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HEROZ
JAPAN

Presentation Material for
FY04/2021 Q3 Financial Results

March 12, 2021

HEROZ, Inc. (4382)

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HEROZ
JAPAN

- 1. Business Overview**
2. FY04/2021 Q3
Performance
3. Growth Strategy
4. Reference Materials

Company Overview

Name HEROZ, Inc.
Location PMO Tamachi 2F, 5-31-17 Shiba, Minato-ku, Tokyo
Established April 2009
Representatives Takahiro Hayashi/Tomohiro Takahashi
Business Description AI (B-to-B) services: HEROZ Kishin
AI (B-to-C) services: “Shogi Wars”, etc.
Membership Japan Deep Learning Association,
The Japanese Society for Artificial Intelligence

2019

Listed on the First Section of Tokyo Stock Exchange (TSE)

2018

Listed on Tokyo Stock Exchange (TSE) Mothers
Capital and business alliance with Netmarble Games Corporation

2017

Capital and business alliances with Takenaka Corporation and Koei Tecmo Games

2016

Capital and business alliance with Bandai Namco Entertainment

2013

Shogi AI, developed by HEROZ engineers, defeated a shogi professional

2012

Launched mobile app, “Shogi Wars”



Representative Director and CEO
Takahiro Hayashi

Graduated from Waseda University
Joined NEC as a technology engineer
Experience at IT strategy division, business planning division
Founded HEROZ



Representative Director and COO
Tomohiro Takahashi

Graduated from Waseda University
Joined NEC as a technology engineer
Experience at Business Planning Division, BIGLOBE
Founded HEROZ

Shogi Track Record

Amateur 6th dan (highest rank after becoming national amateur champion)
7th dan, Shogi Wars
Amateur Kisen Champion (7-time title defender as national champion)
Played against Yoshiharu Habu (permanent 7 title holder)



Director and CFO

Daisuke Asahara

Graduated from Kyoto University
MBA from Wharton School
ex-Goldman Sachs

Director and CTO, Head of Development Div.

Keiichi Iguchi

Graduated from
Tokyo Institute of Technology
Joined NEC Central Research Labs

Creating the future through artificial intelligence (AI) revolutions

Chess AI



Deep Blue ('97)
defeated a
professional Chess
player

IBM

Shogi AI



AI developed by our
engineers defeated a
professional Shogi
(Japanese Chess)
player ('13)

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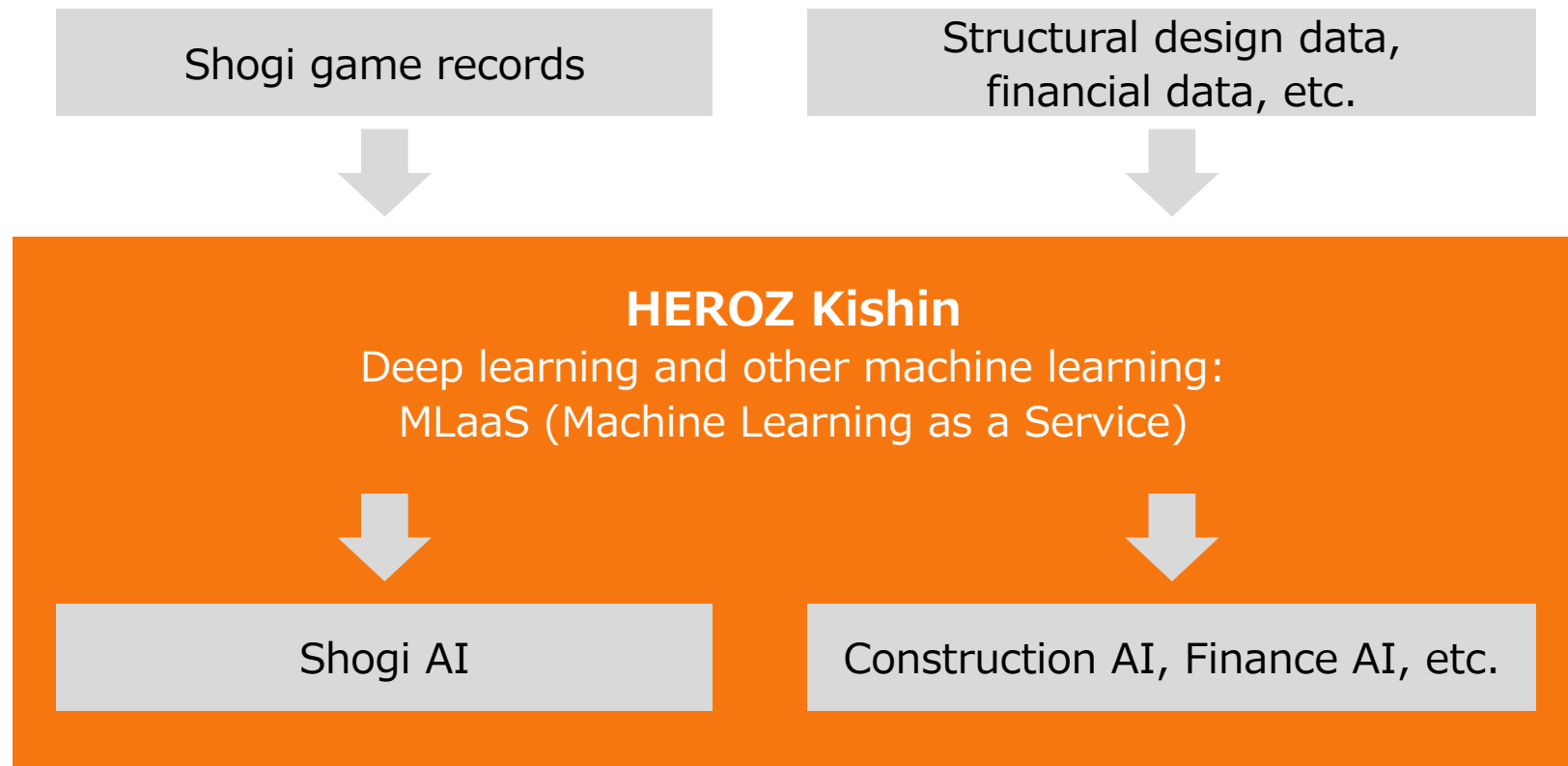
Go AI



Google acquired Deep Mind ('14)
AlphaGo, developed by
Deep Mind, defeated a
professional Go player ('16)

Google

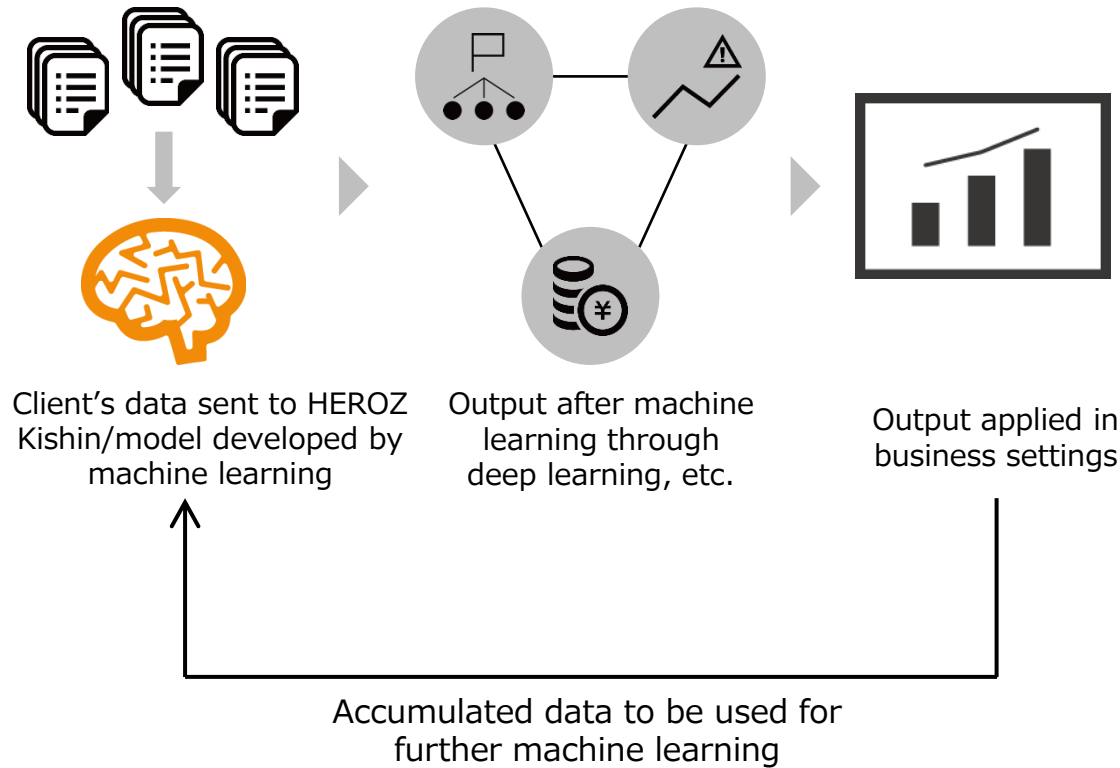
B-to-B Services: Machine Learning by Replacing Shogi Game Records with Other Data



MLaaS : What is Machine Learning as a Service?

Provides models, developed by machine/deep learning, as a service

B-to-B Services: Profit Model and High Switching Costs



Output precision increases through repeated machine learning

Research/develop Shogi AI

Standardize AI technology accumulated through shogi AI

Establish "HEROZ Kishin" = MLaaS (Machine Learning as a Service)

Establish an infrastructure which allows HEROZ to provide AI services efficiently to solve various challenges in various industries just by changing input data

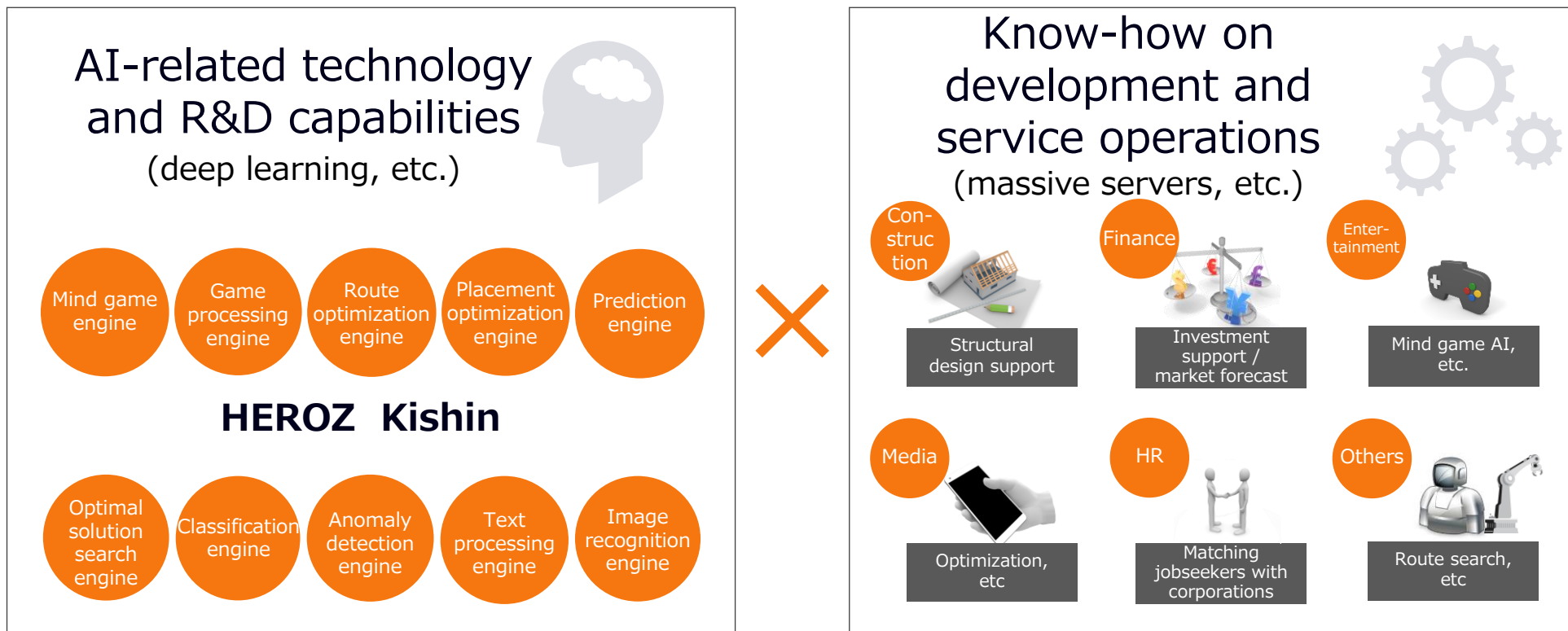
Provide comprehensive AI services with massive servers

Achieve stable, sustained earnings and high switching costs

Earning structure: initial setup fee and ongoing fees

B-to-B Services: Engines included in HEROZ Kishin and Examples of Applications

- Create AI products by combining engines and achieve an efficient operating structure



We aim to create the industry standard for AI in each sector through collaboration with companies which own high-quality private data

B-to-B Services: Areas of Focus and Examples of Services Provided

- Focusing on construction, finance, and entertainment for the foreseeable future
- Earning structure is initial setup fee and ongoing fees

*Examples of clients served

Construc- -tion



Structural design support, etc.

Fi- -nance



Investment support,
market forecasts, etc.

Enter- -tainment



netmarble

Creation of high-quality NPCs,
game balance adjustment, etc.
(In B-to-B service, HEROZ is not a
game operator/publisher but a
background AI provider)

Depending on the types of projects,
ongoing fees in the form of revenue sharing is also introduced

Charging fees for B-to-C content which user AI

- Leveraging AI-related technology to provide mind games such as shogi, chess, and backgammon worldwide
- Shogi Wars has remained cash cow backed by increase of paid users on a YoY basis
- Staying home by COVID-19 and shogi event held on our mobile app led to increased demand for our app, with an increase in our paid active user base



Shogi Wars



Animal
Shogi Wars



Igo Wars



CHESS HEROZ
(English)



BackgammonAce
(English)

Earning structure: monthly membership fees,
Kishin (AI) usage fees, etc.

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1. Business Overview
- 2. FY04/2021 Q3 Performance**
3. Growth Strategy
4. Reference Materials

- We believe that EBITDA, as calculated below, is our key performance indicator

$$\text{EBITDA} = \text{Operating Profit} + \text{Depreciation/Amortization Expenses}$$

- In AI-related businesses, server investments, etc. are required to engage in advanced machine learning, leading to various depreciation/amortization expenses. We aim to continuously enhance enterprise value/equity value via EBITDA growth, without being concerned about fluctuations in one-time depreciation/amortization expenses.

Updated Assumptions related to COVID-19

- We update our assumptions regarding the new coronavirus infection to estimate earnings forecast as follows, but have not revised our earnings forecast announced at the beginning of this fiscal year

FY04/2021	Original assumptions to estimate earnings forecast
External environment	<ul style="list-style-type: none">• The increase in COVID-19 patients will settle down in the first half
Internal environment	<ul style="list-style-type: none">• Growth will slow down in the first half by slowdowns in progress of projects and reduced opportunities for sales discussions due to emergency declared by the government, but is expected to normalize in the second half



Updated assumptions to estimate earnings forecast
<ul style="list-style-type: none">• The increase in COVID-19 patients will continue in the second half as well
<ul style="list-style-type: none">• Growth will slow down in the entire fiscal year by slowdowns in progress of projects and reduced opportunities for sales discussions due to emergency declared by the government

Analysis of Risks relating to COVID-19

	AI (B-to-B) Services	AI (B-to-C) Services
Materialized Impact	<ul style="list-style-type: none"> Delays in documentation (contracts, receipts, etc.) and decreased opportunities for sales discussions due to work from home Some clients have suspended new projects until the situation settles down <p>↓ The impact will continue in the second half as well</p>	<ul style="list-style-type: none"> Increased revenues from mobile apps such as Shogi Wars <p>↑ The impact will continue in the second half as well</p>
Potential Upside	<ul style="list-style-type: none"> Increase in the use of AI through promotion of DX (digital transformation), etc. <p>→ It has been partial and non-material this fiscal year yet</p>	<ul style="list-style-type: none"> Further revenue increase in our mobile apps due to increased use of our online contents <p>→ Limited impact other than Shogi Wars</p>
Potential Downside	<ul style="list-style-type: none"> Reduction in client budgets for IT investments, etc. <p>↓ The impact has become materialized for some clients</p>	<ul style="list-style-type: none"> Troubles due to increased traffic <p>→ No material troubles occurred</p>

↑ : Positive Impact ↓ : Negative Impact → : Non-material Impact

※ **Our earnings forecast has not been changed since the beginning of this fiscal year**

Performance Overview (May 2020-January 2021)

- Revenues increased in Q3 on a year-on-year basis backed by growth of AI (B-to-C) although AI (B-to-B) services decreased due to emergency declared for COVID-19
- EBITDA and other profits made steady progress towards achievement of fiscal year forecasts while they decreased on a year-on-year basis. We have been investing proceeds from public offering in December 2019 for our medium-to-long term growth

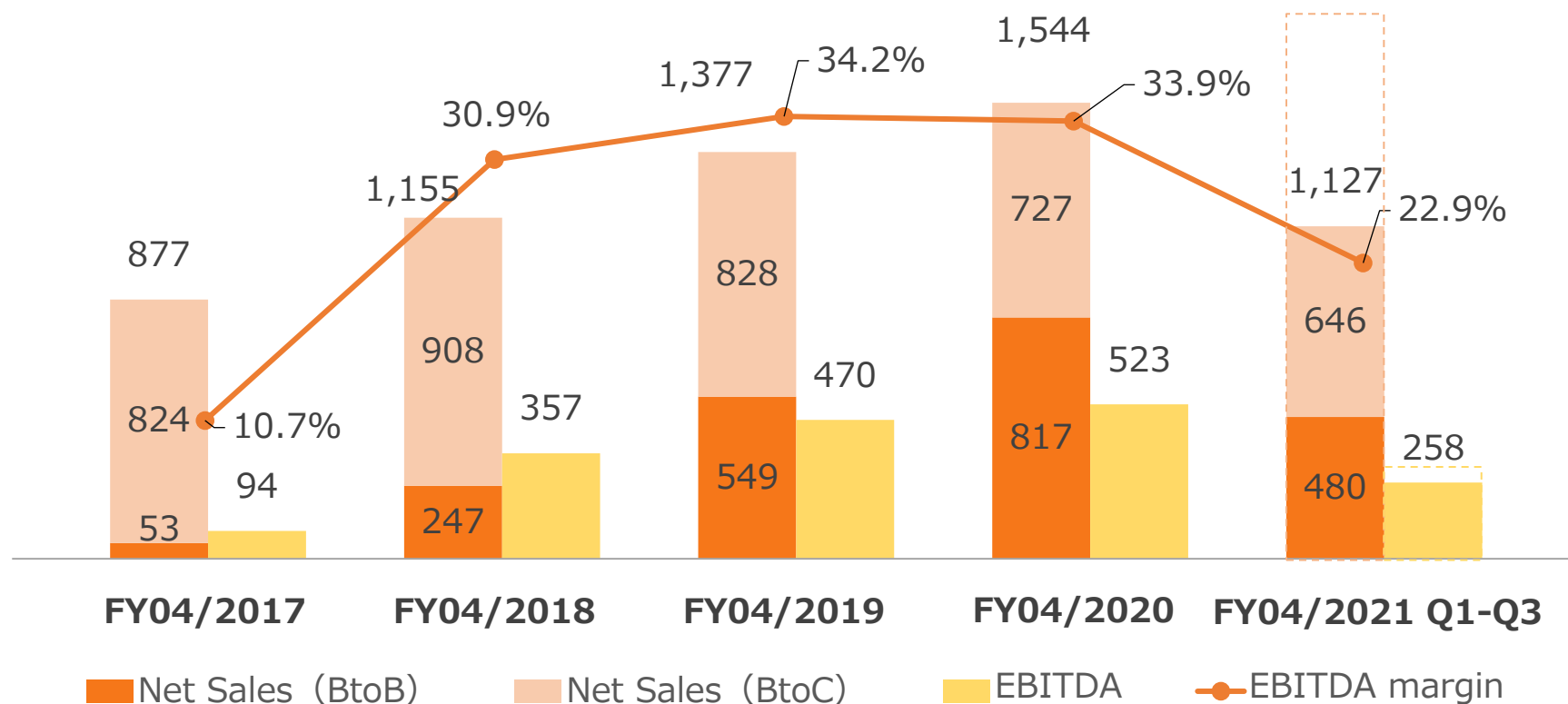
(Units: JPY millions)	FY04/2021 Q1-Q3 Actual	(Reference) FY04/2020 Q1-Q3 Actual	YoY	FY04/2021 Forecast	Progress
Net Sales	1,127	1,121	+0.5%	1,700	66.3%
EBITDA*	258	372	△30.6%	290	89.0%
<i>EBITDA Margin</i>	<i>22.9%</i>	<i>33.2%</i>	–	<i>17.1%</i>	–
Operating Profit	215	324	△33.7%	230	93.5%
<i>Operating Margin</i>	<i>19.1%</i>	<i>28.9%</i>	–	<i>13.5%</i>	–
Ordinary Profit	206	270	△23.5%	220	93.9%
Net Income	140	184	△23.7%	150	93.8%

* EBITDA = Operating Profit + Depreciation Expenses + Amortization of Lease Deposits

Net sales and EBITDA Trends

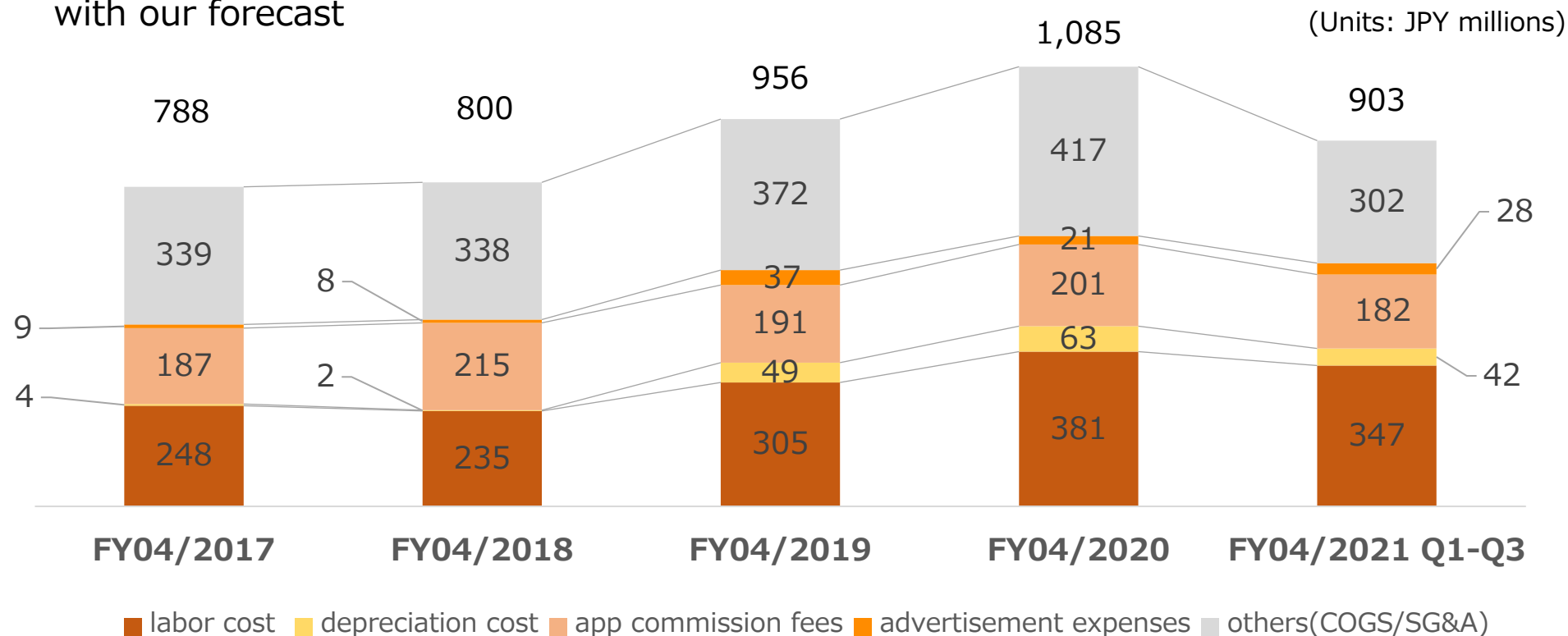
- Net sales of AI (B-to-B) services, the core pillar of our growth strategy, declined in Q3 due to reduced opportunities for business meetings by COVID-19
- Net sales of AI (B-to-C) services increased compared with the previous fiscal year led by “Shogi Wars”

(Units: JPY millions)



COGS and SG&A Trends

- Labor cost has increased on a year-on-year basis and is expected to keep growing next fiscal year as well to increase our engineering capacity, which will lead to our medium-to-long term growth
- In addition, there were an increase in app commission fees by growth of AI (B-to-C) services, and anticipatory investments of proceeds via public offering for our growth strategy. Although profits were down compared with the previous year, they are in line with our forecast



Balance Sheet (as of January 31, 2021)

- B/S remains strong backed by cash and deposits increased via public offering in 2019
- We plan to invest them in efforts to achieve the medium-to-long term growth strategy (e.g. hiring for AI engineers, in-house computing servers and external cloud computing services, investments to companies with peripheral technologies which can be applied to our operations, working capital)

Units: JPY millions	As of 1/31/2021	(Reference) As of 4/30/2020
Current Assets	5,990	5,935
Cash and deposits	5,805	5,562
Fixed Assets	480	473
Property, plant and equipment	160	131
Intangible assets	5	6
Investments and other assets	315	334
Total Assets	6,471	6,408
Current Liabilities	135	226
Fixed Liabilities	-	-
Net Assets	6,336	6,182

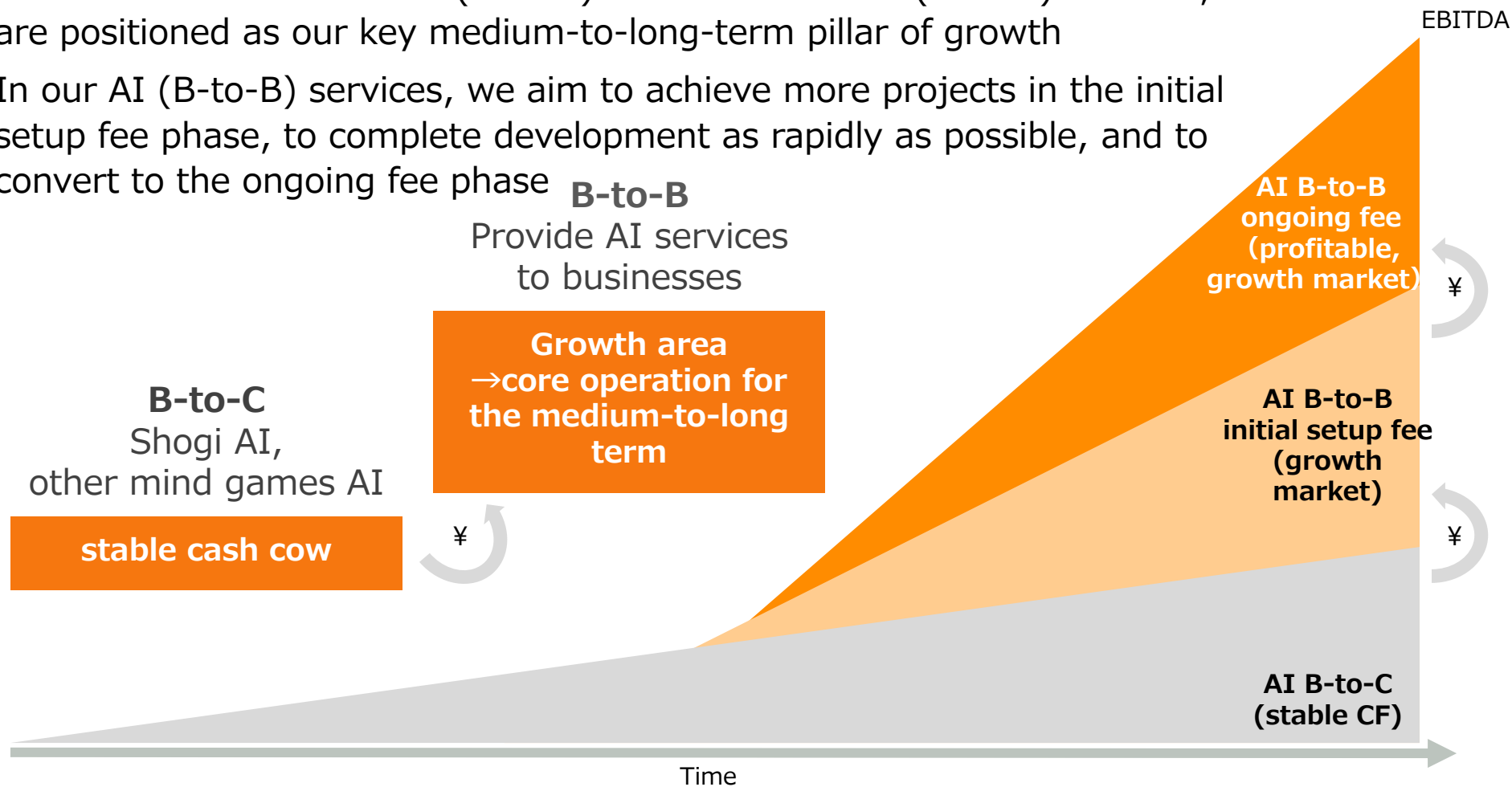
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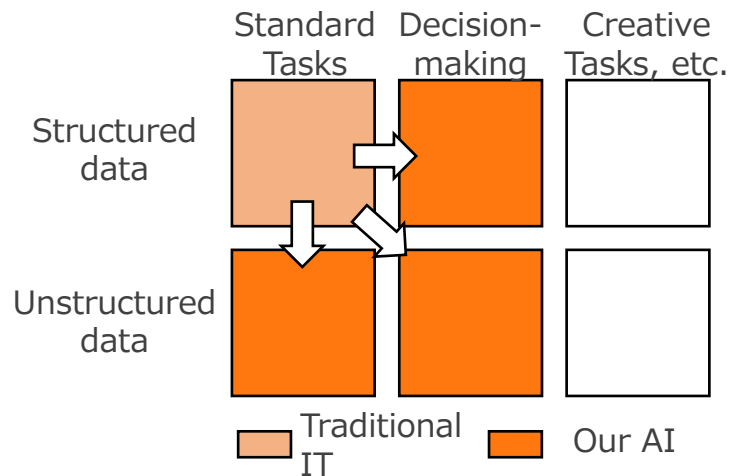
1. Business Overview
2. FY04/2021 Q3
Performance
- 3. Growth Strategy**
4. Reference Materials

Medium-to-long term Growth Strategy

- We aim to achieve EBITDA growth by investing our cash flows and leveraging our know-how from our AI (B-to-C) services to our AI (B-to-B) services, which are positioned as our key medium-to-long-term pillar of growth
- In our AI (B-to-B) services, we aim to achieve more projects in the initial setup fee phase, to complete development as rapidly as possible, and to convert to the ongoing fee phase



- Domestic DX (digital transformation) is expected to accelerate due to the future decrease in the working population as well as the impact of the COVID-19 pandemic
- AI allows for DX of a wide variety of operations including those involving decision-making, which were previously considered difficult to automate



- DX will begin with standard tasks based on structured data and is expected to expand to decision-making and tasks which utilize unstructured data
- Our AI can automate a wide variety of operations including those requiring decision-making. We have also achieved DX for unstructured data, which were traditionally considered difficult for DX
- We are promoting DX and building a track record in areas including construction, finance, and entertainment

- Joining the "SDGs for Regional Revitalization Public-Private Partnership Platform"
 - On December 2, 2020, we joined the "SDGs for Regional Revitalization Public-Private Partnership Platform" established by the Cabinet Office. The platform was established as a forum for public-private partnerships to deepen partnerships with a wide range of stakeholders with the aim of promoting domestic implementation of the SDGs and further local development.
 - Through our participation in the platform, we will promote solutions to regional issues in collaboration with a wide range of stakeholders, and contribute to the promotion of regional development driven by the SDGs

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Performance
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Potential AI Demand in Our Areas of Focus

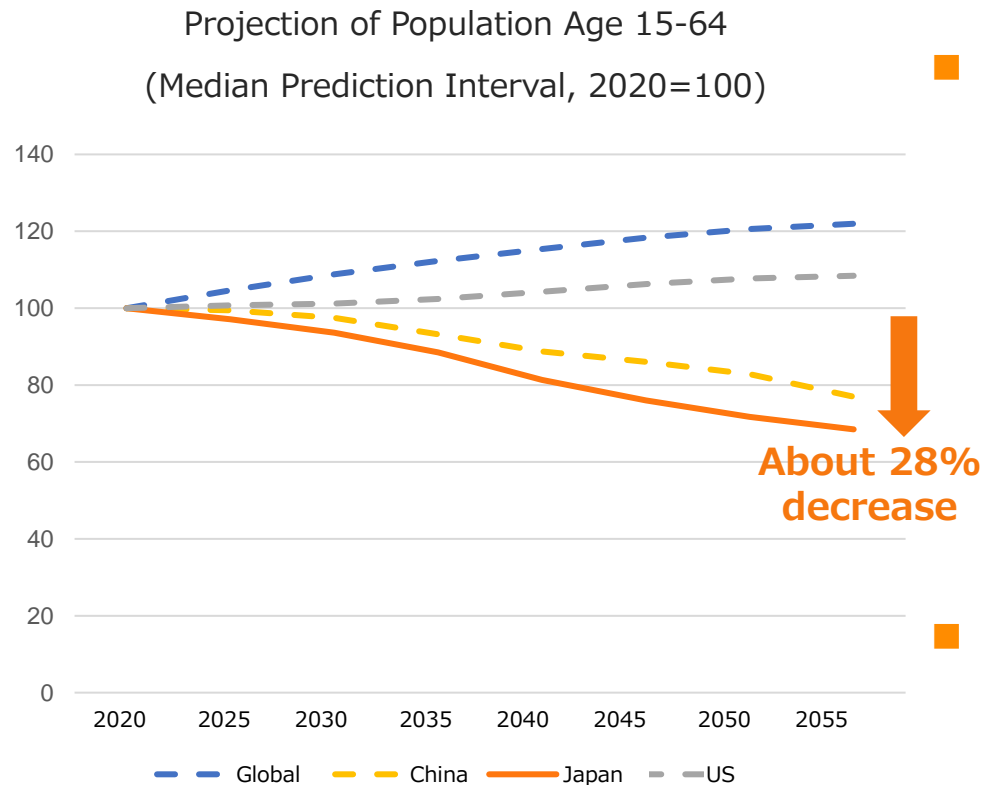
- We believe there is also significant potential demand for enhancing operational efficiency through AI in the construction industry, which is one of our areas of focus



- We entered into a capital and business alliance with Takenaka Corporation in 2017 and became a member of i-Construction. We aim to create the industry standard AI for the construction industry, enhancing productivity and creating a new, attractive construction site

Japan: Potential AI Demand is Among the Largest Worldwide

- Potential AI demand in Japan can be expected to be among the largest worldwide, as the working population is expected to decrease significantly going forward



- When defining the working population as those aged 15-64, the world average is forecasted to increase by about 12% from 2020 to 2035 and by about 21% from 2020 to 2055. On the other hand, the working population is expected to decrease by about 11% and about 28% during the same periods, respectively
- Based on such forecasts, the Japanese working population will show the largest decrease among leading GDP nations

Source: Prepared by HEROZ based on United Nations, World Population Prospects, The 2019 revision

Initiatives to Prevent Spread of COVID-19

- We continue to promote efforts to prevent the spread of COVID-19 and prioritize health and safety of our stakeholders including our employees
- There is no significant impact on operations and labor productivity

~April 2020

May

June~

Internal

- Introduced a selective system for work from home and flexible hours in February
- All officer and employees were instructed to work from home if at all possible, in April
- Set up an internal consultation desk for COVID-19
- Improved the work from home environment through reinforcement of VPN (virtual private network)

- Adopted an optional system for work from home and flexible hours based on Tokyo's roadmap against virus
- Alcohol sterilization and temperature measurements when entering the office
- Weekly online company-wide meeting

- Continue an optional system for work from home and flexible hours
- Promote an internal DX to improve our work productivity

External

- Transitioned to online internal/external meetings and recruiting interviews

- Alcohol sterilization and temperature measurements when entering the office
- Promoted shift to paperless work

- Held an online financial results meeting
- Held an online recruiting event

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The forward-looking statements set out in this material including performance outlooks are based on information currently available to HEROZ, Inc. and on certain assumptions deemed rational, and may therefore differ materially from actual results due to uncertainties in judgements or assumptions, or for other reasons.

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