.
- The Entertainment Business achieved a double-digit profit growth due to the sales increase and a high gross margin.

Significant Growth in EBITDA due in part to M&A

**EBITDA** 

¥2,984 mn

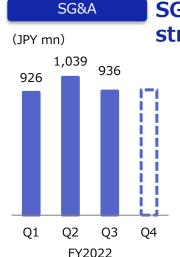
(YoY 116.2%)

- Both the Enterprise and the Entertainment Business achieved a double-digit growth of EBITDA, excluding the impact of amortization of goodwill, etc.
- EBITDA of existing businesses excluding the impact of newly consolidated subsidiaries was YoY 110.7%, showing steady cash flow expansion.

## **Enterprise Business Highlight**



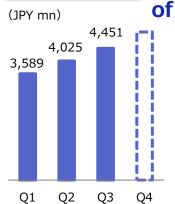
Launched AGEST, Inc. in April 2022 and concentrated strategic investments in 1H. Improving OP margin due to sales expansion after investments and cost control.



## SG&A expenses increased due to strategic investments

- AGEST, the core company, making strategic investments in 2H as well.
- > Total SG&A decreased in 3Q due to cost control throughout the Group.
- ➤ Aiming to keep SG&A in 4Q on par with 3Q.

## **Growing steadily, due to effects of strategic investments**



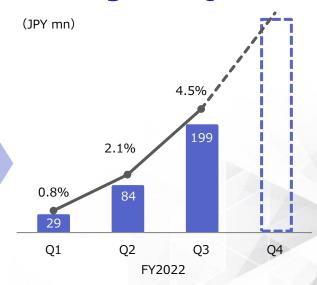
FY2022

Net sales

- Number of clients with orders steadily rising.
- > Expand services by increasing the number of expart engineers.
- > Rapid sales growth from Q1, QoQ 110%.
- Aiming to achieve full year sales of ¥17.0 billion, exceeding the initial forecasts.

#### Segment income

## Aiming for over 7% OP margin in Q4



- ➤ AGEST achieved significant profit growth in Q3 due to increased sales, even with its continuous investments.
- Aiming to achieve record-high profit on a quarterly basis in Q4, with better OP margin due to its sales growth.

## **Topics**



Materializing growth effects of strategic investments in the Enterprise Business. Initiatives of the Entertainment Business to strengthen its global business foundation.

#### **Enterprise Business**

Core company AGEST has been steadily expanding its businesses in Q3 nine months

AGEST Number of engineers hired

<u>YoY</u>

Approx.

2.1 times

AGEST Number of high-skill engineer applicants

Increase steadily
Number of applicants

Q4 Q1 Q2 Q3 FY2021 FY2022 **Entertainment Business** 

Changed name of subsidiary in South Korea as part of its PMI

<u>Before</u>

After

Org

DIGITAL HEARTS

**Entertainment Business** 

## Strengthening the marketing business in South Korea

Newly invited two marketing experts in South Korea





Ryu Eunji

Choi Hyangsook

**Enterprise Business** 

New owned media "Sqripts" launched

</Sqripts >

 Providing information necessary for improving software quality **Entertainment Business** 

Decided to raise hourly wages of testers in response to price hikes

From April 2023

Hourly wages for part-time game testers

Up 5%~20%

Improving the added value of debugging Raise service unit price

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**AGEST** 

YoY.

with orders

**Number of clients** 

Approx.

**1.2** times

## **Summary of Business Results for Q3 FY2022**



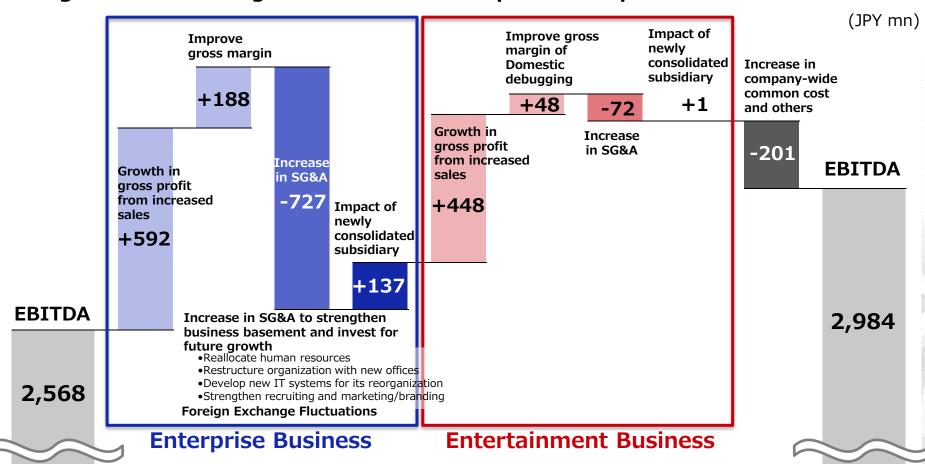
Significant increase in sales due to the growth of existing businesses and the impact of M&As. Operating income increased and EBITDA grew significantly, despite aggressive investment for growth.

(JPY mn)	Q3 FY2021	Q3 FY2022	YoY Cha	nge
Net sales	21,246	26,879	5,633	126.5%
Cost of sales	15,141	19,067	3,925	125.9%
Cost of sales (%)	71.3%	70.9%		-0.3 points
Gross profit	6,104	7,811	1,707	128.0%
SG&A	3,980	5,670	1,690	142.5%
Operating income	2,123	2,140	17	100.8%
Operating income margin	10.0%	8.0%		-2.0points
Ordinary income	2,192	2,351	159	107.3%
Profit attributable to owners of parent	1,363	1,400	37	102.7%
EBITDA	2,568	2,984	415	116.2%

## **Analysis of Changes in EBITDA**



While aggressively investing in the Enterprise Business for its developing business basement and future growth, **EBITDA** grew by 116.2% YoY due to the growth of existing businesses and the positive impact of M&As.



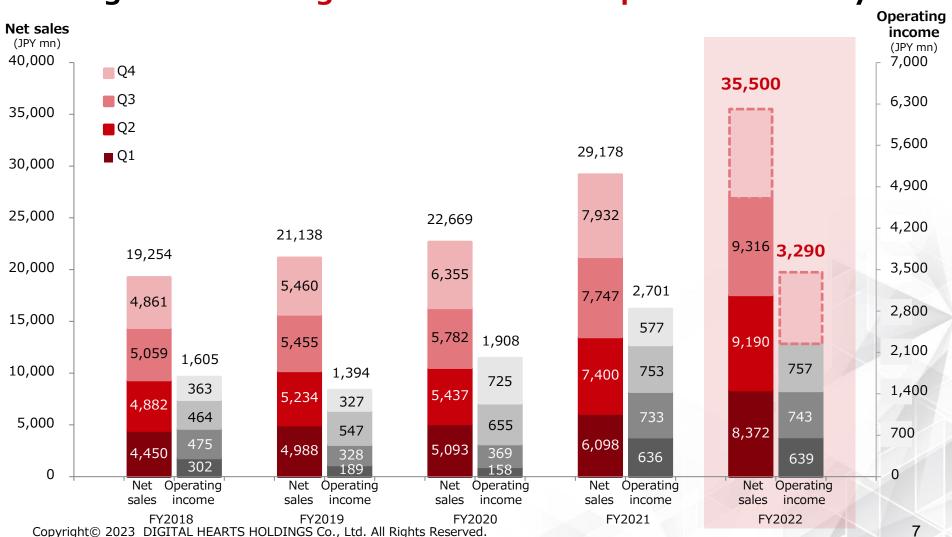
Q3 FY2021

Q3 FY2022

## **Trend in Net Sales and Operating Income**



Achieved record-high quarterly profit in Q3. Aiming for record highs in net sales and profits as a full year.



## **Consolidated Balance Sheets for Q3 FY2022**



(JPY mn)	Q4 FY2021 (As of March 31, 2022)	Q3 FY2022 (As of December 31, 2022)	Change from Q4 FY2021
Total assets	17,565	19,913	2,347
Current assets	10,392	11,569	1,176
Cash and deposits	5,208	5,948	739
Noncurrent assets	7,172	8,343	1,171
Property, plant and equipment	693	1,100	407
Intangible assets	5,094	5,593	498
Goodwill	4,763	5,082	319
Investments and other assets	1,384	1,649	265
Total liabilities	9,989	9,608	-380
Current liabilities	9,679	9,495	-183
Short-term loans	5,421	5,106	-314
Noncurrent liabilities	309	113	-196
Total net assets	7,576	10,304	2,727
Shareholders' equity	6,776	8,838	2,062
Accumulated other comprehensive income	228	765	537
Subscription rights to shares	_	6	6
Non-controlling interests	572	693	121
Total liabilities and net assets	17,565	19,913	2,347

## (Appendix) Q3 FY2022 Non-operating Income / Extraordinary Income and Loss



Non-operating income, extraordinary income and loss related to foreign exchange rate fluctuations, restructuring of overseas operations, and others.

Non-operating income

¥234mn

Foreign exchange gain ¥200mn

Exchange difference on intergroup loans to a U.S. subsidiary, LOGIGEAR CORPORATION.

**Extraordinary income** 

**¥41**<sub>mn</sub>

> Settlement income ¥41mn
Litigation settlement by LOGIGEAR CORPORATION, a U.S. subsidiary.

**Extraordinary loss** 

¥178mn

> Business liquidation loss ¥23mn

Losses associated with the withdrawal from a part of businesses of the subsidiary DIGITAL HEARTS Seoul Co., Ltd. (formerly Orgosoft Co., Ltd.), a subsidiary in South Korea.

- Loss on transfer of business ¥108mn
  Losses associated with the separation of the advertising agency businesses specializing in Taiwan.



# Q3 FY2022 Financial Results by Segment and Full-year Forecast of FY2022

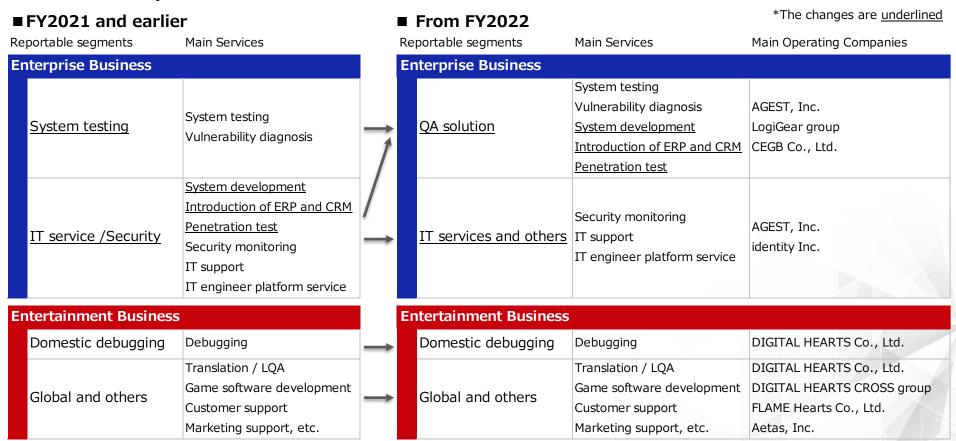
Notice regarding earnings by segment

- Net sales by segment include inter-segment sales or transfers.
   Segment income is based on operating income.
- Some changes were made to the sub-segments of the Enterprise Business in Q1 FY2022. For this reason, the figures for FY2021 and earlier by sub-segments of the Enterprise Business are reclassified to reflect the change in sub-segments for comparison purposes.

### **Changes in Sub-segments**



## Sub-segments in FY2022 are amended to reflect changes made to the services of the Enterprise Business.



#### (Reason for Change)

- Through cross-selling initiatives, increasing in the number of projects providing "one-stop" service including development, testing, and security services.
- Aggressive M&As have led to an expansion in our range of solutions and group synergy improvement.

## **Summary of Financial Results by Segment**



(JPY mn)	Q3 FY2021	Q3 FY2022	YoY Change
Net sales	21,246	26,879	126.5%
Enterprise	7,937	12,066	152.0%
Entertainment	13,308	14,926	112.2%
Adjustments	_	-113	_
Operating income	2,123	2,140	100.8%
Enterprise	403	313	77.9%
Entertainment	2,884	3,206	111.1%
Adjustments	-1,164	-1,379	
EBITDA	2,568	2,984	116.2%
Enterprise	644	835	129.6%
Entertainment	3,069	3,495	113.9%

## **Financial Result of Enterprise Business**



- High sales growth YoY over 1.5 times due to continuous double-digit growth in existing businesses and the effects of M&As conducted last year.
- Segment income declined in Q3 nine months due to intensive strategic investments at AGEST, Inc., the core subsidiary of the Enterprise Business. On the other hand, in Q3 three months, segment income increased due to sales growth and control of SG&A expenses.
- In Q4 three months, as a highest season, profitability is expected to improve due to sales expansion.

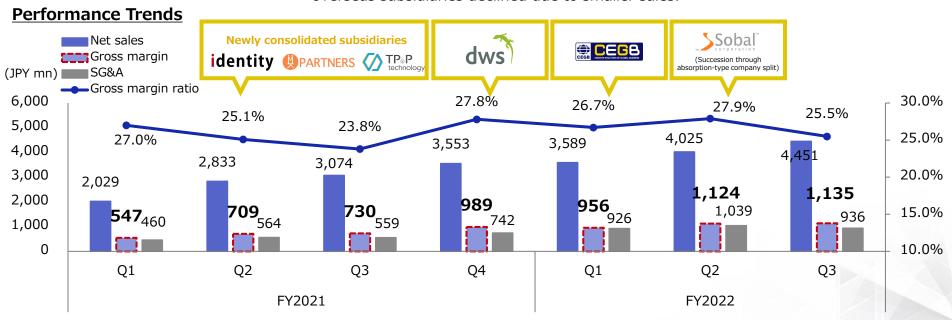
(JP	Y mn)	Q3 FY2021	Q3 FY2022	YoY Change
Ne	et sales	7,937	12,066	152.0%
	QA solution	4,740	7,314	154.3%
	IT services and others	3,196	4,751	148.6%
Se	gment income	403	313	77.9%
EBITDA		644	835	129.6%

### **Key KPIs of Enterprise Business**



#### **Enterprise Business**

- Net sales and gross profit remained steady, partly due to the contribution of M&As.
- In Q3, gross margin ratio of AGEST improved compared to Q2, but gross margin ratio of overseas subsidiaries declined due to smaller sales.



#### **QA** solution division

Sales ratio of Number of clients Advanced testing and Annual sales per client (\*) **Number of engineers** with orders (\*) **Next-generation OA** FY2022 Q3 FY2022 Q3 FY2022 Q3 FY2022 Q3 993<sub>People</sub> ¥12mn **35.1**% 693 companies FY2022 Q4 Target FY2022 Q4 Target FY2022 Q4 Target FY2022 Q4 Target ¥12mn 45.0% 830 companies **1,100** people

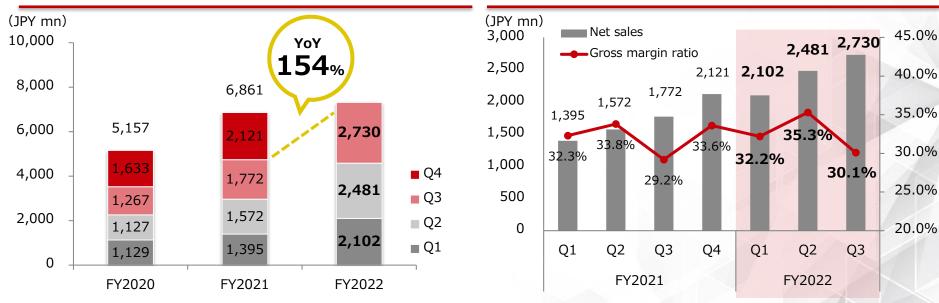
#### **Enterprise Business** - QA solution division



- **Expand transaction volume per client** by strengthening cross-selling of services.
- Promote the enhancement of test engineers through the succession of QA businesses of Sobal Corporation and the expansion of services, such as mutation testing, utilizing specialized knowledge.
- CEGB Co., Ltd., acquired through M&A, contributed from Q1 FY2022. Sales grew YoY 132.7% even after excluding the consolidation benefits of CEGB Co., Ltd., etc.
- Lower gross margin ratio in Q3 affected by weaker margins of oversea subsidiaries. Expecting to improve in Q4, the busiest season, with sales expansion.

#### **Quarterly sales**

#### **Net sales and Gross margin ratio**



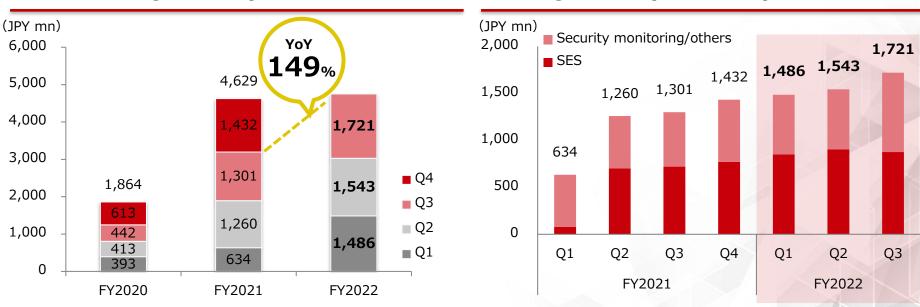
#### **Enterprise Business** - IT services and others division



- The SES businesses grew steadily, as the number of engineers registered at identity Inc. reached to 25,000 people.
- Steady expansion of security monitoring services by capturing increasing demand against the backdrop of expansion of remote work, etc.

#### **Quarterly sales**

#### **Quarterly sales by service**



#### **Financial Results of Entertainment Business**



- Achieve double-digit sales growth in both the Domestic debugging and the Global and others, by steadily capturing growing demand against the backdrop of the booming console game market and accelerated overseas expansion of game content.
- Segment income grew by double digits thanks to sales increase and improved gross margin ratio in the Domestic debugging, and the profit margin remained at a high level of 21.5%.

(JI	PY mn)	Q3 FY2021	Q3 FY2022	YoY Change
Ne	et sales	13,308	14,926	112.2%
	Domestic debugging	9,111	10,116	111.0%
	Global and others	4,196	4,809	114.6%
Se	gment income	2,884	3,206	111.1%
EB	ITDA	3,069	3,495	113.9%

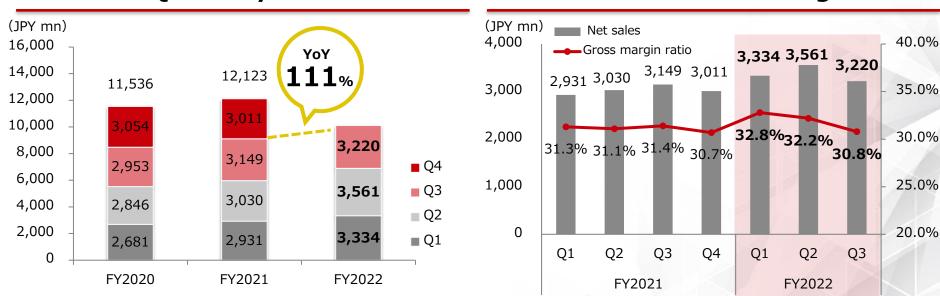
## **Entertainment Business** - Domestic debugging division



- High sales growth in the Domestic debugging driven by around YoY 1.4 times expansion of service for game consoles with increase in developments of new game titles.
- Relatively higher level of sales in Q3, despite the rebound from the busy period of 1H, and maintained a over 30% gross margin ratio, despite the rise in minimum hourly wages.
- Aiming to improve employee satisfaction, as a response to price hikes, the Company decided to raise hourly wages of "full-time" type game testers by ¥100 from April 2023 and to raise the unit price of debugging service with the higher added value through its abundant and talented human capital.

#### **Quarterly sales**

#### **Net sales and Gross margin ratio**



#### **Entertainment Business** - Global and others division

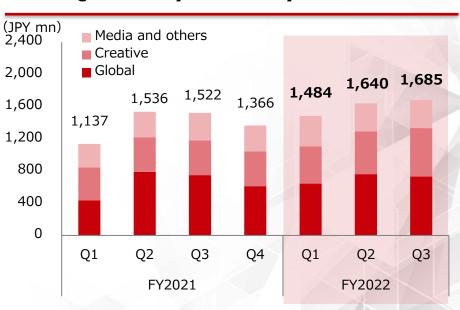


- Achieved higher sales in all services by improving the Group's internal collaboration even with increasing uncertainty of the Asian game market including China.
- Selection and concentration of businesses, such as strengthening cross-border services in South Korea and separating the advertising agency businesses specializing in Taiwan.
- By pursuing group synergies and strengthening initiatives with alliance partners such as GameWith, Inc., aiming to further expand our businesses and create new value.

#### **Quarterly sales**

#### (JPY mn) 7,000 YoY **115**% 5,563 6,000 5,000 4,111 4,000 1,685 1,054 1,522 **Q**4 3,000 1,118 Q3 1,640 2,000 1,536 Q2 1,050 1,000 1,484 ■ Q1 1,137 887 0

#### Quarterly sales by service



FY2022

FY2021

FY2020

#### **FY2022 Consolidated Financial Forecast**



- Aim for record-high net sales and operating income while accelerating investment for future growth.
- The Enterprise Business will keep driving the growth of the group.

•	•		<b>5</b> .
(JPY mn)	Full-year FY2021 (Actual)	Full-year FY2022 (Forecast)	YoY Change
Net sales	29,178	35,500	121.7%
Enterprise	11,491	15,375	133.8%
Entertainment	17,687	20,125	113.8%
Operating income	2,701	3,290	121.8%
Operating income margin	9.3%	9.3%	+0.0points
Ordinary income	2,778	3,290	118.4%
Profit attributable to owners of parent	1,780	2,250	126.4%
EBITDA	3,430	4,240	123.6%



## **Growth Strategy**

## **Our Growth Strategy**



With stable growth of high profitable Entertainment Business, rapidly expand the Enterprise Business while utilizing M&A as well.

#### **M&A** growth

➤ Continue M&A aimed at expanding the pool of engineers and improving technological capabilities, such as test automation tools.

#### **Organic growth: Enterprise Business**

- ➤ Pursue advanced quality technologies and improve QA (\*) expertise.
- Provide testing service in accordance with global standards.

#### **Organic growth: Entertainment Business**

- > Generate stable profits by leveraging our large domestic market share.
- > Accelerate businesses expansion in global services.

¥ 50.0 bn (Target)

FY2023

Sustainable Growth

M&A Growth

**Organic Growth** 





¥ 29.1 bn

Illustrative consolidated net sales

FY2017 FY2021

- The illustrative consolidated net sales above is not a forecast of us and we do not promise it as described above.
- QA···Quality Assurance

¥ 17.3 bn

## **Vision of Enterprise Business**



By utilizing leading-edge quality technologies and developing next-generation QA human capital, to become a service provider of optimum QA solutions at a high level to diversifying needs.

#### **SAVE the DIGITAL WORLD**

Support the innovation of clients' business with a rich user experience

Next-Generation QA Provide quality assurance service in areas such as CASE and Smart City, with testing methods not developed yet in the market.

Support optimization of the testing process by utilizing technology

Contribute to improving the quality of software including nonfunctional aspects such as security or the efficiency of testing processes using automation tools.

**Advanced Testing** 

Assist the testing process from a third-party perspective

Offer outsourcing services to support clients with insufficient experiences and resources for software testing.

**Test Outsourcing** 

## The Basement of Enterprise Business



Developed the business foundation, PP&T (People, Process, and Technology), in 1H. Keep strengthening the basement for further growth of the Enterprise Business.

## Reinforce engineer human resources to improve the quality of software

- Next-generation QA engineers and test engineers with expertise in testing techniques
- Test operator teams with high efficiency and flexibility
- Unique model of recruitment and M&A to continuously reinforce human capital

## Standardize in complying with international standards

- Standardized quality of test services by complying with "ISO/IEC/IEEE 29119"
- Developing standards as best practice by combining international standards with front-line knowledge

### **People**



## Pursuit advanced quality technologies and development of sustainable training model

- AGEST Testing Lab. to develop testing techniques in new areas such as AI testing.
- AGEST Academy as in-house training curriculum for producing nextgeneration QA engineers.

#### **Process**



### **Technology**

#### **Expand technology-oriented services**

- High quality of testing service by utilizing global, state-of-the-art test automation tools
- Improvement of efficiency by utilizing tools such as impact analysis and CI/CD

### **Experts Supporting the Enterprise Business**



Establish PP&T as the Enterprise Business platform by bringing together experts from the frontline of the software testing industry.

## **People**



Dr. Juichi Takahashi

A pioneer in software testing in Japan. Holds a PhD in software testing and has published many works. Director and CTSO of AGEST, Inc., our subsidiary



Dr. Yasuharu Nishi Lecturer, the University of Professor, **Electro-Communications** 

Researcher of AI products and President of NPO ASTER (Association of Software Test Engineering).



Dr. Hironori Washizaki **WASEDA University** 

Researcher in agile development.



Mr. Rex Black

Worldwide authority on software testing with many published works. Former president of the ISTOB.

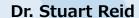


**Process** 



Mr. Yohei Takagi

The first Japanese [ISO/IEC/IEEE 29119 Training Trainer]. Executive Officer of AGEST, Inc., our subsidiary.



The founder of the ISTOB. The convener of ISO Software Testing Working Group 26, which has published software testing standard, "ISO /IEC/IEEE 29119."



Dr. Masahiko Kato Professor, University of Nagasaki

Researcher in Security Testing.



Mr. Kazutaka Jokura

A former CTO in DMM.com LLC. Worked on expanding and training the company's engineers for seven years. Our Chief Technology Officer.





Worldwide authority on software testing. The coauthor of the bible for test

engineers. Founder of our subsidiary LOGIGEAR CORPORATION.

## **Engineer Human Capital Model**



Our unique human capital model of engineers, with testing engineer group including next-generation QA engineers, supporting the improvement of clients' software quality, and with test operating teams with high efficiency and flexibility.

#### **■** Structure of Engineer Human Capital

#### **Next-generation QA engineer**

The highest-class QA engineer with knowledge of both software development and testing to contribute to client's service quality improvement for all from development to post-release.

QA Consulting

Optimization of test coding

Whitebox Testing

Support for in-house testing

#### **Test engineer**

Specialists of software testing from planning and designing in conventional QA services to test automation and security services.

Testing plan

Testing design

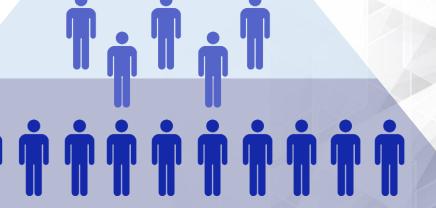
Test automation

Cyber Security

#### **Test operator**

Testers who efficiently and flexibly implement software testing with designed testing processes.

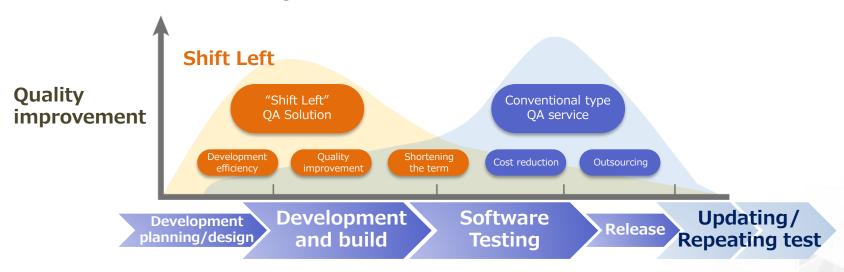
Testing operation



### Value Provided in Response to "Shift Left"



With getting more complex, sophisticated, and diverse needs for software testing and bigger trend of in-house software development by end-user companies, AGEST started "Shift Left" QA solution.



## Providing Total QA Solutions from Development to Post-Release Response

#### "Shift Left" QA Solution

View of software development engineers

Overall optimization to consider the impact to development process including post-release

Coding optimization by source code analysis

Comprehensive knowledge ranging from development to testing

#### **Conventional type QA services**

View of end users

Partial optimization of the testing process before launching or during updates

Check operation according to specifications

Much enough test engineer resource

### New Service Model of "Shift Left" QA Solution



Provide a total solution of high-value-added "Shift Left" QA solution and high-efficient conventional QA services.

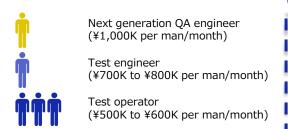




Image of the engineer

#### Conventional type QA service

Low cost



> Efficiently and flexibly provide a large number of test operators

est process

Cyber

Security

Outsourcina

of work

Cost reduction

## **M&A Strategy as a Growth Driver**



Accelerate the business growth by M&As aimed at acquiring engineers and technical capabilities.



Obtain engineer human resources

Strengthen technical capabilities and know-how



Acquired approximately **400** test engineers



Acquired know-how and original tools of **test automation** 



Acquired around **20** test engineers



Acquired **Oracle** test know-how and proprietary test automation tools



Acquired approximately **130** test engineers

(Succession through Absorption-type Company Split)



Acquired **SAP** know-how



Acquired a pool of engineers, more than **7,000** freelances



PARTNERS Acquired Salesforce know-how

#### Resolution of the equity finance (Stock acquisition rights)

#### Transaction size (plan) Approx. ¥4.2 billion

(Approximate amount after payment of expenses)\*

\*Procurement amount as of January 31, 2023: ¥1.05 billion

Exercise period: July 20, 2022 to July 19, 2024

#### **Purposes**

- I. Waiting funds for future M&A
- II. Repayment of existing M&A bank loans
- III. Expenses for R&D initiatives and recruitment and training of engineers

\*Transaction size amounts (plan) may increase or decrease if the exercise price is revised or if the acquisition rights are not exercised during the period.



#### Strategic growth through M&As following strict guidelines

#### **M&A Strategy**

- 1. Strict ROIC standards to maintain higher investment efficiency and profitability \*ROIC=EBITDA×(1-effective tax rate)÷(interest-bearing debt+shareholders' equity)
- 2. Targeting companies with future growth potential and current stable profitability
- 3. Well-balanced PMI initiatives between its organic growth and synergies with our group

#### Target companies

To obtain engineer human resources

- Software testing companies
- Companies with engineers especially for development of open systems
- SES providers with rich human resources as own employee

To strengthen technical capabilities

- ERP-related service providers in Japan

## Size of target companies

Net sales: ¥0.5 - 3.0 bn

Number of engineers: 30 – 150 engineers

Acquisition price: Max. ¥3.0 bn

## Number of projects

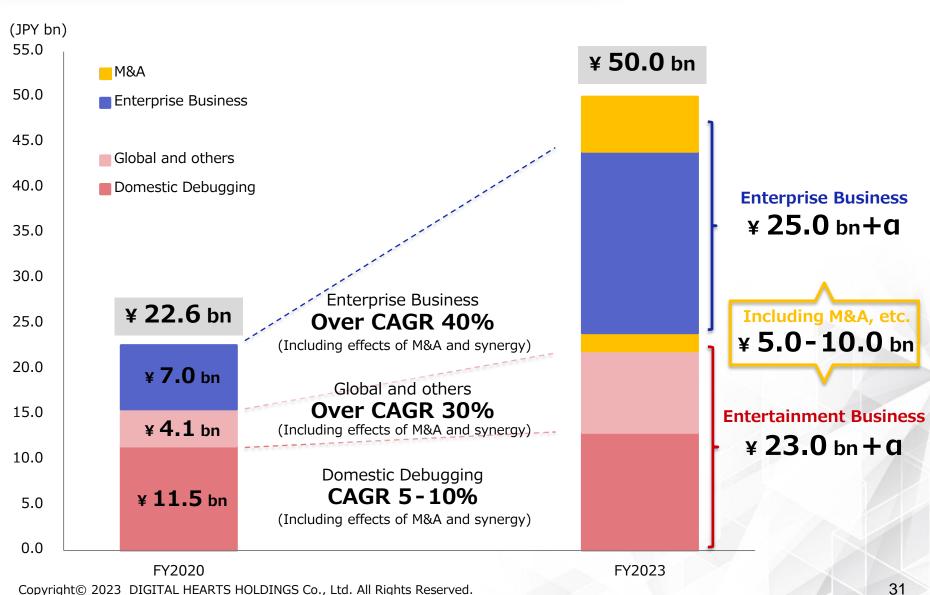
Around 2-3 projects per year as a plan

#### Governance

- Internal Investment Committee from various views including business operations, legal, finance, HR, and others.
- Board of Directors including counsel from outside directors who have knowledge and experience in M&As or finance.

### **Sales Targets**





## **Medium-Term Targets (FY2021-FY2023)**



## FY2023 Target

Group Business	<fy2020 result=""></fy2020>	<fy2021 result=""></fy2021>	<fy2023 target=""></fy2023>
Consolidated Sales	¥ <b>22.6</b> bn	¥ <b>29.1</b> bn	<b>¥50.0</b> bn
<b>ROIC</b> (*1)	16.8%	22.0%	>>> over <b>15</b> %
M&A and Alliances	3 projects	3 projects	5 projects (in 3years)
Number of Clients in Japan as a Group	878 companies	1,005 companies	>> 2,000 companies

#### **SDGs**

Number of IT Human Resources incl. Qualitist (*2)	4,517 people	<b>10,660</b> people	<b>&gt;&gt;</b>	20,000 people
Female Managers Ratio (ratio to total managers) (*3)	10.7%	11.8%	<b>&gt;&gt;</b>	over <b>20</b> %

<sup>\*1</sup> ROIC=EBITDA $\times$ (1-effective tax rate) $\div$ (interest-bearing debt+shareholders' equity)

<sup>\*2</sup> Qualitist...Our original term for specialists contributing to quality incl. engineers

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## **Appendix**

## Why Invest in DIGITAL HEARTS







Employment creation for more than 8,000 testers







### **Corporate Profile**



**Our Mission** 

## SAVE the DIGITAL WORLD

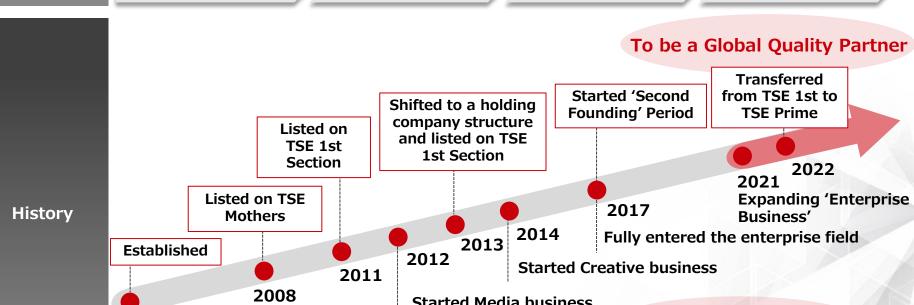
Market environment

Growth of console game market

**Growth of** mobile game market

**Expansion** of IoT

**Expansion** of DX



**Started Media business** 

**Accelerating** diversification in the game industry

Started 'Second Founding Period' promoting the industrial shift of "debugging" business

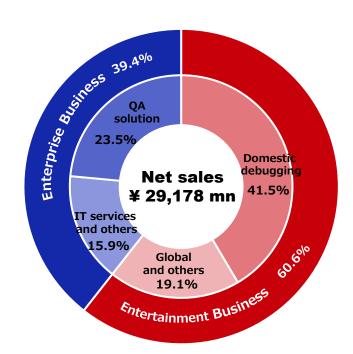
Started Debugging business

'First Founding Period'

2001

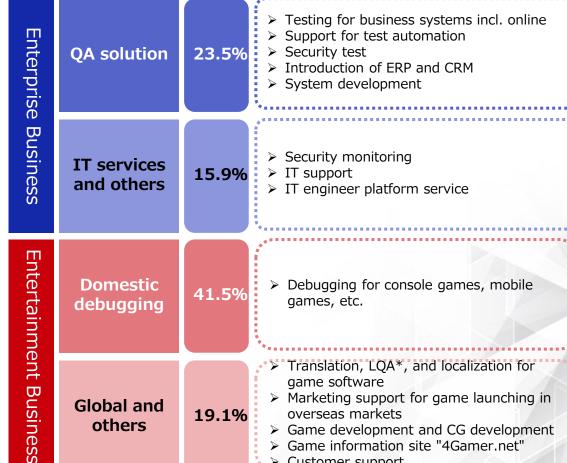


### Our core business: QA(Quality Assurance) and Debugging



### Sales breakdown by segment (FY2021)

\*Segments include intercompany sales and/or transfers.



36

Customer support

### **Overview of System Testing and Debugging**



#### **Our Services**

Develop	Test	Maintain after a product release
Test Design	Running various tests	Continuation test
<ul><li>Test consulting</li><li>Test planning and scheduling</li><li>Support for test automation</li></ul>	<ul> <li>Functionality test</li> <li>Performance test</li> <li>Stress test</li> <li>Acceptance test</li> <li>Usability test</li> </ul>	<ul> <li>Operations and management</li> <li>Evaluation and improvement</li> <li>Updates</li> </ul>

Outline of Services Out					
Service	Service Description		Barriers to entry	Projects Ratio	
System Testing	Detection of bugs in enterprise systems from a test-engineers' knowledge.	<ul><li>System integrators</li><li>Development vendors</li><li>Core system enterprises</li></ul>	Medium  † Personnel shortage in IT Industry.  † Knowledge and expertise on software testing is required.	Low	
	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 managemen to accommodate changeable development schedules are required.	High t	

### **Outline of Our System Testing**



### **ISTQB Global Partner** (One of three companies in Japan)



**Largest class** in Japan

> **Number of people** with ISTQB qualifications 365 people

> > (Consolidated base as of March 31,2022)

#### What is the ISTOB?

ISTQB is an international accreditation body for software testing.

There are four levels defined for the program: Silver, Gold, Platinum, and Global. To be eligible for the Global level, a group has to have at least one Platinum-level company and Gold-level companies in two or more countries.

### **Diverse automation tools**

One of the largest variety of tools in the domestic software testing industry











Selenium

appium

### Supported by global authorities in software testing



Dr. Stuart Reid The founder of the ISTOB. The convener of ISO Software Testing Working Group 26



Mr. Rex Black Former President of the ISTQB



The co-author of a bible for test engineers.

Mr. Hung Nguyen



A pioneer in software testing in Japan who has published many works. Dr. Juichi Takahashi

### Our Strengths in the Entertainment Business



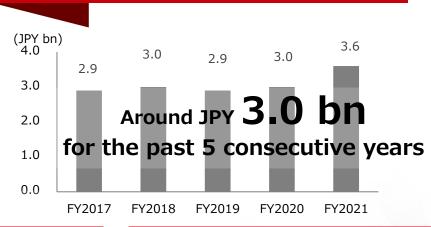
### Market leader in domestic debugging service

Debugging service involvement ratio among top 100 new console game titles \*

**Approx. 75%** 

\*Based on an internal investigation

## Strong operating profits



### Passionate talents who love game



Approx. **8,000** registered testers

### **Abundant and wide** variety of test terminals



Game consoles 2,054



**Smartphones** 6,782

(As of March 31,2022)

#### Over 20 locations

Japan 13

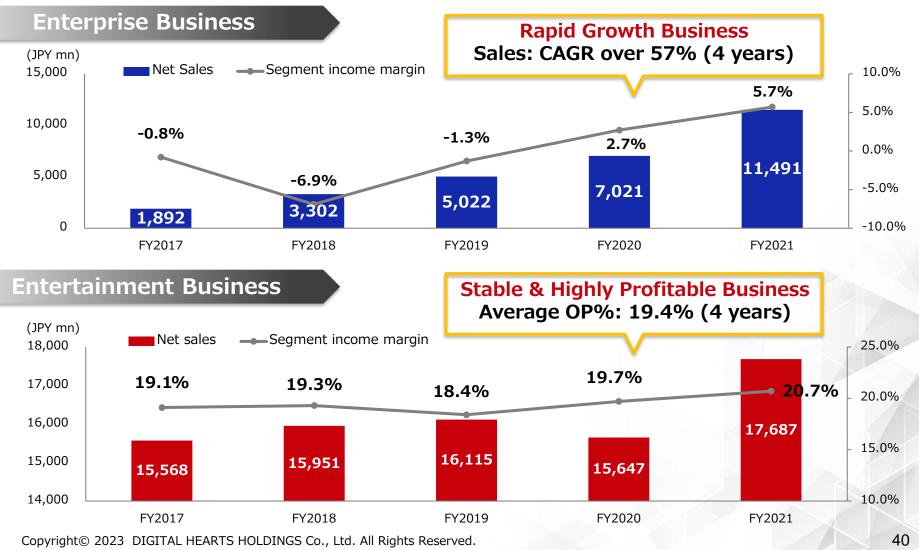
Global

(As of March 31,2022)

### **Our Growth Strategy**



Rapid expansion of the Enterprise Business using the Entertainment Business as a foundation.

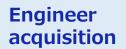


### **Consolidated Financial Statement**



(JPY mn)	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Net sales	13,285	15,011	15,444	17,353	19,254	21,138	22,669	29,178
Enterprise Business	1,713	2,382	1,952	1,892	3,302	5,022	7,021	11,491
Entertainment Business	11,609	12,696	13,544	15,568	15,951	16,115	15,647	17,687
Adjustments	-39	-70	-52	-108	-0	-	-	-
Operating income	1,517	1,963	1,906	1,735	1,605	1,394	1,908	2,701
Enterprise Business	50	71	203	-14	-226	-67	188	649
Entertainment Business	1,915	2,379	2,453	2,966	3,086	2,964	3,077	3,668
Adjustments	-447	-486	-750	-1,215	-1,254	-1,503	-1,356	-1,616
Operating income margin	11.4%	13.1%	12.3%	10.0%	8.3%	6.6%	8.4%	9.3%
Enterprise Business	2.9%	3.0%	10.4%	-	-	-	2.7%	5.7%
Entertainment Business	16.5%	18.7%	18.1%	19.1%	19.3%	18.4%	19.7%	20.7%
Profit attributable to owners of parent	539	361	795	1,200	1,575	792	974	1,780
Total assets	8,272	6,533	7,651	8,575	9,832	10,637	14,338	17,565
Current assets	5,756	5,064	6,221	6,813	7,403	7,453	9,744	10,392
Cash and deposits	3,058	2,197	3,344	3,894	4,197	3,739	5,076	5,208
Noncurrent assets	2,516	1,469	1,430	1,761	2,428	3,183	4,593	7,172
Goodwill	1,169	437	201	150	481	1,027	2,467	4,763
Total liabilities	4,104	3,444	4,793	5,005	4,819	5,198	8,024	9,989
Interest-bearing liabilities	1,865	1,367	1,646	1,610	1,764	2,553	4,797	5,590
Total net assets	4,168	3,089	2,858	3,570	5,012	5,438	6,314	7,576
Shareholders'equity ratio	4,092	2,814	2,632	3,369	4,791	4,922	5,691	7,004
Shareholders' equity ratio	49.5%	43.1%	34.4%	39.3%	48.7%	46.3%	39.7%	39.9%
Net cash	1,193	830	1,698	2,283	2,433	1,186	278	-382
Debt Equity Ratio	0.5	0.5	0.6	0.5	0.4	0.5	0.8	0.8
Net cash provided by operating activities	870	1,080	1,825	1,436	889	1,086	1,416	3,077
Net cash used in investing activities	-568	-17	-610	-618	62	-1,018	-1,813	-2,537
Net cash provided by (used in) financing activities	-950	-1,913	-69	-250	-693	-515	1,730	-546
ROE	13.8%	10.5%	29.2%	40.0%	38.6%	16.3%	18.4%	28.1%
Dividend Payout Ratio	37.6%	60.4%	32.3%	20.9%	18.0%	38.6%	31.0%	18.2%

### Aims Past M&As





TP<sub>®</sub>P technology

identity

Software testing engineers in Japan

Software development engineers in Vietnam

Highly skilled domestic freelance engineers



Test automation tools Offshore in Vietnam

Logi Gear







Services to complement localization



Japan's largest game information website "4Gamer.net"



Game software development/ CG content development



Geographical expansion



Game translation in South Korea



Game translation in Taiwan

Marketing and promotion support in China and Asian countries

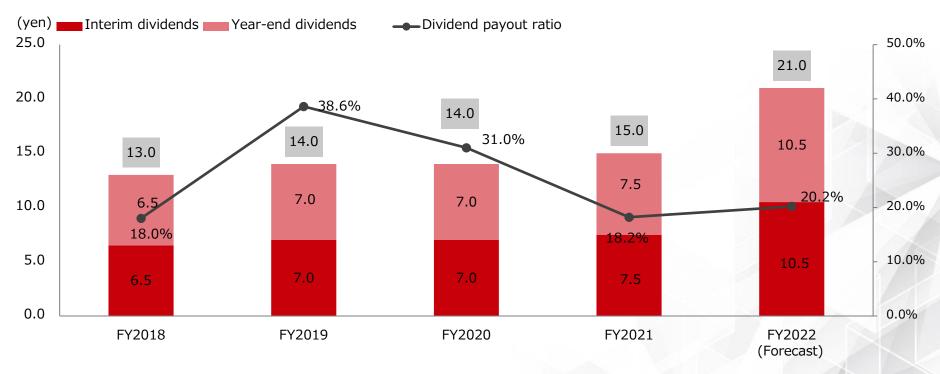
### **Shareholder Returns**



### **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**





### **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
- Obsolescence of existing services by technological innovation
- Focusing on the application of the latest technologies, including a test automation project
- 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
- Strategically acquiring human resources through our overseas offices

- 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

# (Ref.) Our Aims for Sustainable Value Creation



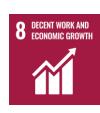
### **Our Major Initiatives and Sustainable Development Goals (SDGs)**

### Human resource

#### To resolve the shortage of IT human resource

- Internal support system for obtaining software test certification of "JSTQB".
- Provide world-class test engineer training program in "AGEST Academy" for employees.
- Provide educational opportunities through collaborations with METI, local governments including Osaka and Gunma prefecture, correspondence high schools, NPOs, and career transition support offices.





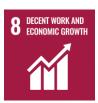


### Human resource

#### 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.
- Provide employment opportunities through the operation of the Tokyo Metropolis-Certified Social Firm.
- Employ foreign nationalities of more than 30 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

- Established "AGEST Testing Lab. " to promote research on new software testing methods to support the evolving software society through industry-academic collaboration.
- Launched factory cyber security solutions to Japan market collaboratively with four companies including Siemens K.K.

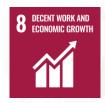




#### Communities

#### To revitalize local community and resolve IT disparities

- Create jobs throughout nationwide test centers (Lab.) and promote teleworking/ work-from-home style by Remote Debugging service.
- Contribute to cyber security measures for local communities and SMEs by acquiring a certification from Information-technology Promotion Agency, Japan (IPA).







### **Group Companies**





(As of December 31, 2022)

#### **Enterprise Business**

#### AGEST, Inc.

System testing, Cyber-security, etc.

#### LogiGear Group

System Testing, Test Automation Support



#### MK Partners, Inc.

Salesforce consulting



System development

#### **DEVELOPING WORLD SYSTEMS LIMITED**

Introduction and maintenance support for Oracle products



#### identity Inc.

IT freelance engineer platform service



#### CEGB Co., Ltd.

SAP implementation and operation support, system development support, etc.



#### **Entertainment Business**

#### **DIGITAL HEARTS Co., Ltd.**

Game debugging, Localization, etc.

#### **DIGITAL HEARTS CROSS Group**

Marketing support, etc.

#### DIGITAL HEARTS (Shanghai) Co., Ltd.

Game debugging, Localization, etc.

#### **DIGITAL HEARTS USA Inc.**

Game debugging, Localization, etc.

#### DIGITAL HEARTS Seoul Co., Ltd.

Game translation, Marketing support, etc.

#### Digital Hearts Linguitronics Taiwan Co., Ltd.

Game translation

#### FLAME Hearts Co., Ltd.

Game development and CG content development

#### Aetas, Inc.

Operation of a game information site, "4Gamer.net"







### **Management Structure**



Strengthen our governance structure and improve business execution capabilities by increasing the number of outside directors and executive officers from FY2022.

Management structure of main group companies



Keiya Kazama

DIGITAL HEARTS HLDGS.

(Holding Company)

Representative Director, President and CEO **Yasumasa Ninomiya** 

Director and Chairman **Eiichi Miyazawa** 

Director, Executive Vice president and CFO

Toshiya Tsukushi

Outside Director Takashi Yanagiya

Outside Director Emiko Murei

Outside Director Ryo Chikasawa

Standing Audit & Supervisory Board Member Masahide Date

Audit & Supervisory Board Member

Outside Audit & Supervisory Board Member **Toshifumi Nikawa** 

Outside Audit & Supervisory Board Member **Yoko Okano** 

Executive Officer and CSO

**Tadahiro Ando** 

Executive Officer and CTO

Kazutaka Jokura

Executive Officer and CIO

Mamoru Seki

Executive Officer **Toshiyuki Takahashi** 

Executive Officer Hideto Itami

### **AGEST**

(Core Enterprise Business Company)

Representative Director and President

Yasumasa Ninomiya

Director and Executive Vice President **Ken Hasegawa** 

Director, Executive Vice President and CTO

Kazutaka Jokura

Director Toshiva Tsukushi

Director Tadahiro Ando

Director and CPO

Mamoru Seki

Director Kenzo Miyajima

Director and CTSO
Juichi Takahashi

Executive Officer **Yohei Takagi** 

Executive Officer **Taku Ueda** 



(Core Entertainment Business Company)

Representative Director and President

Toshiya Tsukushi

Director and Executive Vice President

Ryogo Hagiwara

Director Yasumasa Ninomiya

Director Tadahiro Ando

Director Shinichiro Kasama

Director Takuya Tanaka

Executive Officer
Koichi Nakashima

Executive Officer
Tetsuya Hiyoshi



Terms	Definition		
Enterprise Business	Our service-based business segment for non-gaming enterprise software, which provides software testing and cyber security. It is the main driver of growth in our corporate group due to the massive digital transformation currently sweeping through society.		
Entertainment Business	Our service-based business segment for the game and entertainment industries, which provides debugging and localization. It is our "cash cow", primary stream of revenue in Japan and continues to see extensive growth in the global market.		
System Testing	This is a term used in our Enterprise Business and the same meaning of software testing. System testing comprises detection of system bugs for enterprise resource planning (ERP) software, websites, business apps, etc.		
Debugging	This is a term used in our Entertainment Business. We run tests and find software bugs from the perspective of the user. Debugging generally refers to the identification and correction of errors, but we specialize in identifying and reporting them.  Mobile games comprise two-thirds of our debugging requests, with console games making up the other third.		
QA	An abbreviation for Quality Assurance. It includes both of software testing and game debugging.		
LQA	An abbreviation for Linguistic Quality Assurance. LQA focuses on finding and fixing in-game linguistical errors that occur when translating from a foreign language.		
Test Engineer	Engineers who conduct software testing. It has not been popular yet in Japan as a job career and Japan currently has a shortage of test engineers, we often recruit IT engineers and provide them the necessary training.		
Tester	Staff members who carry out debugging. Most of our testers are registered part-time workers. Some are trained to work as test engineers or cybersecurity specialists.		
Console Games	A game played using dedicated hardware such as the Nintendo Switch or PlayStation.		
Qualitist	Our uniquely coined term for specialists who contribute to the quality of software. It refers to all IT specialists such as test engineers and cybersecurity specialists in our Enterprise Business, as well as testers, translators, 2D/3D graphic designers, etc. that work in our Entertainment Business.		



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