

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

**3676**

Tokyo Stock Exchange First Section

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## Summary

### Is focusing on the industry shift from the entertainment industry to the enterprise industry

DIGITAL HEARTS HOLDINGS Co., Ltd., <3676> (hereafter, also “the Company”) is a group of professionals that conducts “debugging,” which is detecting bugs (defects) hidden in software, from the user’s point of view, and it provides debugging services in fields including consumer, mobile, online, arcade and various other types of games, and amusement equipment. Through its abundance of human resources, of more than approximately 8,000 registered testers fully familiar with games, and a track record of detecting more than 1.5 mn bugs, it has acquired an overwhelming share of the game debugging market in Japan. Also, as its “second startup period,” the Company is currently focusing on the industry shift from the entertainment industry to the enterprise industry, and it is progressing business expansion for new businesses, including system testing and cyber security, targeting Web systems and business systems.

#### 1. Achieved record-high sales in FY2018

In the FY2018 consolidated results, net sales were ¥19,254 mn (up 11.0% year-on-year (YoY)), operating income was ¥1,605 mn (down 7.5%), ordinary income was ¥1,651 mn (down 7.4%), and profit attributable to owners of parent was ¥1,575 mn (up 31.3%). Sales were a record high, but profits declined because the Company invested in strengthening the structure of the Enterprise Business with an eye to growth in the medium- to long-term.

#### 2. For FY2019 also, forecasts are for both businesses to grow and for record-high sales

For the FY2019 results, the Company is forecasting net sales of ¥23,000 mn (up 19.5% YoY), operating income of ¥1,800 mn (up 12.1%), ordinary income of ¥1,830 mn (up 10.8%), and profit attributable to owners of parent of ¥1,250 mn (down 20.7%). In the Entertainment Business, it expects high growth, mainly from the expansion of market share for debugging services for mobile games, while in the Enterprise Business, it plans to acquire orders through strengthening the system for receiving orders and progressing the automation of testing.

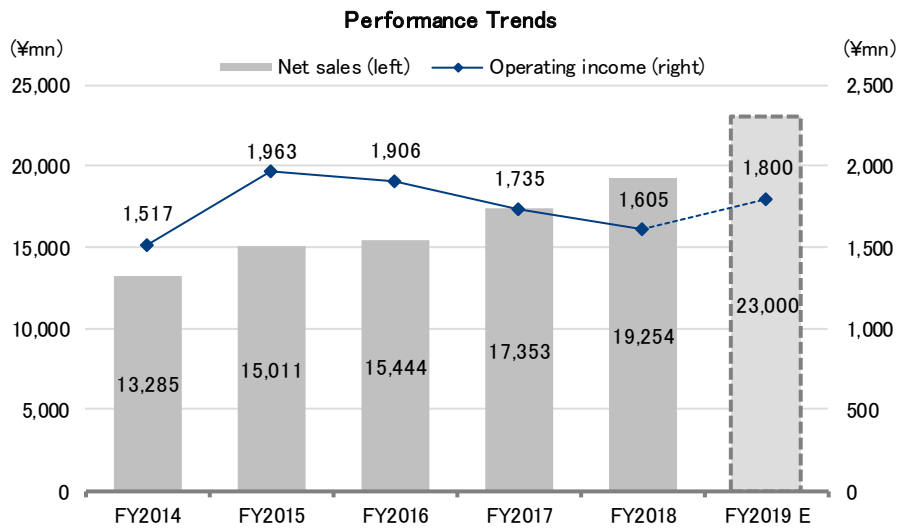
#### 3. Will continue to actively invest in human resources in FY2019 and is aiming to strengthen the foundation of system testing services

In the Entertainment Business, the Company will progress the structural reforms of Lab., and it will also aim to expand and enhance services for game manufacturers, mainly global services such as translation and localization. It will continue to actively invest in human resources, particular for test engineers, and to strengthen the system for receiving orders, while it will also work to improve the added-value of services with the aim of making a dramatic leap forward for growth. Toward strengthening human resources, the Company is redefining the types of engineers according to their skill sets and is continuing to actively invest in human resources. From among the measures for new recruitment, human-resources development, and M&A, it is particularly focusing on training personnel from among game testers. In terms of redefining engineers, from FY2019 onwards, compared to the definition up to the present time, the total number of engineers (which consists of expert engineers) will be divided into test engineers, systems engineers, and infrastructure engineers. It intends to increase the number of test engineers from 89 at the end of FY2018 to 150 at the end of FY2019.

Summary

Key Points

- Has positioned the current period as its “second startup period” and is continuing to actively invest
- In the system testing area, the effects of the active investment are starting to appear
- Forecast is for record-high sales in FY2019 also



Source: Prepared by FISCO from the Company's financial results

## Business overview

**In the game debugging market in Japan, the Company is pursuing an overwhelming market share, further growth in the Entertainment Business, and rapid expansion in the Enterprise Business**

The Company is a group of professionals that carry out debugging, which is the investigation, and reporting, through the perspective of the software user. It provides these debugging services in areas including consumer, mobile, online, arcade, and various other types of games and amusement equipment. Through its abundant human resources, of approximately 8,000 registered testers who are fully familiar with games, and a track record of detecting more than 1.5 mn bugs, it has an overwhelming share of the game debugging market in Japan. In addition to debugging, it provides multifaceted support for game development by providing a variety of other services, including for translation and localization, 2D/3D graphics production, customer support, and game information website management.

Business overview

Moreover, in June 2017, Mr. Genichi Tamatsuka, who had served as the president of Fast Retailing, which manages UNIQLO, and then appointed as CEO, President, and Representative Director of Lawson convenience stores, replacing the outgoing President Miyazawa, the Company’s founder. The Company has positioned the period since this change of leadership as the “second startup period,” and it is pursuing further growth for its mainstay business, the Entertainment Business, at the same time as progressing various measures in order to quickly expand its business in the enterprise area. It defines the Entertainment Business as services for video games and pachinko machines and pachinko slot machines, and the Enterprise Business as services for software other than for games and pachinko machines and pachinko slot machines (including business systems, Web systems, and business apps). Against the backdrop of the advance of the Internet of Things (IoT), in which all things are connected to the Internet, and other developments, software is rapidly become more sophisticated and complex, and the risk is increasing of fatal bugs that can cause product failures and the suspension of services. Therefore, the roles to be played by debugging and system testing, which ensure the quality of software, are becoming increasingly large. On the other hand, the chronic shortage of IT personnel in companies has become more serious, so demand for this kind of outsourcing is expected to increase in the future.

1. Entertainment Business

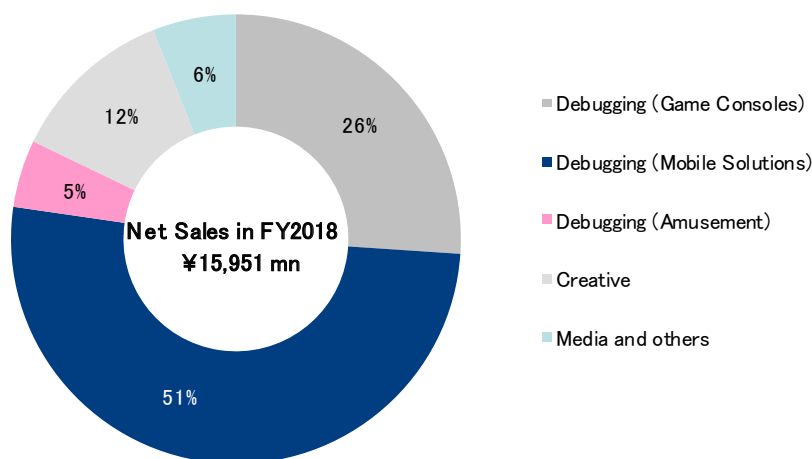
**Provides multifaceted support for the development of high-quality games, mainly debugging services**

In the Entertainment Business, more than 80% of sales are from debugging services to detect bugs, including for home-use games, mobile games, and pachinko machines and pachinko slot machines.

- Debugging Div.

Debugging services are provided through three departments: Game Consoles (GC), for the verification mainly of home-use games, online games, and arcade games; Mobile Solutions (MS), for the verification of mobile games; and Amusement, for the verification mainly of pachinko machines and pachinko slot machines. In terms of the percentages of sale, Game Consoles provides 26%, Mobile Solutions 51%, and Amusement 5%.

Percentages of total sales in the Entertainment Business



Source: Prepared by FISCO from the Company’s results briefing materials

#### Business overview

- Game Console (GC)

Consumer games are becoming more complex and bloated, and the outsourcing of debugging is being conducted with the aim of efficiently detecting bugs before a game is released. The Company uses its abundance of test personnel and debugging experience to flexibly provide high-quality services that accommodate fluid development schedules. It is also one of the limited number of companies in Japan in terms of holding licenses enabling purchases of dedicated debugging devices, such as for PlayStation 4 and Nintendo Switch, and it has acquired and is maintaining a high market share in Japan.

- Mobile Solutions (MS)

Mobile games are becoming more complex as smartphones become more sophisticated, and moreover, updates occur even after a game is launched, such as regular in-game events or some promotion events with new game items. Therefore, needs for continuous debugging are being generated not only for before the game is launched, but also in the management phase after it is launched. The Company is responsible for debugging content in the operational phase for many best-selling titles, and the sales from this service currently contribute more than 80% of MS sales and it is a business model that has significant stock characteristics. The Company is also working to strengthen its engagement with its customer companies by providing a wide range of services, including global services like translation and localization, and customer support.

- Amusement (AM)

The Company is responsible for debugging before a machine is launched, but different to GC and MS, a feature of AM is that the market demand or trend is affected by laws and regulations. In recent years, the regulations have been gradually strengthened for both pachinko machines and pachinko slot machines, and the market environment continues to be severe. It is working to expand its market share acquired from the competition by focusing on providing high-quality services.

- Creative and Media and others Div.s

In addition, in services other than debugging services, the Company provides creative services, for outsourced game development and 2D/3S graphics production, and media and other services for planning, management, and customer support, including for 4Gamer.net, which is Japan's largest video game information website.

## 2. Enterprise Business

### **Supports the development of high-quality products and services in the rapidly changing digital society**

The Enterprise Business is comprised of system testing, which includes the verification of Web systems and business systems, and Automobile driving tests; and IT services and security, which includes system development, IT support, and cyber security services.

- System testing

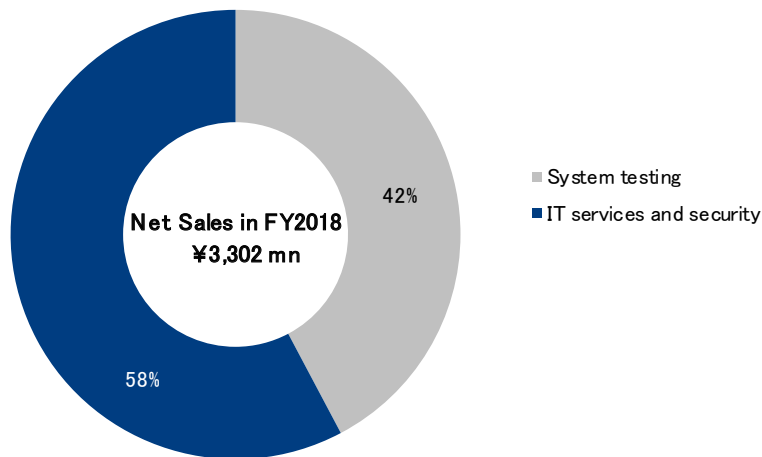
System testing is different from game debugging, as nearly all system testing is still conducted in-house by development companies and little progress has been made in outsourcing the test process. Therefore, the Company is working to promote outsourcing, including through actively conducting sales. It is also focusing on securing and training test engineers who can design and plan the tests, which is indispensable to acquire projects, and in strengthening the system for receiving orders. At the same time, it is progressing the automation of testing and aiming to provide unique solution services that organically combine technologies and human resources.

Business overview

- IT services and security

For the percentages of sales in IT services and security, 20% are from outsourced system development, 75% from maintenance and management that includes IT support, and 5% from cyber security. By providing these services, the Company has built a system that enables one-stop ordering from development and testing through to maintenance and management. It is also focusing on expanding security services that have a high affinity with testing, while it intends to strengthen specialist human resources and expand services that utilize alliances.

Percentages of sales in the Enterprise Business



Source: Prepared by FISCO from the Company's results briefing materials

## Results Trends

### Achieved record-high sales in FY2018 Continues investment and other activities with an eye to growth in the medium- to long-term

#### 1. Overview of FY2018 results

In the FY2018 consolidated results, net sales were ¥19,254 mn (up 11.0% YoY), operating income was ¥1,605 mn (down 7.5%), ordinary income was ¥1,651 mn (down 7.4%), and profit attributable to owners of parent was ¥1,575 mn (up 31.3%). Sales were a record high, but profits declined due to changes in the business environment and also as the Company is also undertaking investment and other activities to strengthen the structure of the Enterprise Business with an eye to growth in the medium- to long-term.

We encourage readers to review our complete legal statement on "Disclaimer" page.

#### Results Trends

Net profit increased mainly due to the recording of extraordinary income (¥703 mn) as the Company sold its holding of HEROZ shares. It entered into a capital and business alliance with HEROZ in July 2017, and they have been investigating the commercialization of highly competitive services using AI. They have been able to build a strong relationship as business partners, and it was judged that even if the capital alliance was ended, this would not prove a hindrance to either company, so both agreed to end the capital alliance. Alongside this, with the aim of effectively utilize the Group's assets, the Company decided to sell all of its shares of HEROZ in order to strengthen its financial foundation.

In the results by segment, the Company achieved higher sales and profits in the Entertainment Business through working to further improve its competitive advantages by reviewing the business system, mainly for the mainstay debugging services, and strengthening the structure to provide services to game manufacturers in order to maximize earnings opportunities. In the Enterprise Business also, which the Company is focusing on developing to become the second pillar of earnings, net sales grew by around 1.7 times YoY, as it worked to strengthen specialist human resources, mainly for system testing services, and to expand new services, including those that utilize alliances. On the other hand, segment profit decreased due to the impact of the upfront investment, including for these human resources.

Compared to the initial forecasts, the Company released revised results forecasts on March 22, 2019, and the results were basically in line with these revised forecasts. The main reasons for the revisions were the effects of the changes in the mobile games industry and that sales in the Enterprise Business, which the Company is currently focusing on, did not grow to the extent expected. However, it positioned FY2018 as a year to solidify business foundations in the "second startup period," and it invested in recruitment and education costs with the aim of strengthening specialist human resources and acquiring advanced technologies, while also actively conducting M&A and entering-into alliances. While the effects of these efforts have not yet been reflected in the results, the Company is progressing preparations toward steadily realizing growth in the future.

#### Performance Trends

Fiscal year end	(¥mn)					
	Sales	Operating income	Ordinary income	Profit attributable to owners of parent	EPS	Dividends (Yen)
FY2017	17,353	1,735	1,782	1,200	55.14%	¥11.5
FY2018	19,254	1,605	1,651	1,575	72.13%	¥13.0
FY2019 forecast	23,000	1,800	1,830	1,250	57.14%	¥14.0

Source: Prepared by FISCO from the Company's financial results

## Firmly seizing upon increasing demand for debugging with services for mobile games

### 2. Entertainment Business

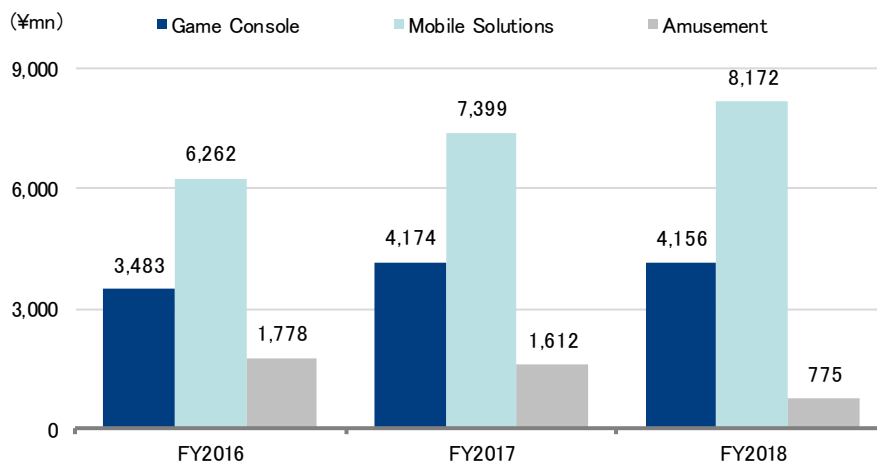
Sales and profits increased in the Entertainment Business, with net sales of ¥15,951 mn (up 2.5% YoY), and segment profit of ¥3,086 mn (up 4.0%). The main services provided in this segment include debugging for console games, mobile games, and amusement equipment; outsourced game development; and support for promotions activities.



Results Trends

In debugging services, amusement sales decreased significantly due to the impact of the strengthened regulations, but, on the other hand, the double-digit growth continued in Mobile Solutions. Therefore, for debugging services as a whole, net sales were ¥13,103 mn (down 0.6%) and were maintained at almost the same level as in the previous fiscal period. With its services for mobile games, the Company continues to firmly seize upon increasing demand for debugging by focusing on the games' operational phase.

Trend in debugging net sales

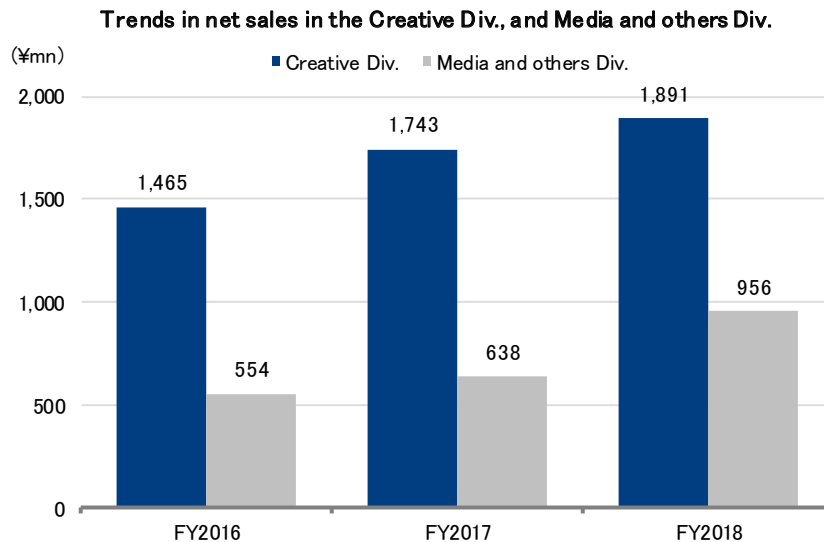


Source: Prepared by FISCO from the Company's results briefing materials

In the Creative Div., the Company provided product support services across all the creative area for content product, including video game development and 2D/3D graphics production, and net sales of these services were ¥1,891 mn (up 8.4% YoY). In addition to continuing to acquiring game development projects, it is steadily acquiring new projects through focusing on securing and training human resources with advanced technical skills and on working to improve service quality.

In the Media and others Div., the Company provides management and customer support services, including for 4Gamer.net, which is Japan's largest game information website. Sales of these services grew significantly to ¥956 mn (up 49.8%). This was mostly due to the steady acquisition of orders for customer support services, which were newly started from the previous fiscal period.

Results Trends



Source: Prepared by FISCO from the Company's results briefing materials

## Effects of the active investment in the system testing area

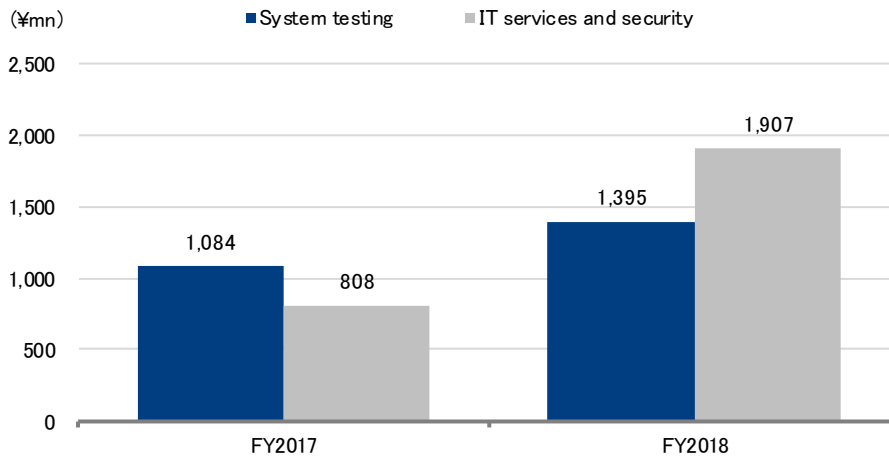
### 3. Enterprise Business

In the Enterprise Business, net sales increased around 1.7 times YoY to ¥3,302 mn (up 74.5%). The segment loss was ¥226 mn, but this was due to the active investment including in specialist human resources, and as can be seen by the significant rise in sales, the effects of this active investment are gradually starting to appear. Sales are broken down by system testing, which offers services to investigate bugs in enterprise systems, and IT services and cyber security, which offers services for outsourced system development, IT support, security, and other services.

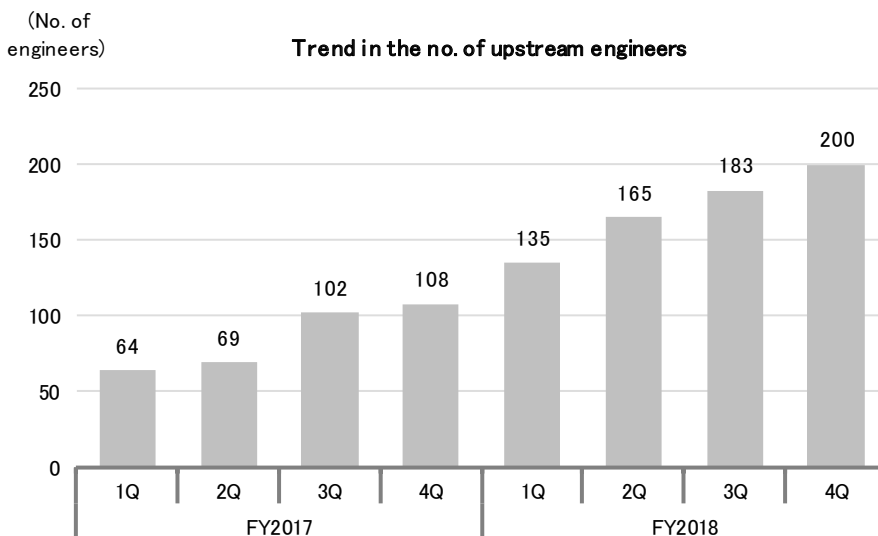
System testing net sales increased greatly to ¥1,395 mn (up 28.7%). Due to the strengthening of industry specialists, new customers were acquired and transactions with existing customers grew, while the sales from ANET Corporation., which was made a subsidiary in September 2018 and which is strong in medical-related system testing, also contributed. In addition, the Company enhanced education programs that utilize alliances with other companies and introduced an in-house program for the acquisition of JSTQB, which is a software testing engineering qualification in Japan. It is advancing the development of an internal system to develop test engineers from among the approximately 8,000 registered testers in the Company's Group. The number of expert engineers approximately doubled compared to the end of the previous fiscal period, and the aim is to strengthen the system for receiving orders.

Results Trends

Enterprise Business net sales by segment



Source: Prepared by FISCO from the Company's results briefing materials



Source: Prepared by FISCO from the Company's results briefing materials

The Company receives orders for system testing for a wide range of industries: in the information and communication industries, for EC websites and music distribution websites; in the financial industry, for internet banking and internet securities websites; in the food industry, for beverage devices utilizing IoT; in the automobile industry, including for connected car systems and car navigation systems; in the real estate industry, for sales support systems and property management systems; and in the medical industry, including for in-hospital information systems and medical devices.

## Results Trends

In IT services and security, sales of new network-related services and other services performed well, and net sales were ¥1,907 mn (up 136.0%) and are trending favorably in this field. The Company is actively acquiring human resources, including through business transfers, and strengthening its system that is able to provide comprehensive support, from the construction of in-house systems through to their maintenance and management. It has fully entered-into the cyber security business that has high affinity with system testing and has started to provide security inspection and monitoring services that utilize cutting-edge technologies. At the same time, the Company is advancing measures toward business expansion in the future, including launching its own security monitoring team comprised of specialist human resources.

## Business Outlook

### The Enterprise Business will grow significantly due to the strengthening of human resources and the promotion of testing automation

#### 1. Forecast for FY2019

For the FY2019 results, the Company is forecasting net sales of ¥23,000 mn (up 19.5% YoY), operating income of ¥1,800 mn (up 12.1%), ordinary income of ¥1,830 mn (up 10.8%), and profit attributable to owners of parent of ¥1,250 mn (down 20.7%). Results in the Entertainment Business are expected to grow significantly, driven by debugging services, particularly from the expansion of market share in Mobile Solutions (MS). In addition, in the Enterprise Business, the Company plans to strengthen the system to receive orders, including by increasing the number of test engineers, and also to acquire orders through promoting the automation of testing. Breaking down sales, the forecasts are for net sales of ¥17,450 mn (up 9.4%) in the Entertainment Business and of ¥5,550 mn (up 68.0%) in the Enterprise Business. Operating income and ordinary income are expected to increase by double digits, because the rise in sales will absorb the upfront investment, including in human resources. This will be the first time that operating income has increased in 4 fiscal years, since FY2015. Net profit is expected to decline due to the absence of the impact of recording extraordinary income through the sale of shares held in FY2018. But if excluding the effect of this recording of extraordinary income in the previous fiscal year, then it is forecast to increase.

#### Forecast for FY2019

	FY2018	FY2019 E	YoY
	(¥mn)		
Net sales	19,254	23,000	19.5%
Entertainment	15,951	17,450	9.4%
Enterprise	3,302	5,550	68.0%
Operating income	1,605	1,800	12.1%
Ordinary income	1,651	1,830	10.8%
Profit attributable to owners of parent	1,575	1,250	-20.7%

Source: Prepared by FISCO from the Company's financial results and briefing materials

## In the Entertainment Business, is progressing the structural reforms of the Labs. and expanding and strengthening services for game manufacturers

### 2. Priority measures for FY2019

In the Entertainment Business, the Company is progressing the structural reforms of the Labs (the test centers). Together with increasing the productivity of the Labs. and conducting structural reforms of their earnings, it is shifting more employees and registered testers to be human resources that can be active in the enterprise area. It is training potentially highly skilled personnel to be test engineers and cyber security experts in the Enterprise Business, which will enable it to acquire orders for high-value operations that require more advanced skills and technologies. At the same time, it is strengthening various training programs for after the shift of human resources as well, with the aim of maintaining high-quality services. The Company is also focusing on raising-up the level of testing skills and improving the skills of the Lab. administrators in the 15 test centers nationwide, and thereby strengthening the business foundation.

The Company also intends to expand and strengthen services for game manufacturers. For customer support, which was launched in FY2017, Digital Hearts, which ascertains the details of game content through debugging, is responsible for operations up to customer support, and demand for its services among companies is growing greatly. In overseas operations also, it is strengthening outsourcing, such as for translation and graphics, mainly at its subsidiaries in China and South Korea, and the number of overseas companies for which it conducts outsourced operations is rising steadily, from 45 companies in FY2017 to 67 companies in FY2018, with the target for FY2019 being at least 80 companies.

### In the Enterprise Business, continues to actively invest in human resources and to strengthen the foundation

In the Enterprise Business, the Company continues to actively invest in human resources, mainly to increase the number of test engineers, with the intention of strengthening the system for receiving orders. It is also working to improve the value-added of services toward achieving a dramatic leap forward for growth. To strengthen human resources, it is recruiting new employees, training human resources, and utilizing M&A, and among these efforts, it is particularly focusing on training personnel from among game testers. The reason for this is that the Company has about 8,000 registered testers who have a high affinity with the digital area. Among these testers, there are human resources with extremely high IT literacy who can be active in the enterprise area as well, and in fact, there are members who are currently active as test engineers as a result of completing the Company's own training program. The shortage of IT human resources has become even more serious and competition to acquire these human resources is intensifying in every industry, and in this situation, the fact that the Company has 8,000 potential human resources is considered to be a major strength.

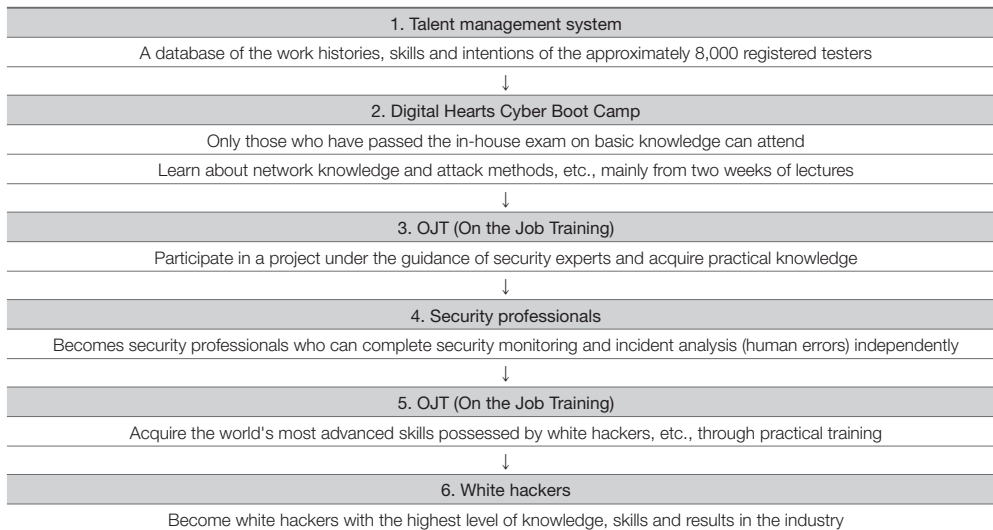
Also, toward the strengthening of these human resources, the Company has redefined the types of engineers. From FY2019, compared to the definition up to the present time, of expert engineers = the total number of engineers, they will be divided into test engineers, systems engineers, and infrastructure engineers. The aim is to increase the number of test engineers from 89 at the end of FY2018 to 150 at the end of FY2019. In terms of other measures, it will progress the automated testing project, centered on the CTO (Chief Technology Officer), while also focusing on developing engineers for the automation of testing. For the system to receive orders, it will conduct integrated management of resources, strengthen the management of test engineers' operating conditions and project progress, and establish a system in which there are no opportunity losses.

Business Outlook

Also, by strengthening the structure for system development, the Company will maximize earning opportunities for one-stop orders, from the upstream development process through to system testing. Therefore, it will increase the number of systems engineers and strengthen alliances, while it also plans to expand offshore bases with the aims of increasing the number of systems engineers and enhancing cost controls.

Moreover, in the cyber security business, the Company has received orders from major companies and is currently progressing multiple projects, including in the communications industry and the travel industry. It is pursuing further business expansion by utilizing its strength of having experts in the fields of security inspections and monitoring. It is also building its own flow for the training of security human resources. Specifically, first of all, from among the approximately 8,000 registered testers, who include game lovers, it will hold the Digital Hearts Cyber Boot Camp that can be taken only by those testers who have passed the in-house test on basic knowledge. There are many applicants for the Cyber Boot Camp, because it is a training program on which they can acquire high-level skills.

Security human resources flow



The movement to realize the DX (digital transformation) scenario across all industries is accelerating

3. Business environment

In terms of the environment surrounding the Company, in May 2019, the Digital First Act, which unifies the administrative procedures for electronic applications, was approved, in principle, in the House of Representative’s plenary session. Also, the Japanese Government intends to utilize ICT to the greatest possible extent and to share its “super smart society” vision of society in the future that will bring abundance to people through measures that integrate cyberspace and physical spaces (the real world). While further deepening the series of measures toward realizing this vision, it is promoting the strengthening of Society 5.0 and aiming to realizing a super smart society ahead of the rest of the world.

#### Business Outlook

Toward the realization of an industrial society in which various things are networked through the IoT and which creates new added value toward solving the problems of customers and society, the market environment is rapidly changing and expanding. For example, the movement to realize the DX (digital transformation) scenario for all industries, including the establishment of an environment by the government, is accelerating. The demand for the Company's measures for system testing and security is expected to increase more and more in the future due to the rise in the number of systems and devices mediated by networks in various industries. For game debugging also, as it has established a solid position in the market, it would seem that the Company can expect growth in the fields where demand is expected, of system testing and security.

#### **Google's game streaming service Stadia is a business opportunity**

Growth is also expected in the Entertainment Business. Under its parent company Alphabet Inc., Google announced in the middle of March at its annual meeting for game developers that it will launch Stadia, a new game streaming service to deliver video games via the Cloud. Stadia will use the Chrome browser, and players will be able to enjoy games instantly on devices such as their smartphone, PC, or TV. It seems that it will be possible to switch to a game from the YouTube video sharing website simply by clicking a button.

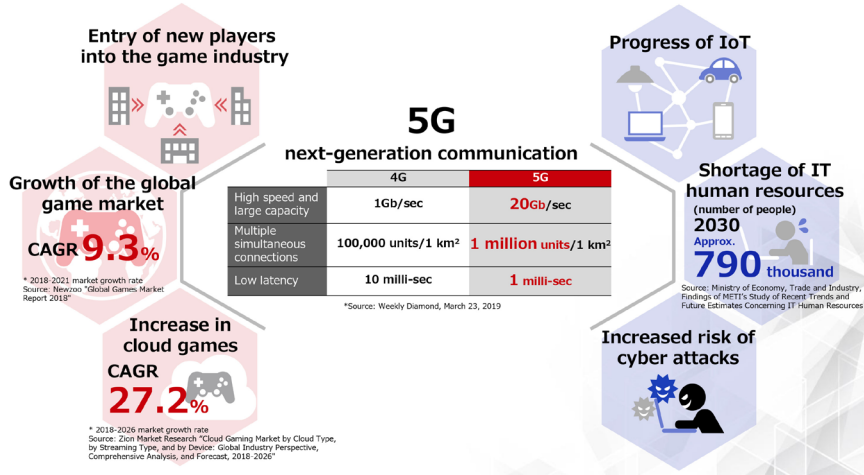
This is being made possible by 5G (fifth-generation mobile communication system). 5G is said to be capable of transmission speeds about 10 times those of 4G, and it is clear that the spread of 5G will make it possible for anyone to enjoy Stadia and other streaming services anywhere. It is thought that 5G will lead to the appearance of social games that are compliant with high resolution and large-scale multiplayer, so it will make developing games more complex, and so alongside this, demand for debugging services will increase. Moreover, at its management policy briefing meeting in May, Sony discussed its next-generation game console (the PS5) and appealed to its processing performance that is overwhelming superior to that of the PS4 Pro. The major game manufacturers are also expected to release their flagship titles, so debugging services and other services for both console and mobile are forecast to grow.

Google plans to launch Stadia during 2019, starting with the United States, Canada, the UK and most of Europe, while the service-launch period for Japan has not yet been decided. As it will be possible to play games even without expensive game devices, it may change the ways in which people buy and enjoy games, so new players will enter into the game industry. Moreover, as the target market is the entire world, development by game manufacturers will accelerate and demand for services, such as for verification and translation, is likely to grow. According to the results of a survey by a research company, the global game market's CAGR (average annual growth rate) from 2018 to 2021 will be 9.3%, while the CAGR for the increase in Cloud games from 2018 to 2026 will be 27.2%. Therefore, both the entertainment area and the enterprise area are growth markets, and the Company's business opportunities are expanding.

Both the entertainment area and enterprise area are growth markets, and the Company's business opportunities are expanding

Business Outlook

The environment surrounding the Company



Source: The Company's results briefing materials

**Is focusing on deepening the Entertainment Business and expanding the Enterprise Business, and is creating new businesses with high affinity with system testing**

**4. Growth strategy**

Since it changed its management structure in June 2017, in the "second startup period," the Company has been pursuing the further growth of the Entertainment Business, its mainstay business, while also focusing on expanding the Enterprise Business, which it has positioned as a growth driver. It positioned FY2018 as a year to solidify the business foundations toward taking a dramatic leap forward for growth, and it invested in recruitment and education costs with the aims of strengthening specialist human resources and acquiring advanced technologies. At the same time, it has also been actively conducting M&A and entering-into alliances. While progressing these measures, the Company once again became aware of the enormous size of customers' potential needs for system testing services, to the extent that it may receive more order than it had the capacity to meet. It also received feedback on the measures for the "second startup period," in which it is progressing strategic investment from a medium- to long-term viewpoint for securing and training human resources and establishing business foundations, such as the verification of the height of the potential of the tester human resources that the Company has accumulated in the Entertainment Business up to this time. On the other hand, the shortage of IT human resources is expected to become increasingly serious in the future, and according to the results of a survey by the Ministry of Economy, Trade and Industry, this shortage of IT human resources will reach a maximum of around 790,000 people by 2030. In this situation, it is expected that in the IT industry as a whole, needs for outsourced development, testing, maintenance and management will increase rapidly in the future.



#### Business Outlook

In FY2018, the Company reviewed its structure from a zero basis as the second startup period and considered the points to focus on in the two years of FY2019 and FY2020. One of the aims of the second startup period is to deepen the Entertainment Business, which is its mainstay business. Other than debugging services, which it has focused on up to the present time, it has also been developing various other services, including game development support, translation, localization, and game information website management, but naturally it has grown dramatically due to the growth of the debugging services. Going forward, while continuing to focus on debugging, the Company will work to strengthen peripheral services, and it intends to provide comprehensive support for the development of high-quality games.

What is most important for the second startup period is the expansion of the Enterprise Business, which has been positioned as the mainstay business. In the Enterprise Business, the Company is building a solid business foundation on which to steadily meet the needs for outsourcing that are expected to increase rapidly in the future. It also plans to create new businesses with high affinity with system testing, such as IT services and security.

## ■ Extracts from the Company's recent press releases

### The Chairman of the Board of Directors makes his debut as a member of the NISC at its 22nd meeting, and selection for an IPA demonstration project

#### 1. The Chairman of the Board of Directors makes his debut as a member of the Japanese government's NISC at its 22nd meeting

It was announced on May 15, 2019 that Mr. Miyazawa, the Chairman of the Board of Directors, would make his debut as a member of the Japanese government's National center of Incident readiness and Strategy for Cybersecurity (NISC) at the 22nd meeting of the organization. The NISC was established within the Cabinet in January 2015, following the enactment of the Cyber Security Basic Act, to serve as the government's control tower for cyber security policies. Its duties including drafting the government's cyber security strategy and evaluating measures for major incidents relating to cyber security that have occurred in the government's administration of the country. In addition to the Chief Cabinet Secretary who serves as the Chief of the NISC, its members are composed of the ministers of ministries relating to cyber security, and members of the private sector who are authorities in this area and who are appointed by the Prime Minister.

#### 2. Digital Hearts was selected by the IPA for its Cyber Security Follow-up Demonstration Project for SMEs

On May 17, 2019, the subsidiary Digital Hearts was selected by the Information-technology Promotion Agency (IPA) for the Cyber Security Follow-up Demonstration Project for SMEs, for which it had publically solicited for applicants, and it was decided it would carry out the demonstration project for one part of the Tohoku region. Digital Hearts had proposed to IPA a Cyber Security Support Team in Tohoku for SMEs, which would visualize security risks and provide consulting on cyber countermeasures through installing network sensors utilizing AI for SMEs in one part of the Tohoku region, including Miyagi Prefecture, Fukushima Prefecture and Iwate Prefecture, with a focus on Sendai City (hereafter, "the demonstration area"). As a result, its business plans were highly evaluated and among the multiple regions in which the project is being implemented, it was placed in charge of the demonstration project for the Tohoku region.

## History

### Started the “second startup period” in June 2017

The Company was founded in April 2001 with the aim of providing debugging services, such as for consumer games. It was listed on the TSE Mothers market in February 2008, and subsequently its listed was upgraded to the TSE 1st Section in February 2011. In June 2017, it changed its management structure, including appointing a new Chairman and Representative Director, and started the “second startup period” with the aims of growing the existing businesses and expanding the new businesses.

#### History

April 2001	Established DIGITAL Hearts Ltd. Started providing debugging services
October 2003	Reorganized to become a corporation
September 2007	Approved as an authorized test vendor for Microsoft Corp., becoming the first Japanese company to participate in the Authorized Xbox 360R Test Program (AXTP)
October 2007	Obtained the PrivacyMark accreditation
February 2008	Listed on TSE Mothers
February 2011	Listed on TSE 1st Section
July 2011	Established DIGITAL Hearts Korea Co., Ltd., as a consolidated subsidiary in South Korea
October 2011	Established DIGITAL Hearts USA Inc., as a consolidated subsidiary in the USA
December 2011	Established DIGITAL Hearts (Thailand) Co., Ltd., as a consolidated subsidiary in Thailand
March 2012	Established G&D Co., Ltd., as a consolidated subsidiary in Shinjuku Ward, Tokyo
May 2012	Established Digital Hearts Visual Co., Ltd., as a consolidated subsidiary in Shinjuku Ward, Tokyo
November 2012	Acquired all shares of Aetas Inc., and made it a subsidiary
October 2013	Transferred to a pure holding company structure by establishing Hearts United Group Co., Ltd., a pure holding company, through a share transfer
November 2013	Acquired the shares of Network 21 Inc., and made it a subsidiary
April 2014	Acquired the shares of Premium Agency Inc., and made it a subsidiary through underwriting a third-party allocation of shares
January 2015	Established ZEG Inc., a joint venture with ZMP Inc., in Bunkyo Ward, Tokyo
January 2016	Merged three companies, of G&D Co., Ltd., Digital Hearts Visual Co., Ltd. and Premium Agency Co., Ltd., and changed the company name to FLAME Hearts Co., Ltd.
July 2016	Established DIGITAL Hearts (Shanghai) Co., Ltd., as a consolidated subsidiary in China (Shanghai)
June 2017	Change the management structure, including the representative director, to pursue the growth of the existing businesses and to start the “second startup period” with the aim of expanding new businesses
July 2017	Relocated headquarters from Minato Ward to Shinjuku Ward in Tokyo
October 2017	Merged Digital Hearts Co., Ltd., a subsidiary of the Company, and Network 21, Inc. Closed the offices of DIGITAL Hearts Korea Co., Ltd., and DIGITAL Hearts (Thailand) Co., Ltd.
July 2018	Changed the company name from Hearts United Co., Ltd., to DIGITAL HEARTS HOLDINGS Co., Ltd.
August 2018	Established DIGITAL HEARTS GNT VIET NAM COMPANY LIMITED as a joint venture with the GNT Group Acquired the shares of ANET Corporation and made it a subsidiary
January 2019	Acquired the shares of Orgosoft Co., Ltd., and made it a consolidated subsidiary

Source: Prepared by FISCO from the Company’s website

## Shareholder return policy

**As the “second startup period,” is actively investing with an eye to growth in the medium- to long-term  
 Changed the shareholder returns policy in consideration of maintaining a balance between retained earnings and returns to shareholders**

From the current fiscal period, the Company is changing its shareholder returns policy based on the perspective of shareholder equality and other matters as required by its corporate governance code, while also considering the balance between retained holdings and shareholder returns.

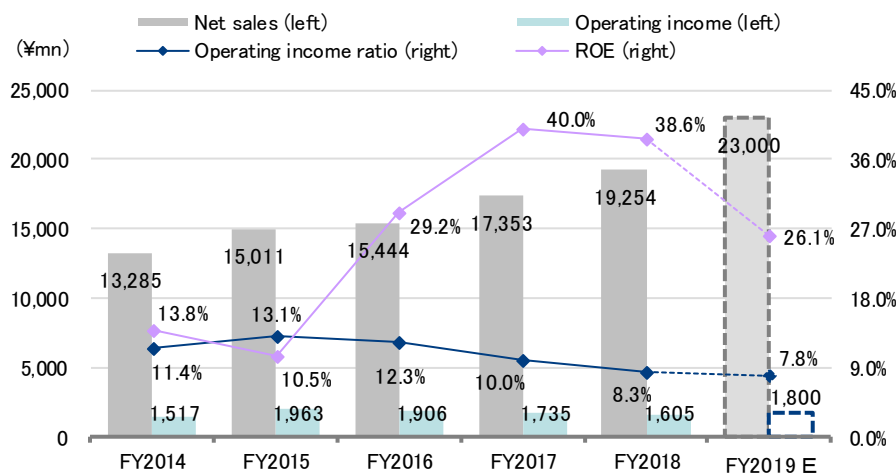
FY2019 returns to shareholders

	Interim dividend	Period-end dividend	Annual total dividends	Shareholder benefits
FY2018	¥6.5	¥6.5	¥13.0	(Holding at least 1 unit of shares) a gift voucher equivalent to the value of 3kg of rice (Holding at least 2 units of shares) a gift voucher equivalent to the value of 6kg of rice
FY2019 (Forecast)	¥7.0	¥7.0	¥14.0	-

Source: Prepared by FISCO from the Company's results briefing materials

As its basic policy, the Company aims for a dividend payout ratio of 20% as the lower limit. In terms of the trend up to the present time, the dividend has continued to stably increase and the Company has demonstrated a positive attitude toward returning profits to shareholders. In FY2019, it is forecasting an increase of 1 yen YoY for an annual dividend of 14 yen. Also, after securing the funds to invest in growth, it flexibly acquires treasury shares in consideration of factors such as their necessity for its capital policy and the effects on its financial position. Moreover, the Return on Equity (ROE), which is an indicator to determine a company's profitability and efficiency, has been trending well above the 8% level required by institutional investors and others.

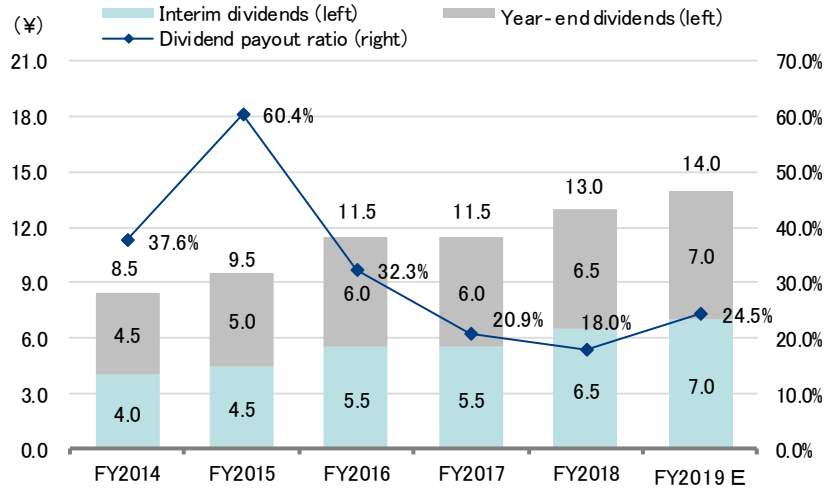
Trends in net sales, operating income, the operating income margin, and ROE



Source: Prepared by FISCO from the Company's financial results

Shareholder return policy

Trends in dividend per share and payout ratio



Note: The Company implemented a 1:2 stock split on October 1, 2016.  
Source: Prepared by FISCO from the Company's financial results

DIGITAL HEARTS HOLDINGS Co., Ltd.  
3676 Tokyo Stock Exchange First Section

16-Jul.-2019  
<https://en.digitalhearts-hd.com/ir/>

## ■ Group Companies

DIGITAL HEARTS Co., Ltd.

Comprehensive debugging services, system testing, systems outsourced development, security, etc.  
<https://www.digitalhearts.com/>

DIGITAL HEARTS USA Inc.

Comprehensive debugging services, etc.  
<http://www.digitalheartsusa.com/>

DIGITAL HEARTS (Shanghai) Co., Ltd.

Comprehensive debugging services, etc.

Orgosoft Co., Ltd

Comprehensive debugging services, etc.  
<https://orgosoft.com/jp/>

ANET Corporation

Third-party software verification, evaluation and verification services /software and system development, and maintenance and management services  
<https://www.anet21.co.jp/>

Aetas, Inc.

Planning and management of 4Gamer.net, a general game information website, etc.  
<http://www.aetas.co.jp/>

FLAME Hearts Co., Ltd.

Game development and CG production, etc.  
<https://www.flamehearts.co.jp/>

ZEG Inc.

Business related to experiment-agency services, such as for debugging and data collection for the automotive industry  
<http://www.zeg.co.jp/>

DIGITAL HEARTS NETWORKS Co., Ltd.

Internet communication-related business and security business  
<https://www.digitalhearts-networks.co.jp/>



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