

ZENRIN

Securities Code: 9474

Briefing on Results for First 2 Quarters of Fiscal 2017 (Year Ending March 31, 2017)

November 11, 2016

ZENRIN Co., Ltd.
Maps to the Future

President and CEO

Zenshi Takayama

Executive Vice President

Junya Amita

Executive Officer, and
Head of Corporate Management Division

Masami Matsuo

1. Overview of Results for First 2 Quarters of Fiscal 2017
2. Earnings Forecast for Fiscal 2017
3. Business Summary
4. Appendix

Note: This document contains forward-looking statements based on assumptions, forecasts and plans in light of information available to ZENRIN Co., Ltd. as of the preparation date of this document. Actual performance may vary significantly from the forecast figures due to various risks and uncertainties owing to global economic trends, market demand, status of competition, exchange fluctuations and other factors.

The information that appears in this document rounds down fractions to the nearest specified unit and rounds off decimals in the percentage of change to the first decimal place.

In addition, cases where the percentage of change exceeds 1000% and cases where one or both of the items of comparison are negative are shown as “-.”

1. Overview of Results for First 2 Quarters of Fiscal 2017

- 1) Overview of Results
- 2) Changes in Net Sales, Income and Profit
- 3) Causes for Change in Operating Income
- 4) Net Sales by Business under Medium- to Long-Term Business Plan ZGP2020
- 5) Segment Information
- 6) Changes in Cash Flows

1-1) Overview of Results

Key Points of Results for First 2 Quarters of Fiscal 2017

Compared to First 2 Quarters of Fiscal 2016 <increase in sales and decrease in income>

- Robust sales related to GIS utilizing residential map databases
- Sales increased for two years in a row while income at each level decreased due to increases in G&A expenses and depreciation of Zenrin Integrated Geospatial System

Compared to Earnings Forecast <decrease in sales and decrease in income>

- Sales have been roughly as expected
- Income decreased mainly because some of the expenses that had been expected in 2H arose in 2Q

(Amounts in million yen)

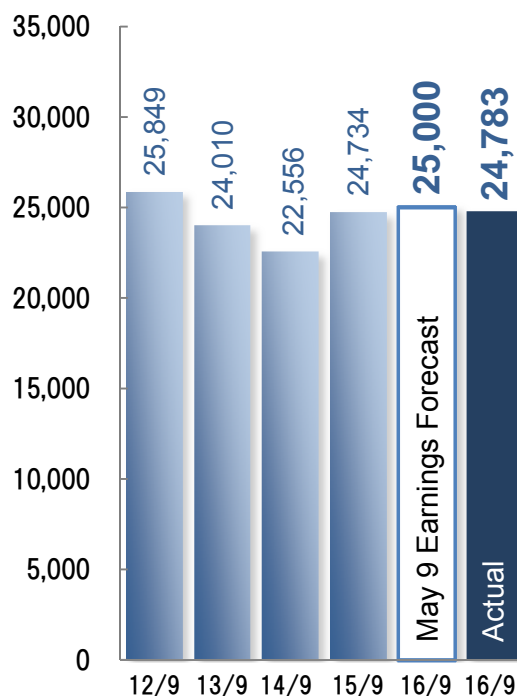
	First 2Qs of FY2016 Actual	First 2Qs of FY2017 Earnings Forecast (May 9)	First 2Qs of FY2017 Revised Forecast (Oct. 24)	First 2Qs of FY2017 Actual	Compared to First 2Qs of FY2016	% of Change	Compared to Earnings Forecast (May 9)	% of Change	Compared to Revised Forecast (Oct. 24)	% of Change
Net Sales	24,734	25,000	24,780	24,783	49	0.2	-216	-0.9	3	0.0
Operating Expenses	24,557	25,000	25,160	25,161	604	2.5	161	0.6	1	0.0
Operating Income	176	0	-380	-378	-555	—	-378	—	1	—
Operating Margin	0.7%	—	-1.5%	-1.5%	-2.2pt		-1.5pt		0.0pt	
Ordinary Income	422	200	-210	-207	-630	—	-407	—	2	—
Profit Attributable to Owners of Parent	119	100	-390	-387	-507	—	-487	—	2	—

*No substantial change from the revised earnings forecast figures announced on October 24.

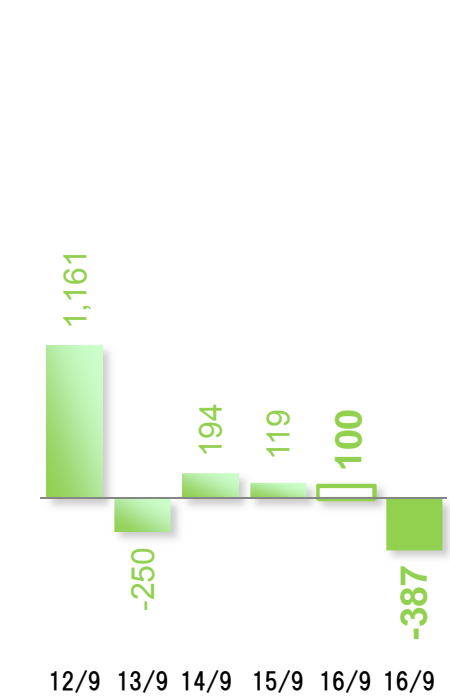
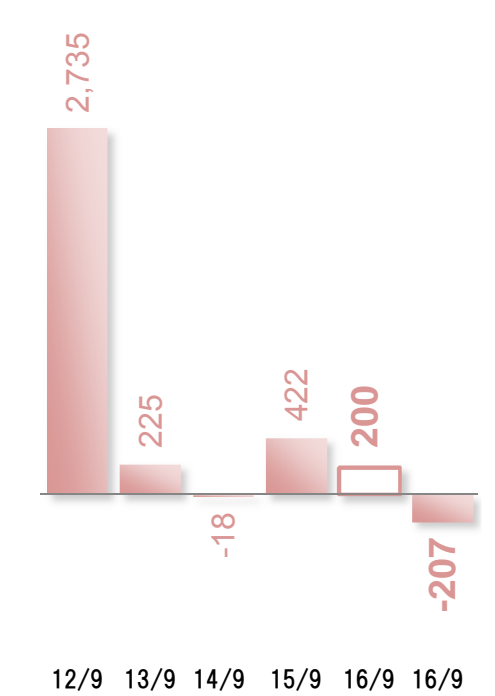
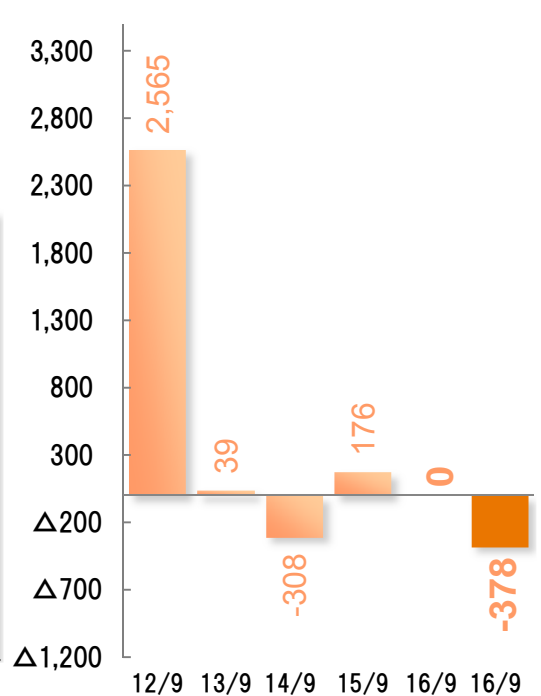
1-2) Changes in Net Sales, Income and Profit

(Amounts in million yen)

	Net Sales	Operating Income	Ordinary Income	Profit Attributable to Owners of Parent
Compared to First 2Qs of FY2016	Up 49 (+0.2%)	Downturn of 555 (—)	Downturn of 630 (—)	Downturn of 507 (—)
Compared to Earnings Forecast (announced on May 9)	Down 216 (-0.9%)	Downturn of 378 (—)	Downturn of 407 (—)	Downturn of 487 (—)



Increase in sales for 2 consecutive periods

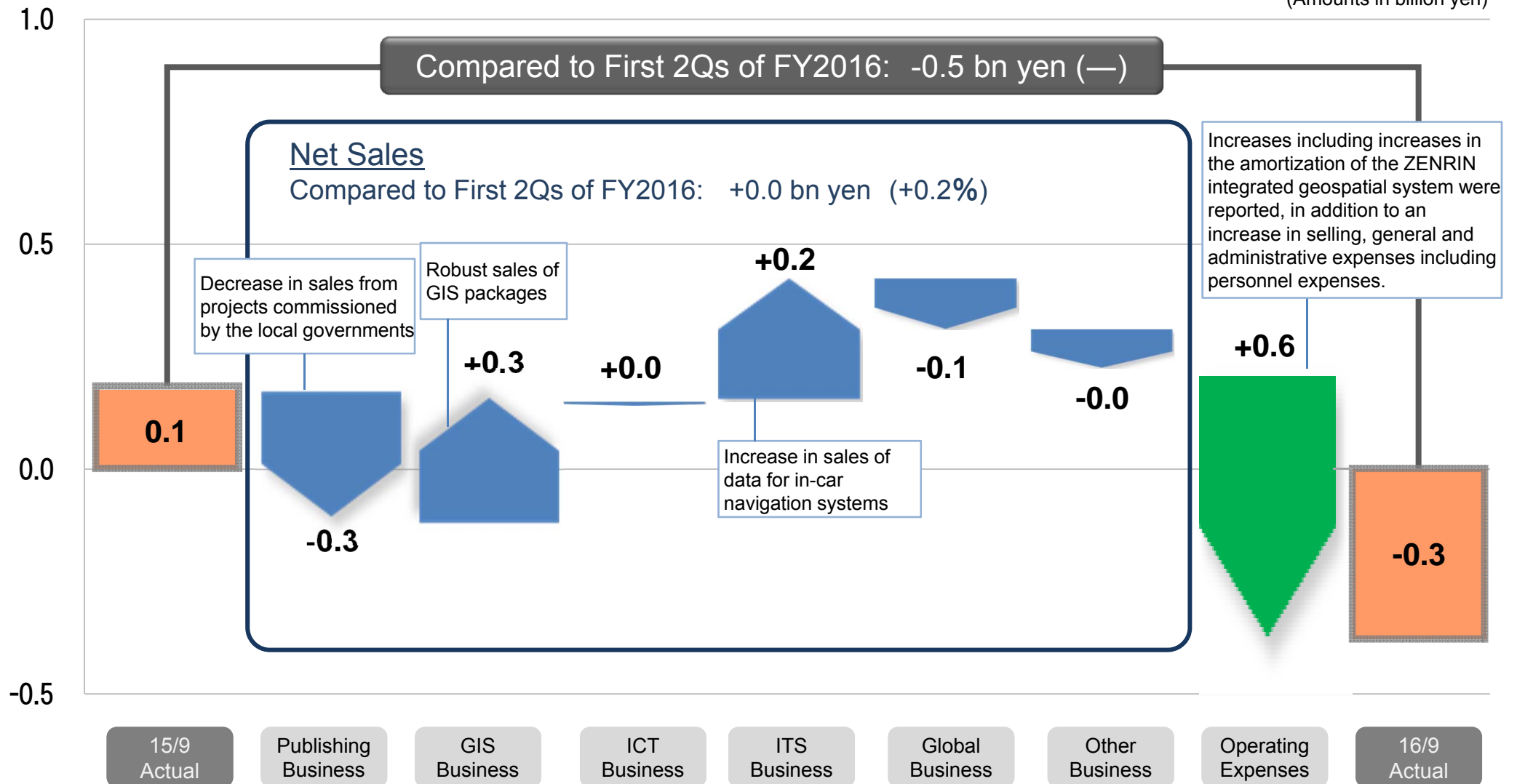


Profit in previous period → Loss

*No substantial change from the revised earnings forecast figures announced on October 24.

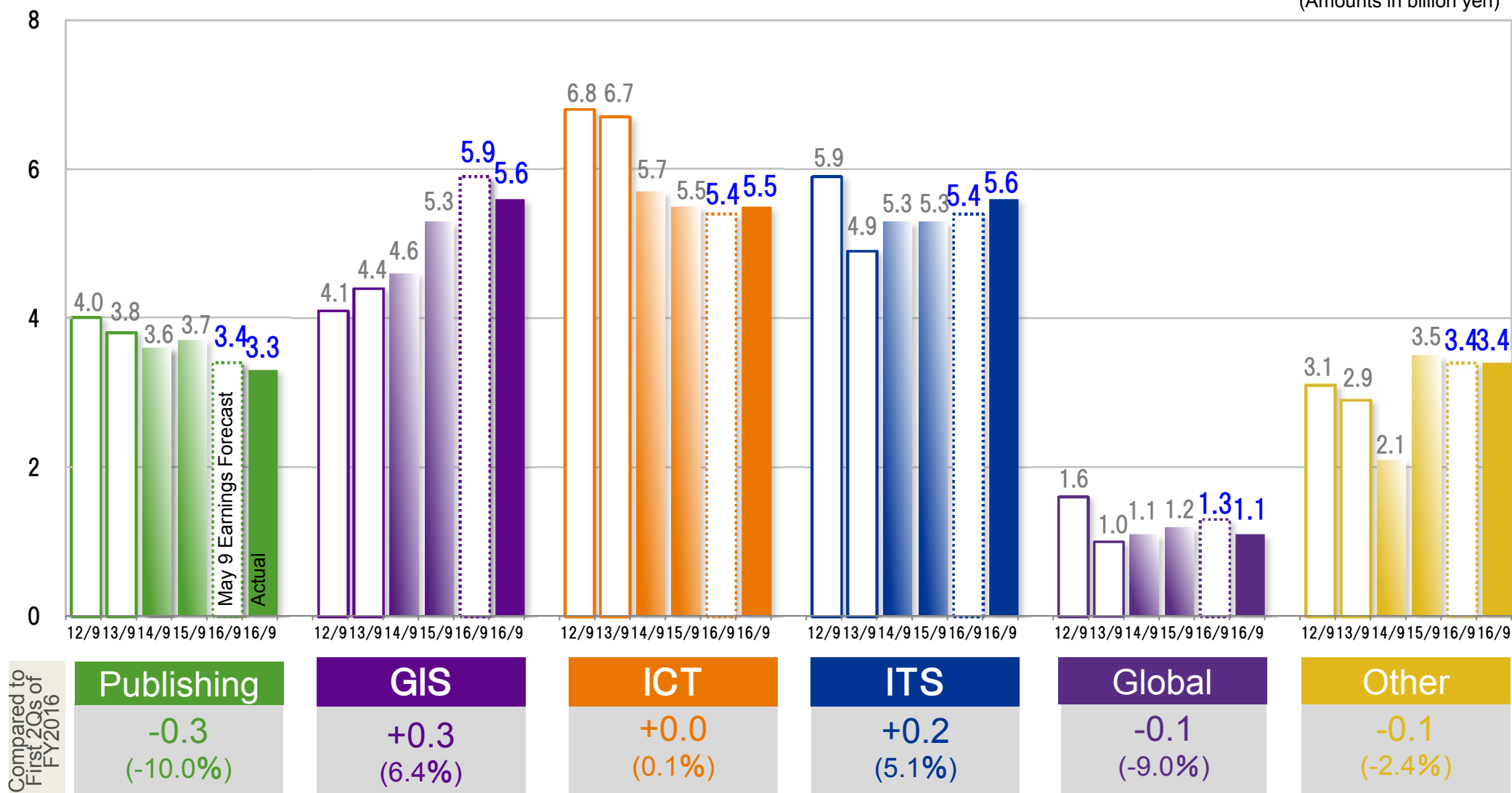
1-3) Causes for Change in Operating Income

(Amounts in billion yen)



1-4) Net Sales by Business under ZGP2020

(Amounts in billion yen)



* Net sales for the first 2 quarters of fiscal 2013 (period ended September 2012) and first 2 quarters of fiscal 2014 (period ended September 2013), which are the outlined open bars on the bar graph, are net sales compiled based on the business composition under ZGP2015.

1-5) Segment Information

Sales
Composition

83.4%

1. Map Database Segment

Main Items: Printed residential maps, residential map databases, map data for Japanese and overseas in-car navigation systems, services for smartphones, map data provision, etc. for various media/devices



6.7%

2. General Printing Segment

Main Items: Commercial printing



9.9%

3. Other

Main Items: Purchased products, digital signage, direct mail delivery services, in-ship advertising

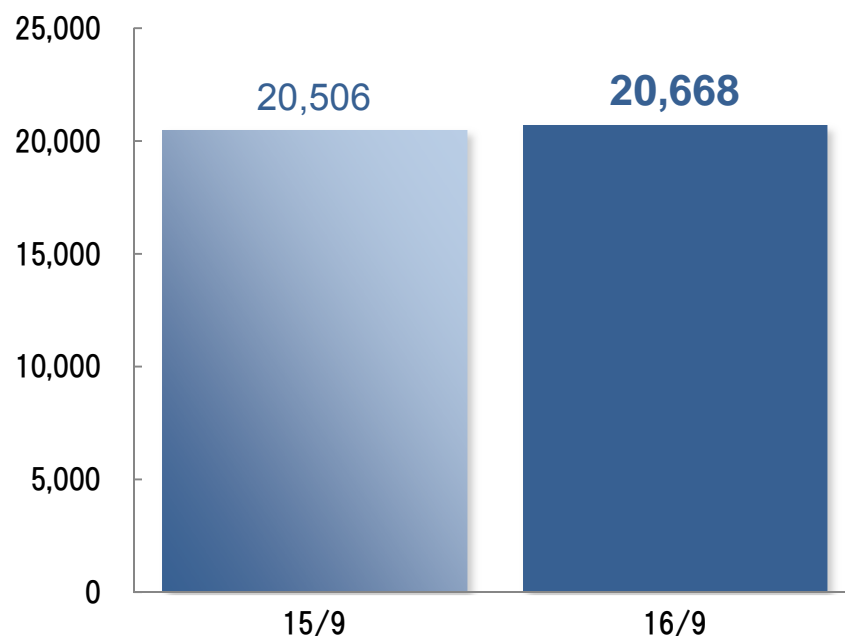


1-5) Map Database Segment

Net Sales

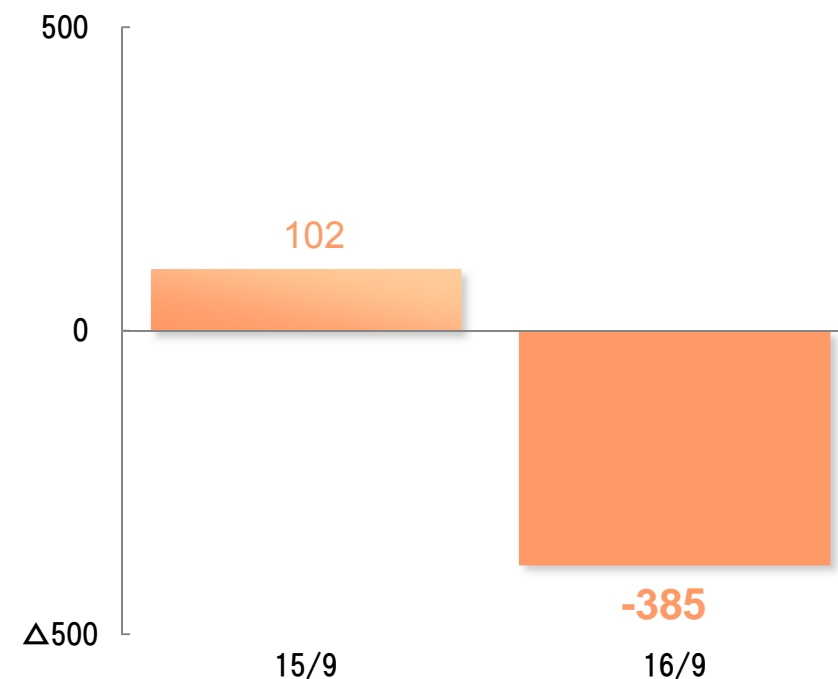
Compared to
First 2Qs of
FY2016

Up 162 (+0.8%)



Operating Income

Downturn of 487 (—)



- Robust sales related to GIS-utilizing residential map databases.
- increases including increases in the amortization of the ZENRIN integrated geospatial system were reported, in addition to an increase in selling, general and administrative expenses including personnel expenses.

1-5) General Printing Segment, and Other

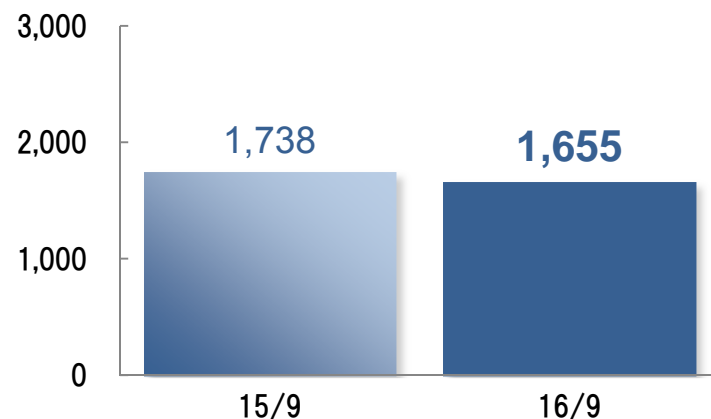
(Amounts in million yen)

General Printing Segment

Net Sales

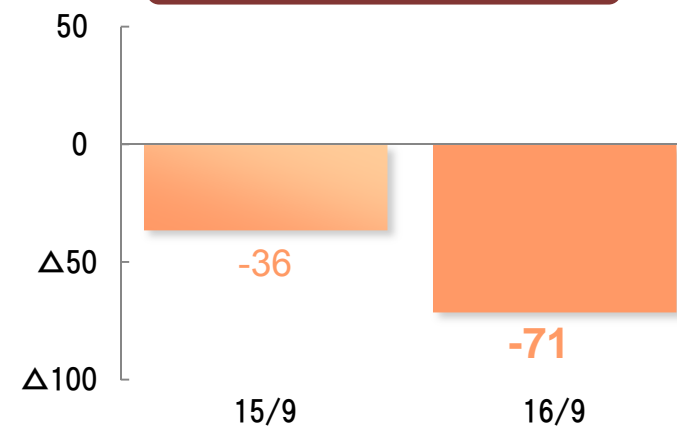
Compared to First 2Qs of FY2016

Down 83 (-4.8%)



Operating Income

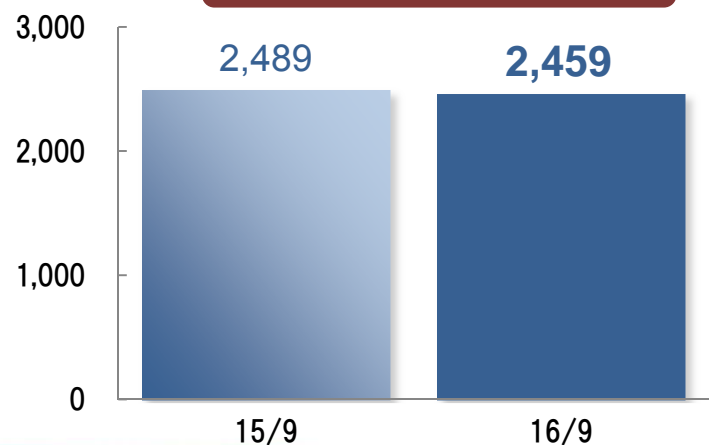
Downturn of 34 (—)



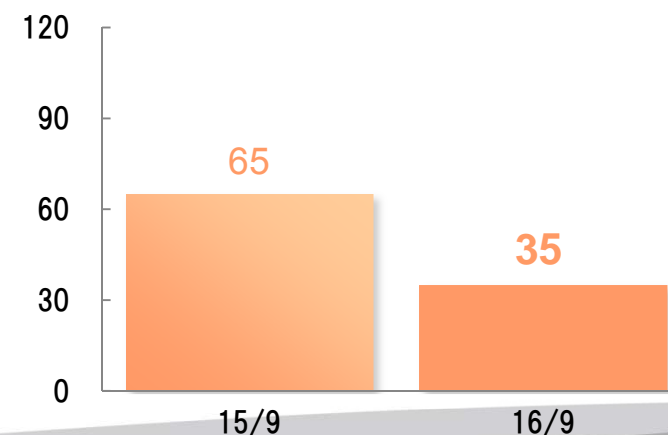
Other

Down 30 (-1.2%)

Compared to First 2Qs of FY2016



Down 30 (-46.4%)



1-6) Changes in Cash Flows

Operating Cash Flows

Investing Cash Flows

Free Cash Flows

Financing Cash Flows

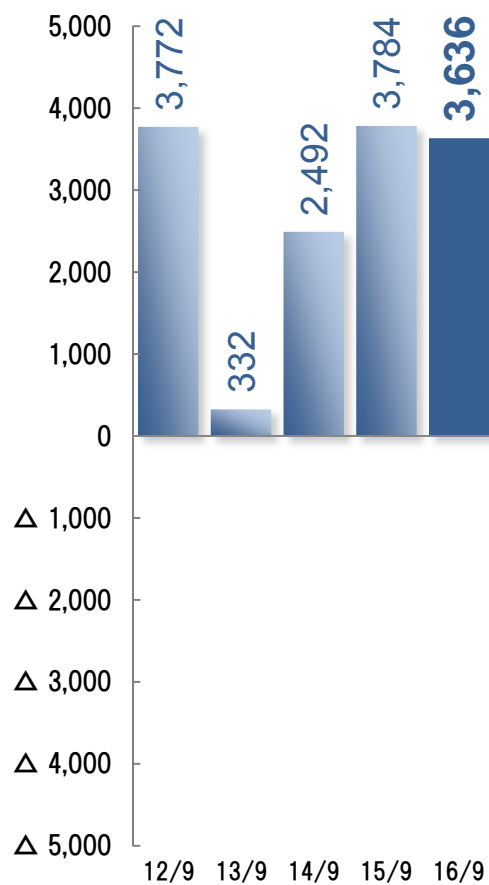
Compared to
First 2Qs of
FY2016

Inflows down 148

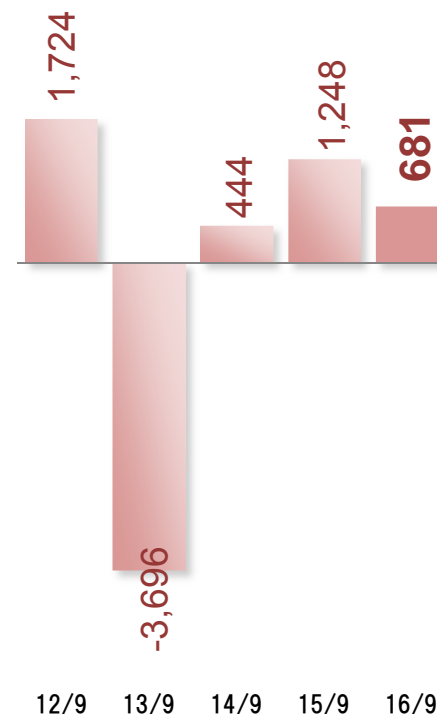
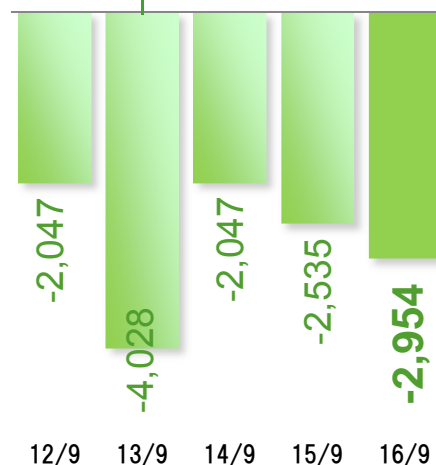
Outflows up 419

Inflows down 567

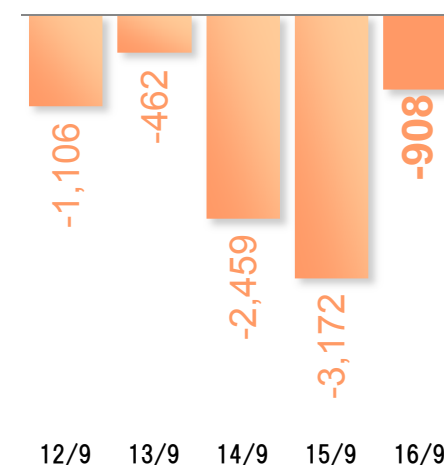
Outflows down 2,263



Remodeling and expansion
of ZENRIN-owned property



Free cash flows	681
Financing cash flows	- 908
Effect of exchange rate	- 152
Net decrease in cash and cash equivalents	- 380
Cash and cash equivalents at beginning of period	5,099
Cash and cash equivalents at end of period	4,719



2. Earnings Forecast for Fiscal 2017

- 1) Overview of Earnings Forecast for Fiscal 2017
(No change from the figures announced on May 9)

- 2) Dividends

2-1) Overview of Earnings Forecast for Fiscal 2017

Earnings Forecast for Fiscal 2017

Given that the actual results through 2Q have been roughly in line with the forecast, the earnings forecast for fiscal 2016 is left unchanged from that announced on May 9, 2016 for now.

Compared to Fiscal 2016 <increase in sales and decrease in income>

- Securing of earnings from GIS Business
- Reduction of fixed cost ratio through productivity reform
- Stable operation of Zenrin Integrated Geospatial System and product development

(Amounts in million yen)

	FY2016 Actual	FY2017 Forecast	Compared to FY2016	% of Change
Net Sales	54,970	57,000	2,029	3.7
Operating Expenses	51,931	53,600	1,668	3.2
Operating Income	3,038	3,400	361	11.9
Operating Margin	5.5%	6.0%	0.5pt	—
Ordinary Income	3,427	3,700	272	7.9
Profit Attributable to Owners of Parent	1,610	2,200	589	36.6

2-2) Dividends

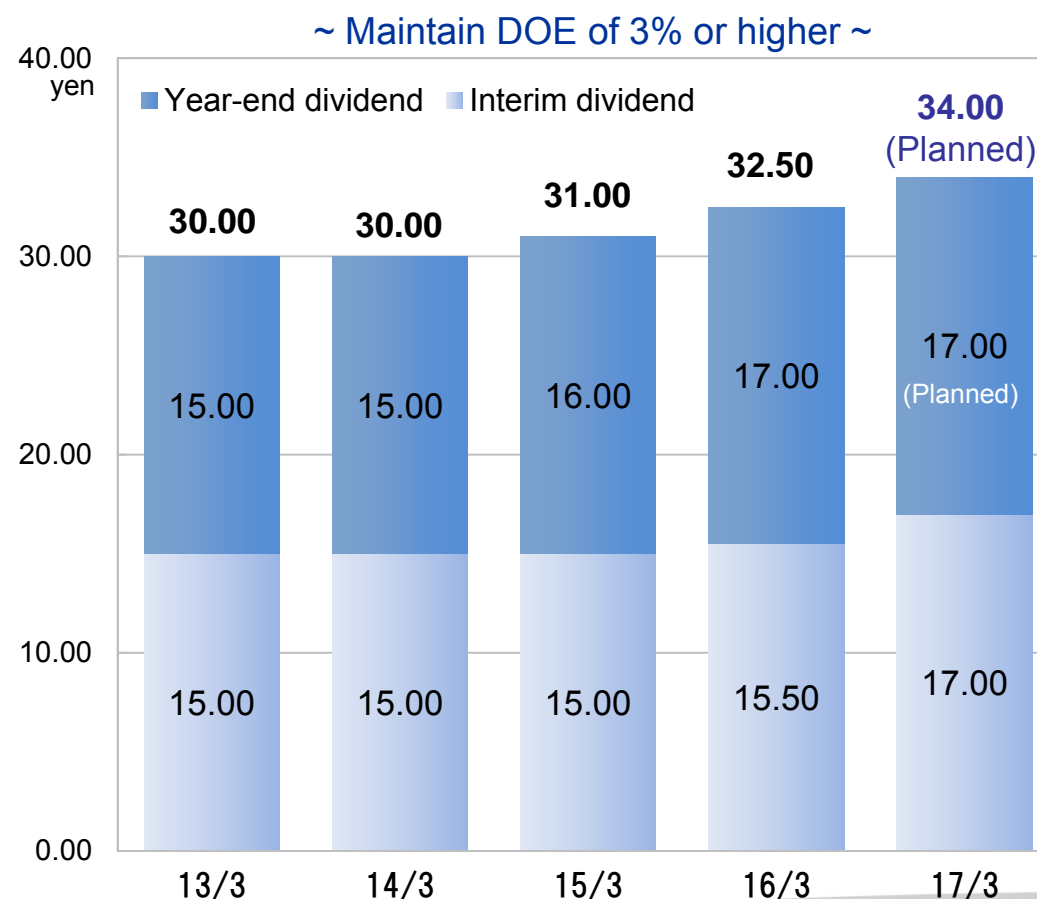
Basic Policy

Return income to shareholders derived from income growth based on the medium- to long-term business plan, while taking into account maintaining an adequate amount of internal reserves

Target dividend on equity (DOE) on a consolidated basis of 3% or higher

FY2017 Dividend (Compared to FY2016)

Interim	17.00 yen (+1.50 yen)
Year-end (Planned)	17.00 yen (\pm 0 yen)
Annual (Planned)	34.00 yen (+1.50 yen)

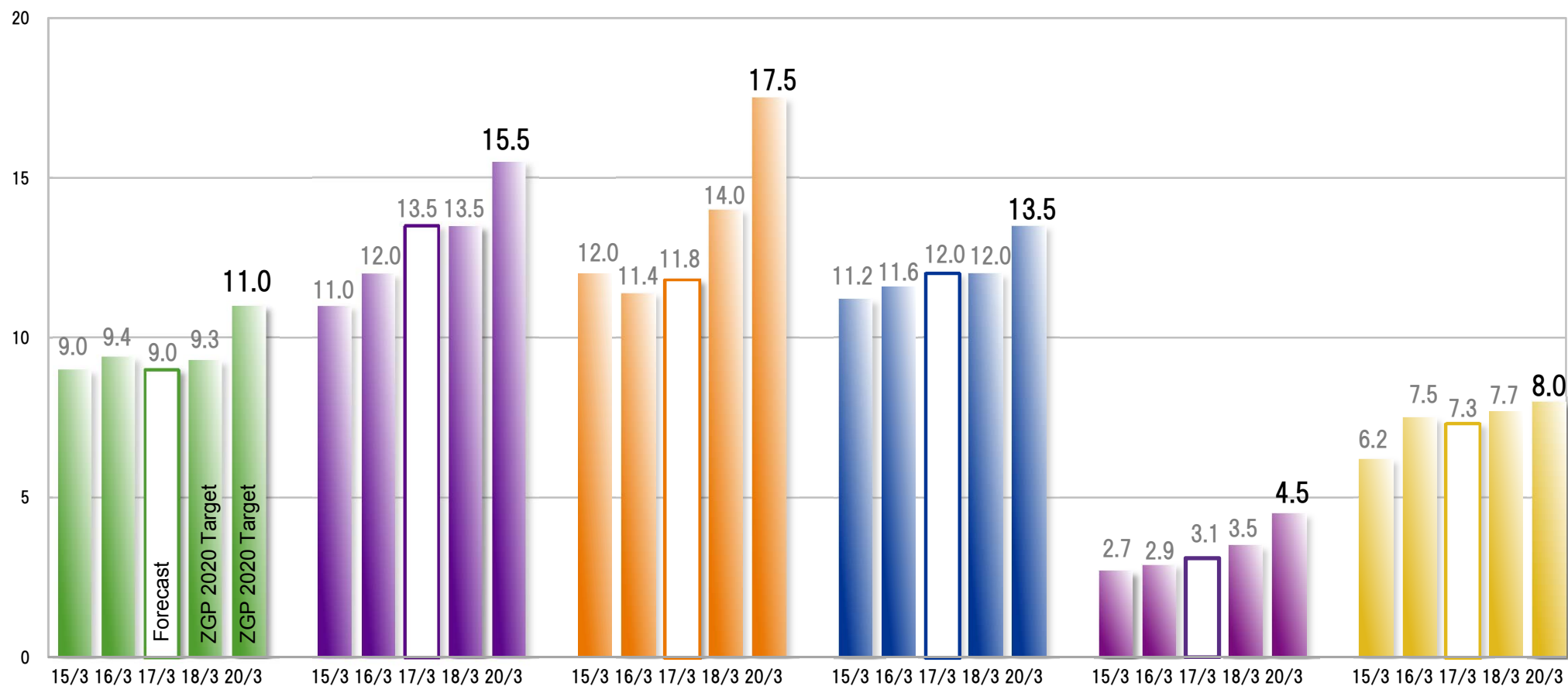


3. Business Overview

- 1) Net Sales by Business under Medium- to Long-Term Business Plan ZGP2020
- 2) ZGP2020 Business Strategy
 - Net sales by Business (Actual/Forecast/ ZGP2020 Targets)
 - Primary Initiatives

3-1) Net Sales by Business under ZGP2020

(Amounts in billion yen)

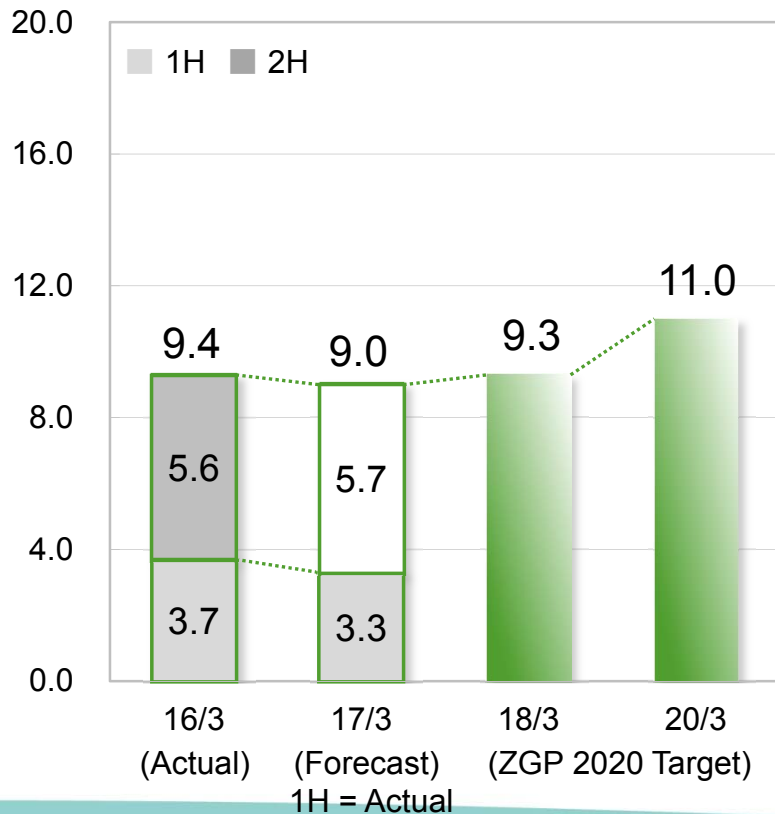


Business	Compared to FY2016 (Forecast)
Publishing	-0.3 (-3.7%)
GIS	+1.4 (12.4%)
ICT	+0.3 (3.2%)
ITS	+0.4 (3.6%)
Global	+0.2 (7.8%)
Other	-0.1 (-1.8%)

3-2) ZGP2020 Business Strategy -Publishing Business-

FY2017 Net Sales Forecast
Compared to FY2016: -0.3 bn yen (-3.7%)

<Second Quarter Progress>
Sales declined due to the effect of projects commissioned by local governments and a decrease in sales of printed residential maps



Pursuit of the “solutions” of print media

Shift from flow-type models to stock-type models

The business model to be reconsidered as a result of feasibility studies in multiple districts
Validation of the sales style to be continued

Enrichment of easily-accessible on-demand service

★ Now available also from our own website in addition to convenience stores all over Japan

Enrichment of proposal-based products evolved from order-based products

★ **Creation of markets by innovating new map concepts**

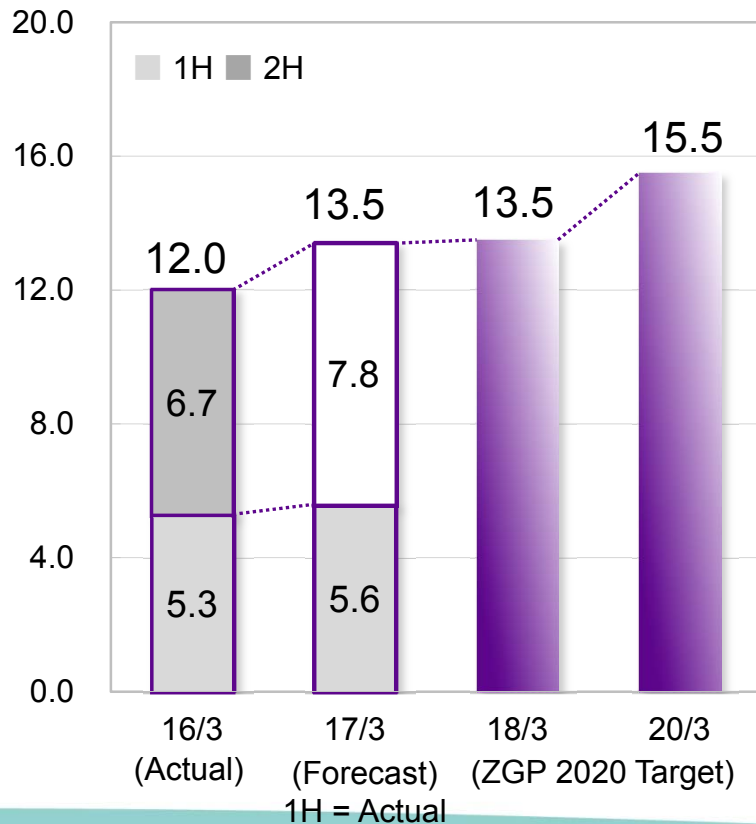
- Map stationery “mati mati” series: Product line with 10 areas/4 items
- A license agreement was concluded for the use of Tokyo Olympics and Paralympics symbols as well as the names of venues/athletic competition on our products. We plan to sell various map products based on this agreement.



3-2) ZGP2020 Business Strategy -GIS Business-

FY2017 Net Sales Forecast
Compared to FY2016: +1.4 bn yen (+12.4%)

<Second Quarter Progress>
Number of GIS package contracts increased and a new GIS marketing subsidiary contributed

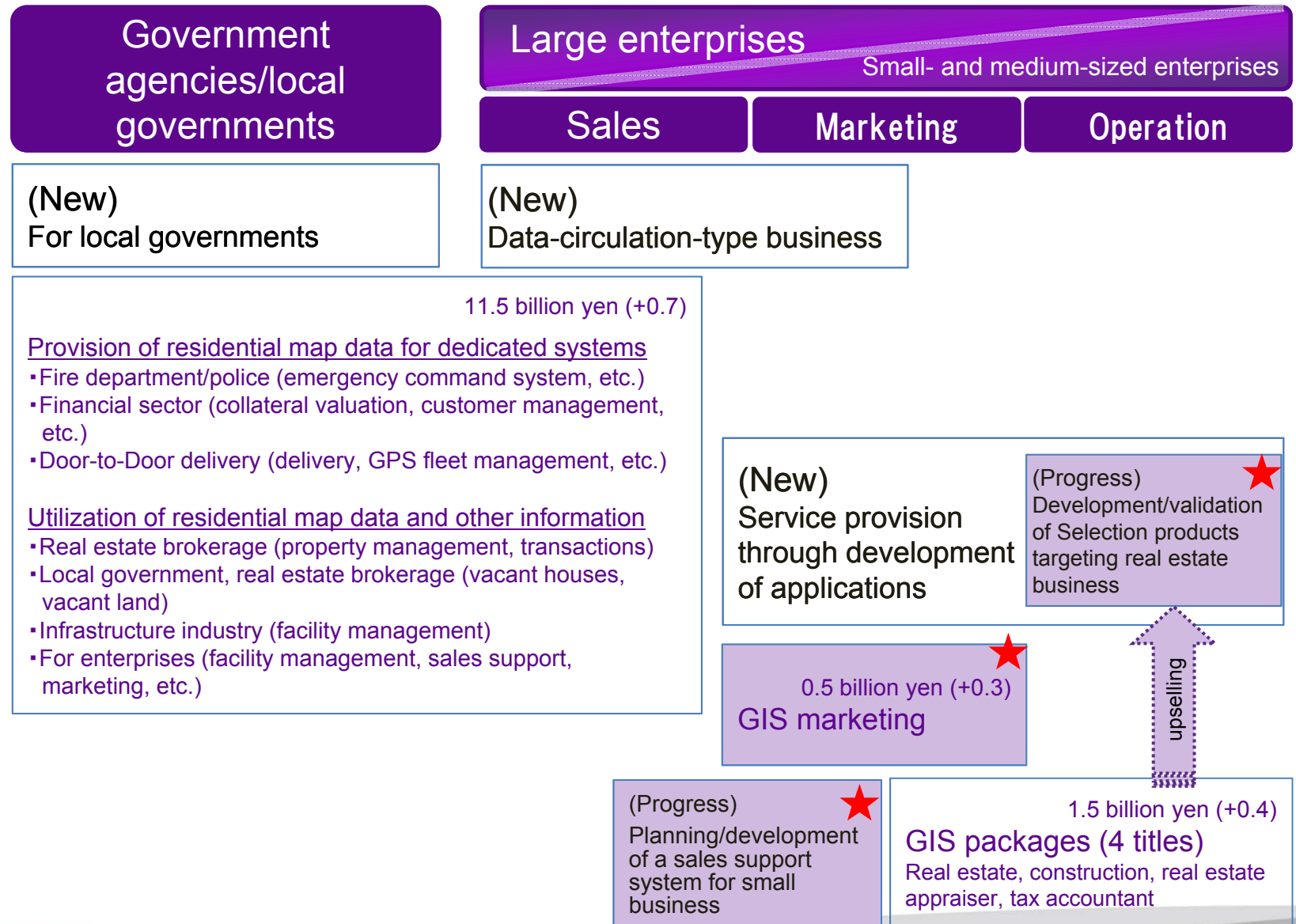


Enrichment of concept products

- ★ Building of the ZENRIN GIS brand through release of products resulting from development of applications and through introduction of new pricing
 - Development/validation of a new product (GIS Selection)
- Release of Package products featuring a clear map-themed concept
- ★ Release of entry models for expanding utilization of GIS
 - Planning/development of a sales support system for small business
- Establishment of local government platform
- Establishment of data-circulation-type business model
 - Business model planning/validation with 3 business partners

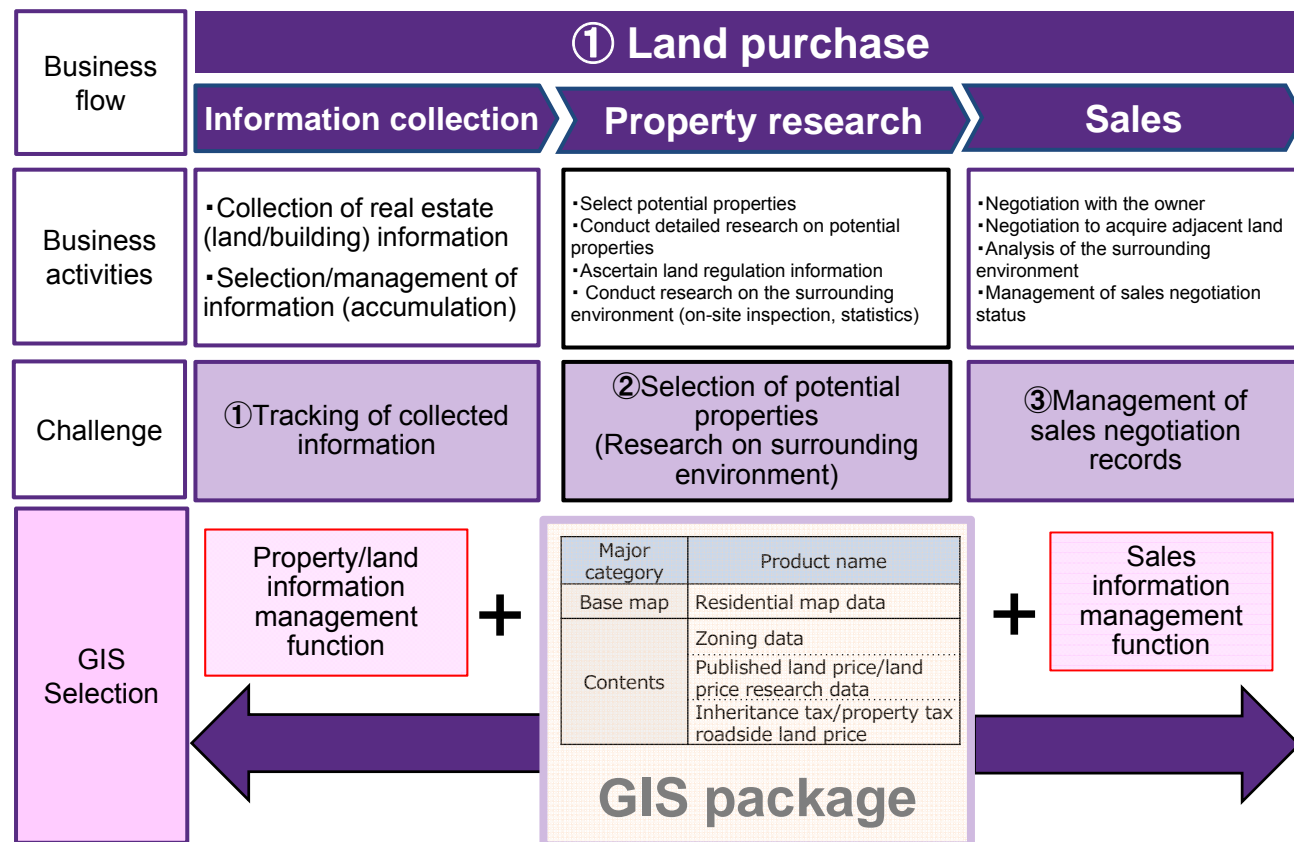
3-2) ZGP2020 Business Strategy -GIS Business- (Building of GIS Brand)

*Figures are sales volume for fiscal 2017 (Compared to FY 2016)



3-2) ZGP2020 Business Strategy -GIS Business- (GIS Selection)

Development/validation of GIS Selection products targeting real estate business



[Future expansion]



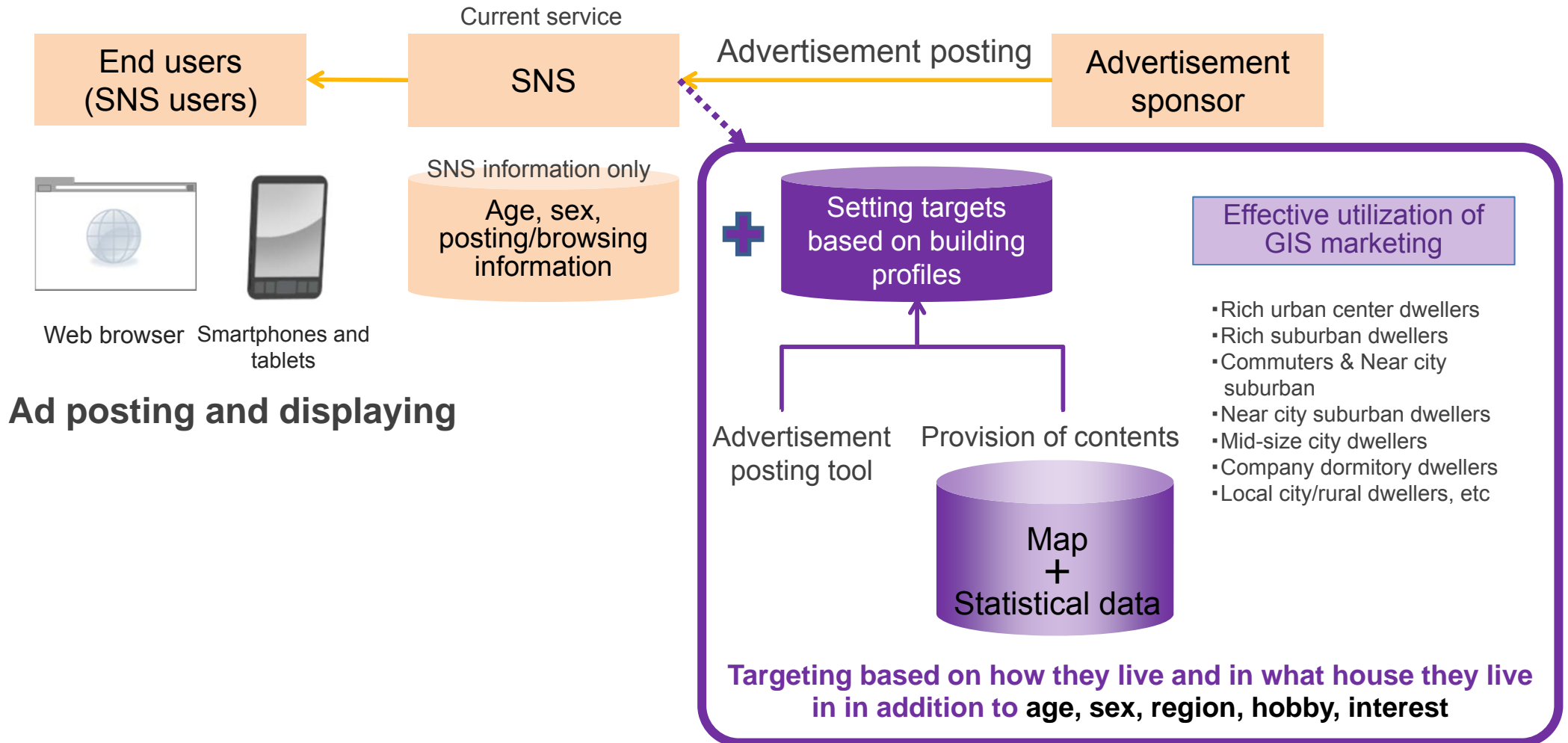
Respond to customer needs by adding contents/functions

(Addition of the property/land information management function and the sales information management function + 10,000 yen/month)

20,000 yen/month for each license

3-2) ZGP2020 Business Strategy -GIS Business- (GIS Marketing)

Advertising targeting business that leverages SNS



3-2) ZGP2020 Business Strategy -GIS Business-

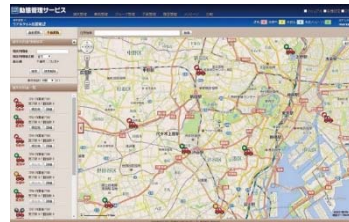
(a sales support system for small business)

Planning/development of a sales support system for small business
(cloud based service)

Location information management

GPS fleet management

- Visualize on the map
- Real-time



Transportation support

Its-mo NAVI Multi

- In-car, train, pedestrian navigation
- Door-to-door guide



Accurate guide

Zenrin Residential Map

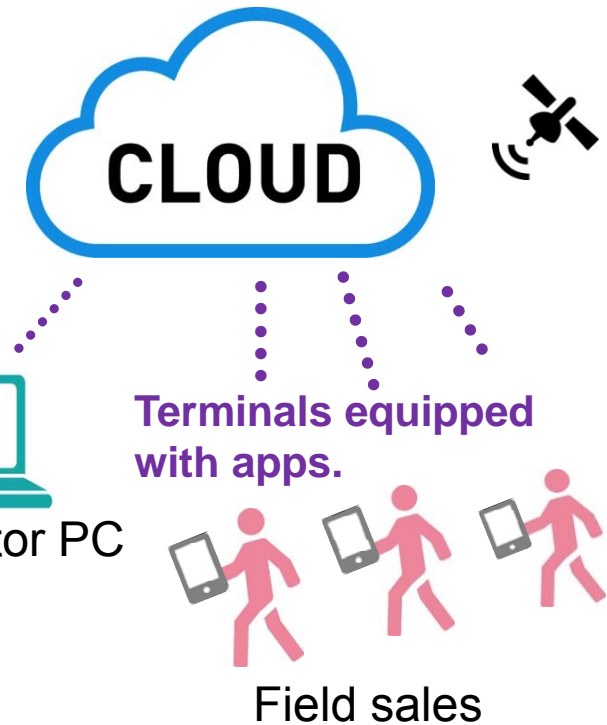
- Guide to the final destination (Last One Mile)



Sales support function

Customer/business information

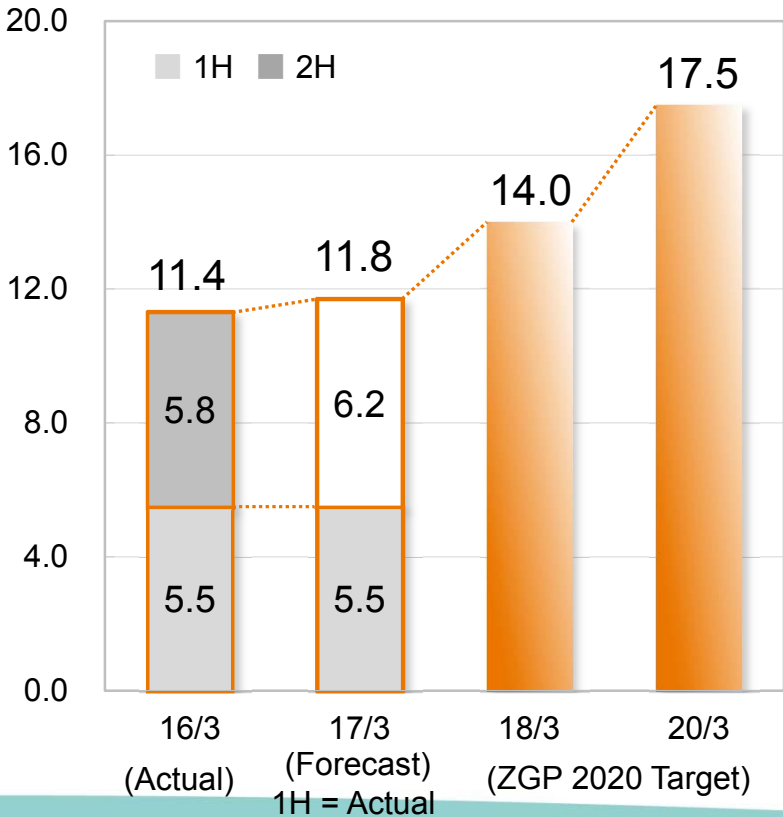
- Confirm where to visit
- Progress/reporting



3-2) ZGP2020 Business Strategy -ICT Business-

FY2017 Net Sales Forecast Compared to FY2016: +0.3 bn yen (+3.2%)

<Second Quarter Progress>
Decrease in the number of subscribers for services for smartphones/adoption of map data for web services resulted in an increase



Pursuit of IT media “solutions”

Enhancement of map DB utility value through provision of Zenrin Integrated Geospatial contents

★ Launch of sharing model for advertising revenue in web business

- Establishment of the business model for drone business (further coordination with the gov't/private sector)
- Commissioned validation experiment project

★ Digital signage market penetration through provision of Zenrin Integrated Geospatial Database

- Adoption of signage at commercial facilities, transportation and accommodation facilities
- Adoption of multi-language map data, tourism contents and indoor information data



Expansion of location information business in “tourism” backed by sector’s growth potential

Launch of 3D solutions through expansion of scope of utilization of 3D data

3-2) ZGP2020 Business Strategy -ITS Business-

FY2017 Net Sales Forecast
Compared to FY2016: +0.4 bn yen (+3.6%)

<Second Quarter Progress>
New adoptions of “communications-linked navigation” and adoptions of entry models contributed to the increase

“Communications-linked navigation” and “high precision maps”

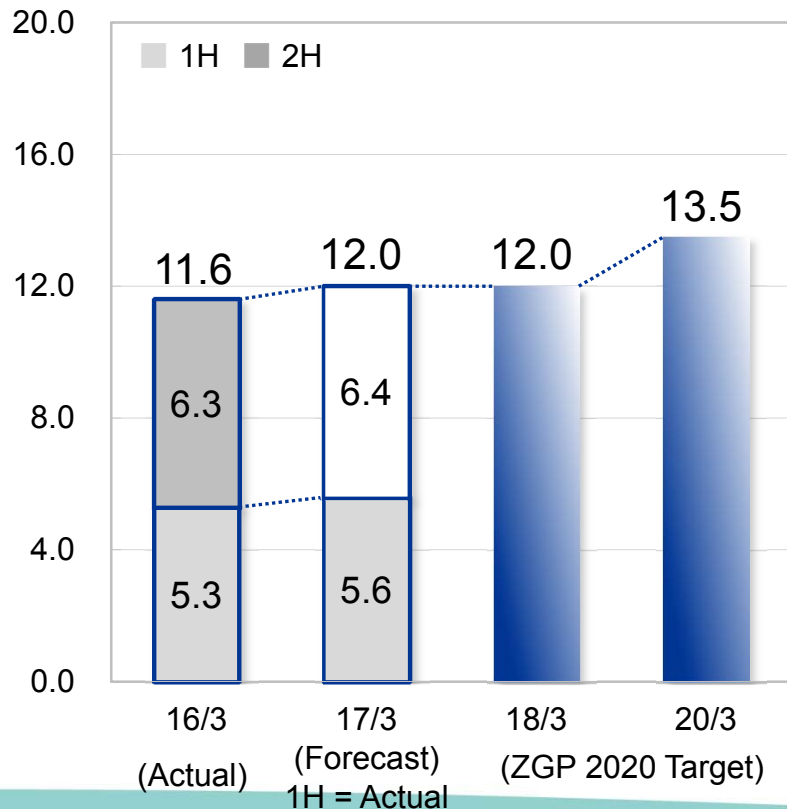
Enhancement of map DB utility value through provision of Zenrin Integrated Geospatial contents

Proposal of comprehensive services that combine map DB and applications

Attracting overseas manufacturers through 3D map licensing and authoring contracts

★ Establishment of technologies and promotion of Product planning for high precision maps

- Proposal of our own map solution (ZGM Auto)
- Coordination with IoT under study
- Investment to establish a new company Dynamic Map Planning Co., Ltd.
⇒ 2016/10/10-10/14 Exhibition booth at 2016 Melbourne World Congress on Intelligent Transport Systems



3-2) ZGP2020 Business Strategy -ITS Business- (ADAS Initiatives)

Briefing on Results for First 2Qs of FY2017

ZENRIN
ZENRIN supports the Automated Driving society with its mapping technologies

Innovations for future geospatial platforms
ZGM Auto
Zenrin's Geospatial data Model for ADAS of line

ZGM AD for Seaside **ZGM HW for Harbors**

High precision 3D point cloud, supporting 3-dimensional information processing

Probe robust data and geospatial objects for ADAS

Cloud-based storage to support the all regions usage

Schedule

Start of development in 2015, start of service in 2017 and 2018

Generating Dynamic Info with real-time probe data
ZENRIN x IoT

Check back to safety driving

Cloud-based storage

Used as a source information for map update

Supported by IBM Japan

ZENRIN Integrated Geospatial System

Changes of road data are measured by laser measurement and the processed data is loaded into the system, and objects are managed in real time.

18 kinds of 3D/2D maps, including 2D Auto, are generated on the system and secured in the cloud for delivery.

1. Survey 2. Map plan and its export 3. ZGM Data 4. Delivery Solutions

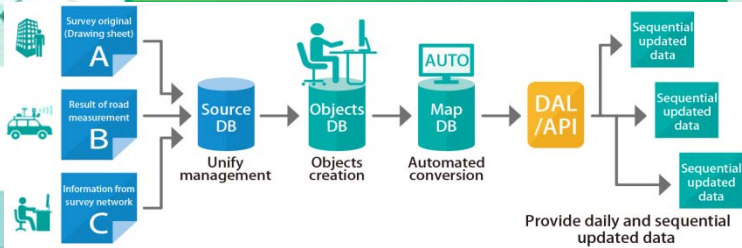
DB L API

Initiatives in Japan to standardize map solutions for AD*ADAS
Dynamic Map Planning Co., Ltd. (DMP)

Development	Member
Dynamic Map Planning Co., Ltd. is a company that is developing a map solution for AD*ADAS.	Aisin, DENSO, HONDA, ISUZU, MITSUBISHI, NISSAN, SUBARU, TOYOTA, etc.
Business	
Business for standardization of developing and operating maps for AD*ADAS, public awareness and general work in Japan.	

Map solutions under study
To cover 28,000 km of expressways and their connecting roads all over Japan before 2020

Coordination with IoT under study
Generation of dynamic information using probe data
Collection of map changing point triggers



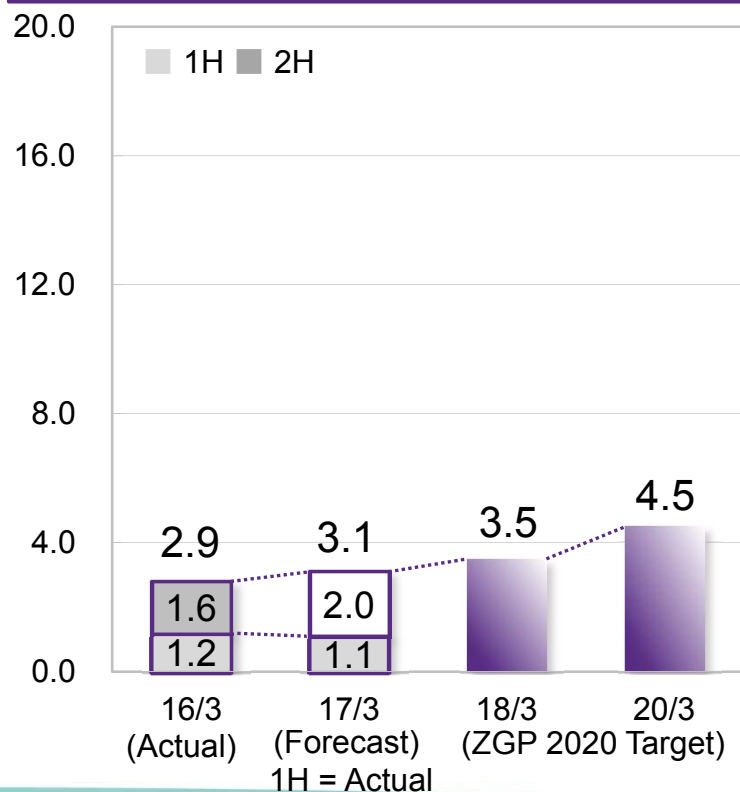
Establishment in June 2016
Dynamic Map Planning Co., Ltd.

Source: Extract from the exhibition booth material at 2016 Melbourne World Congress on Intelligent transport Systems

3-2) ZGP2020 Business Strategy -Global Business-

FY2017 Net Sales Forecast Compared to FY2016: +0.2 bn yen (+7.8%)

<Second Quarter Progress>
Sales decreased due to the replacement of the in-car navigation model (North America)



Building of business base in emerging markets



September 2016: Acquisition of Abalta Technologies (U.S.)

- Provision of software to enable smartphone apps to coordinate with on-vehicle equipment
- Provision of an environment to realize connected vehicles that can perform data communication using smartphones as gateways
- Provision of flexible solutions in emerging markets

Expansion of business in India

Launch of business in ASEAN

Global expansion of navigation apps and securing of authoring contracts

Commencement of business feasibility testing for launch of overseas high precision business

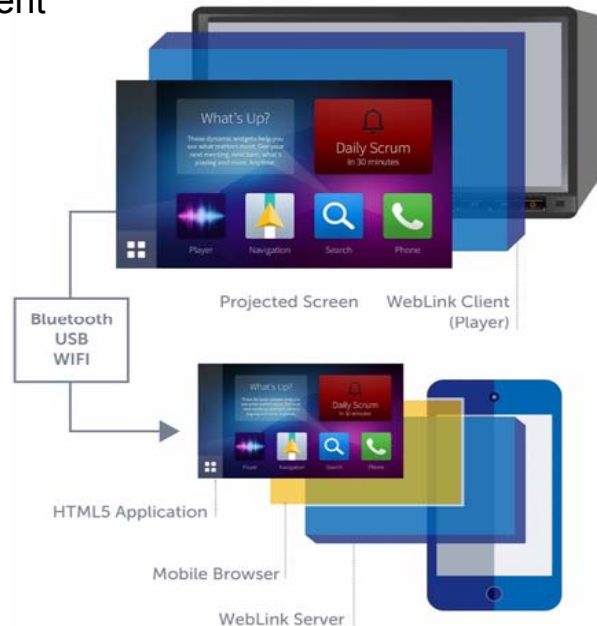
Launch of oversea GIS business

3-3) ZGP2020 Business Strategy -Global Business-

(Abalta's Services)

WebLink

Enables smartphone apps to be displayed on the on-vehicle terminal and operated from on-vehicle equipment



(Application examples)

- Integration with smartphone contents
- Can be customized for each auto manufacturers
- Can be provided under proprietary brands of auto manufacturers to prevent leakage of vehicle information to external parties

SmartLink

Provides an environment to realize connected vehicles that can perform data communication using smartphones as gateways

- Enables vehicles to be connected with the network
- Realizes data updates and big data management using vehicle diagnostic information from the cloud



(Application examples)

- Updates through communication using the embedded software
- Updates through map data communication
- Downloads of vehicle diagnostic data
- Infotainment

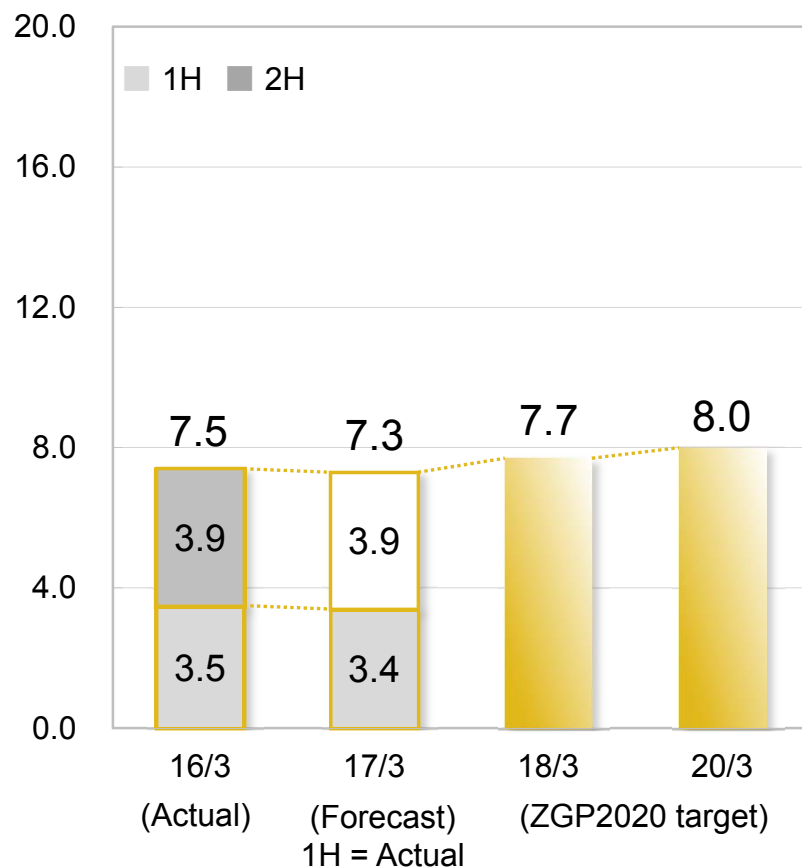
Strengthen business in emerging markets through the provision of solutions combining on-vehicle software

3-2) ZGP2020 Business Strategy -Other Business-

(General printing, In-Ship, etc. Advertising)

FY2017 Net Sales Forecast
Compared to FY2016: -0.1 bn yen (-1.8%)

Reexamination of Group synergies



Stability of general printing business

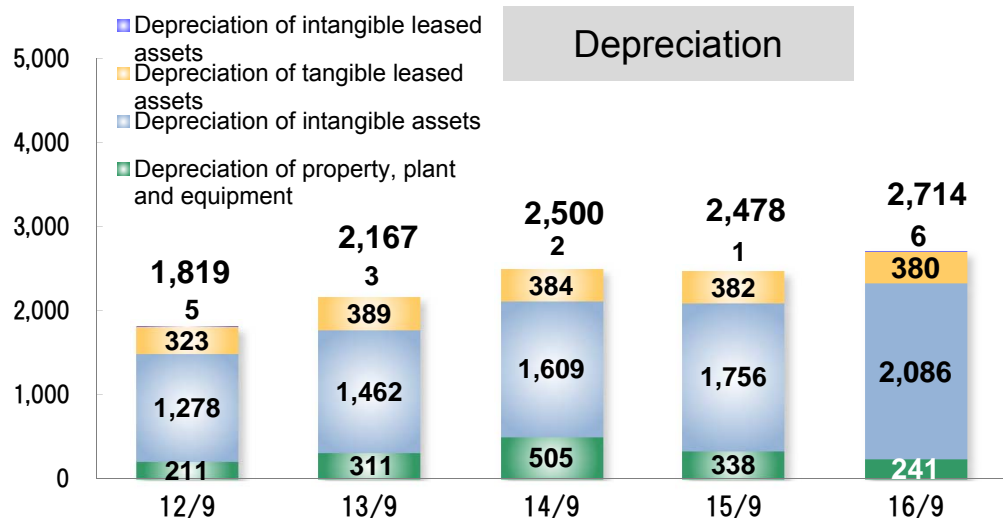
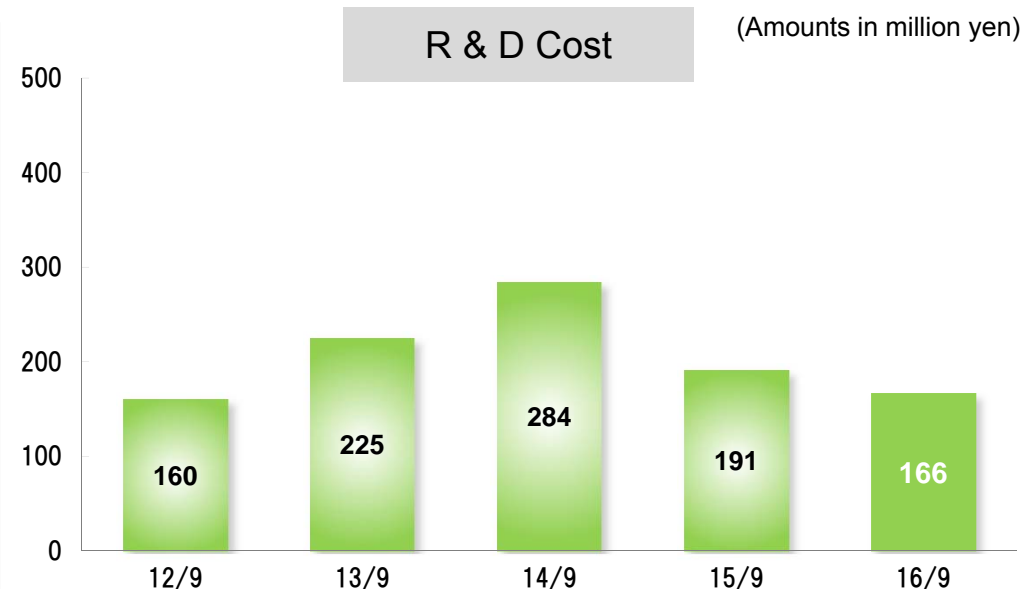
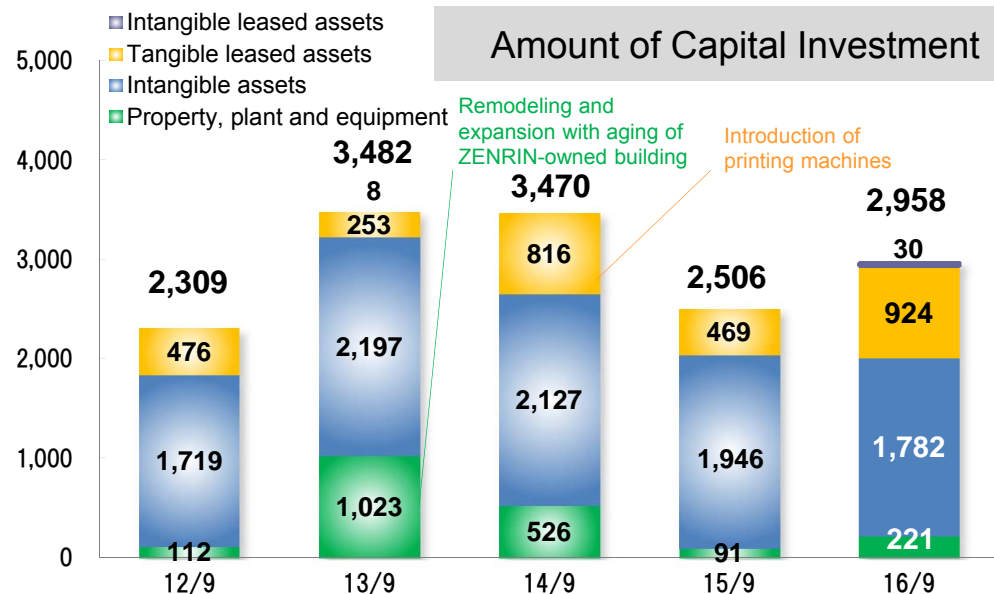
Expansion of in-ship advertising business

Sales expansion
through synergy with location information business

4. Appendix

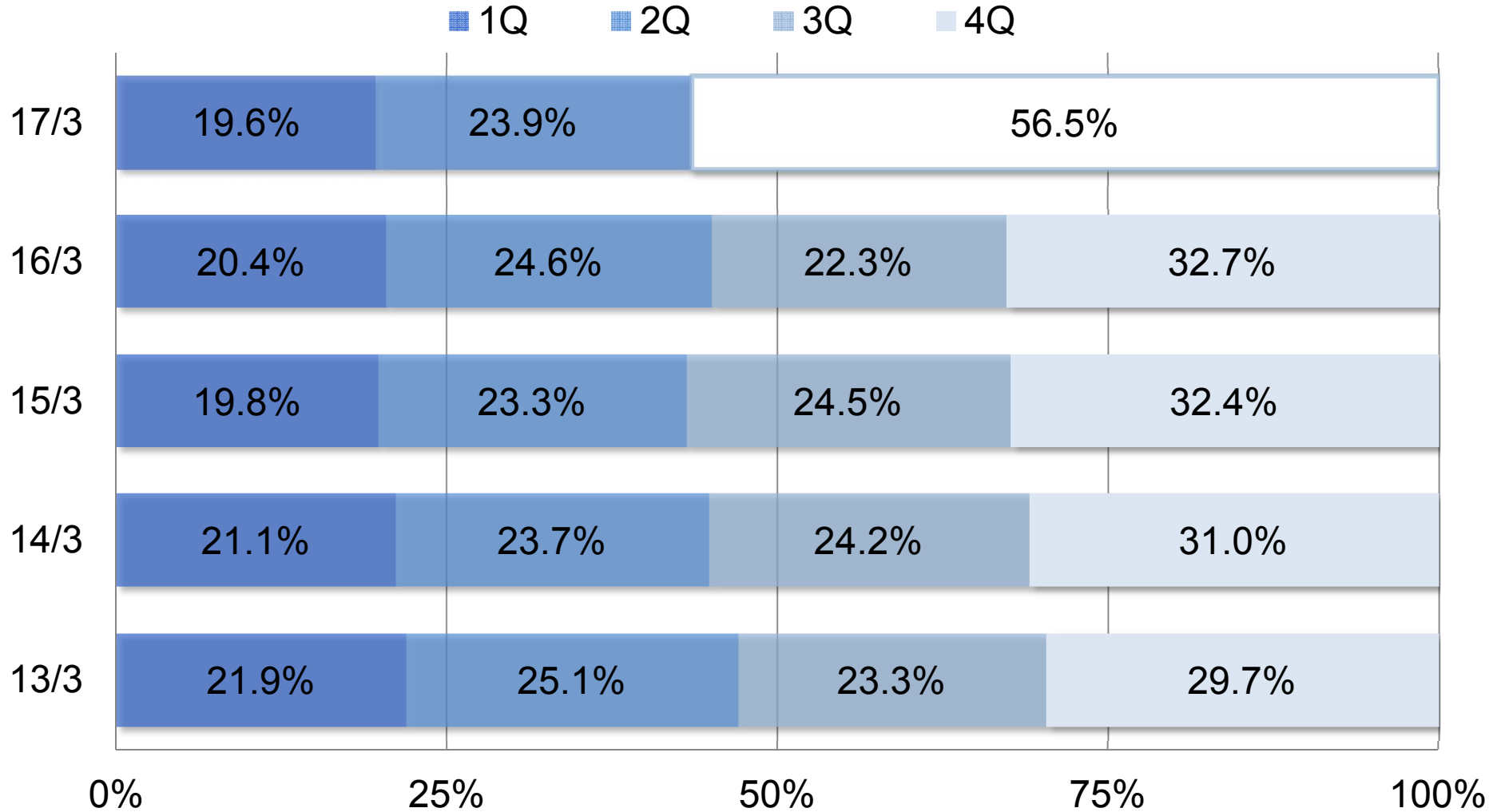
- 1) Overview of Results for First 2 Quarters of Fiscal 2017
 - Amount of Capital Investment, Depreciation and R&D Costs
 - Changes in Composition of Net Sales by Quarter
- 2) Overview of Earnings Forecast for Fiscal 2017
 - (Excerpt from Briefing on Results for Fiscal 2016 presentation materials)
 - Changes in Net Sales, Income and Profit
 - Segment Information
 - Amount of Capital Investment, Depreciation and R&D Costs
- 3) Medium- to Long-Term Business Plan ZGP2020 (From the announcement on 8 May, 2015)
 - Numerical Targets
 - Net sales by Business
- 4) Business Topics

4-1) Overview of Results for First 2 Quarters of Fiscal 2017 (Amount of Capital Investment, Depreciation and R&D Costs)

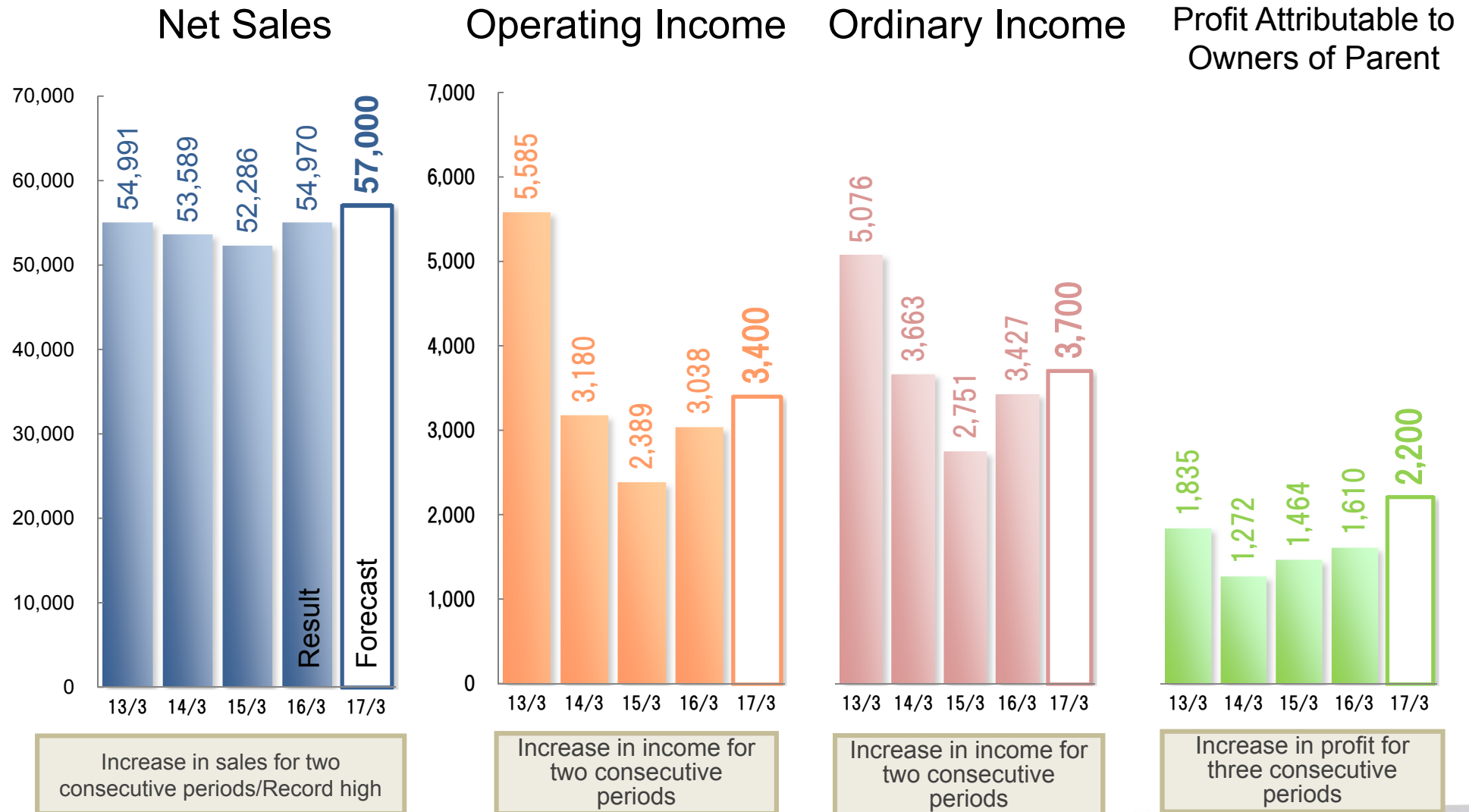


4-1) Overview of Results for First 2 Quarters of Fiscal 2017

(Changes in Composition of Net Sales by Quarter)



4-2) Overview of Earnings Forecast for Fiscal 2017 (Changes in Net Sales, Income and Profit)



4-2) Overview of Earnings Forecast for Fiscal 2017 (Segment Information)

Sales
Composition

84.3%

1. Map Database Segment

Main Items: Printed residential maps, residential map databases, map data for Japanese and overseas in-car navigation systems, services for smartphones, map data provision, etc. for various media/devices



6.2%

2. General Printing Segment

Main Items: Commercial printing



9.5%

3. Other

Main Items: Purchased products, digital signage, direct mail delivery services, in-ship advertising



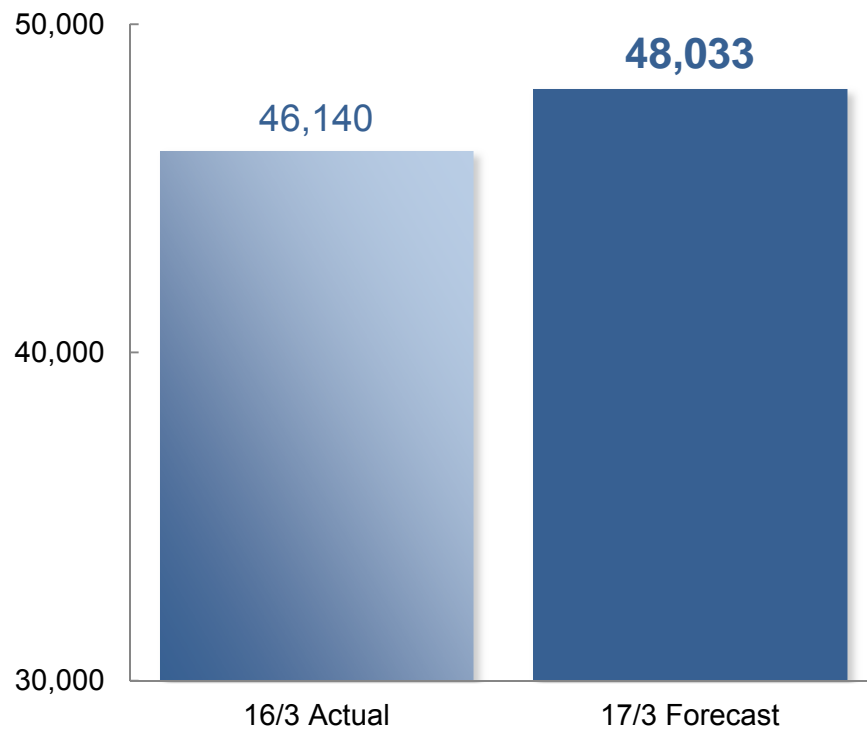
4-2) Overview of Earnings Forecast for Fiscal 2017 (Segment Information)

(Amounts in million yen)

Net Sales

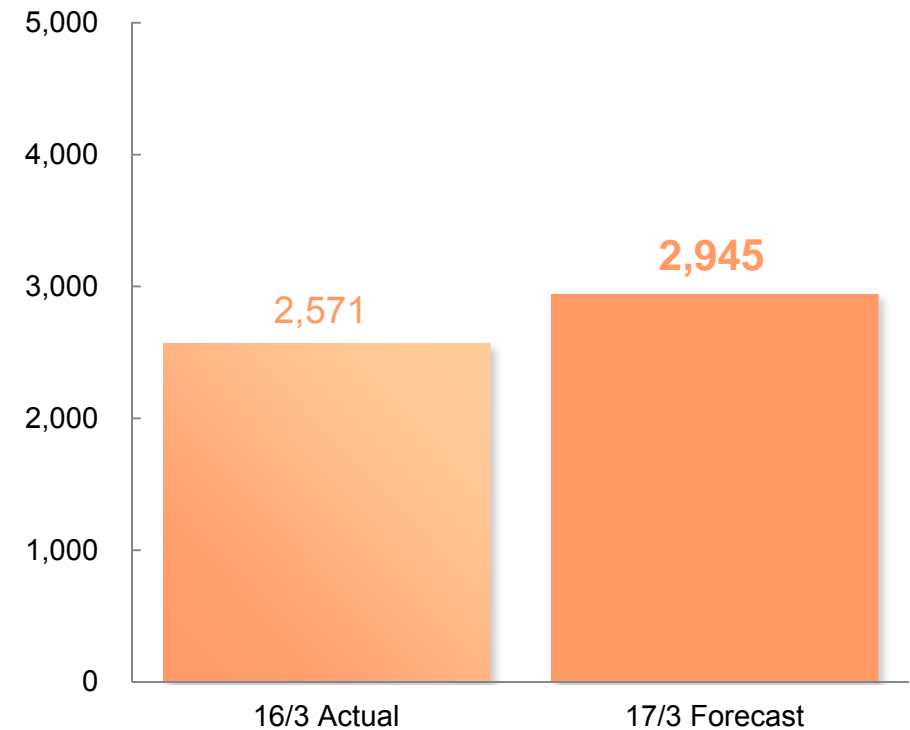
Compared to
FY2016

Up 1,892 (4.1%)



Operating Income

Up 373 (14.5%)

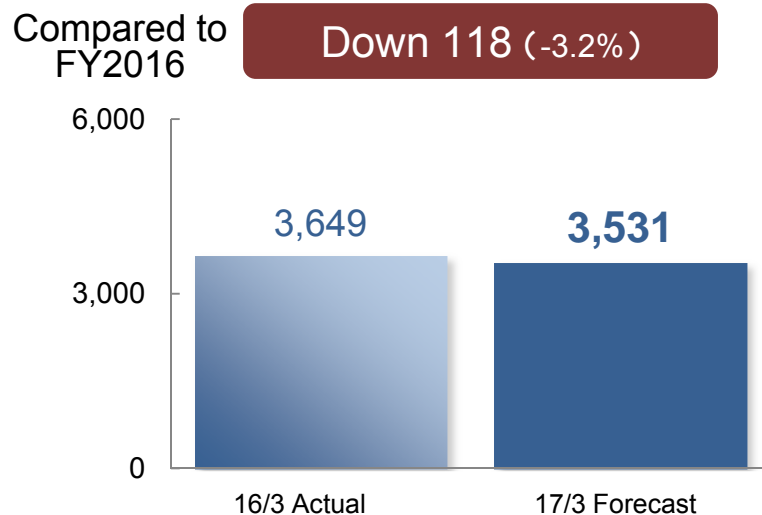


4-2) Overview of Earnings Forecast for Fiscal 2017 (Segment Information)

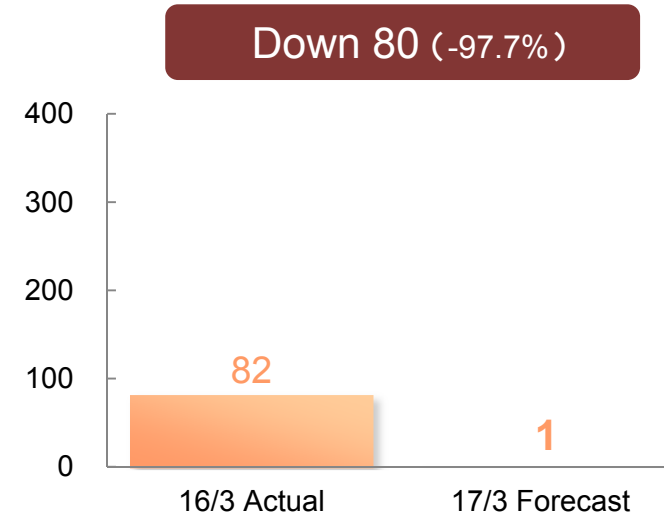
(Amounts in million yen)

General Printing Segment

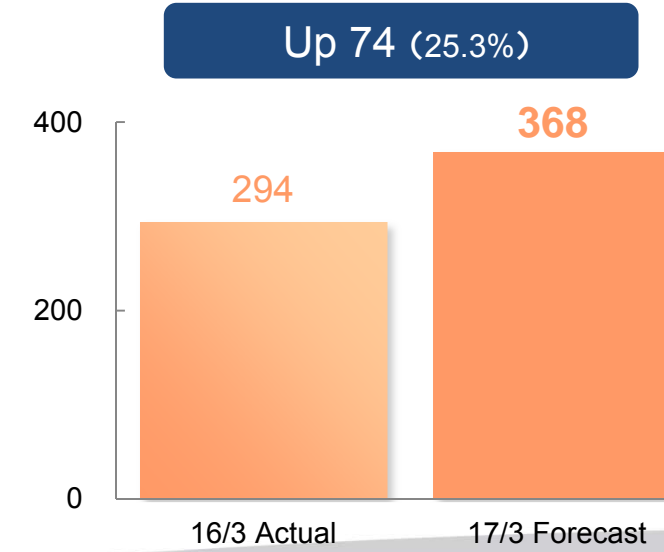
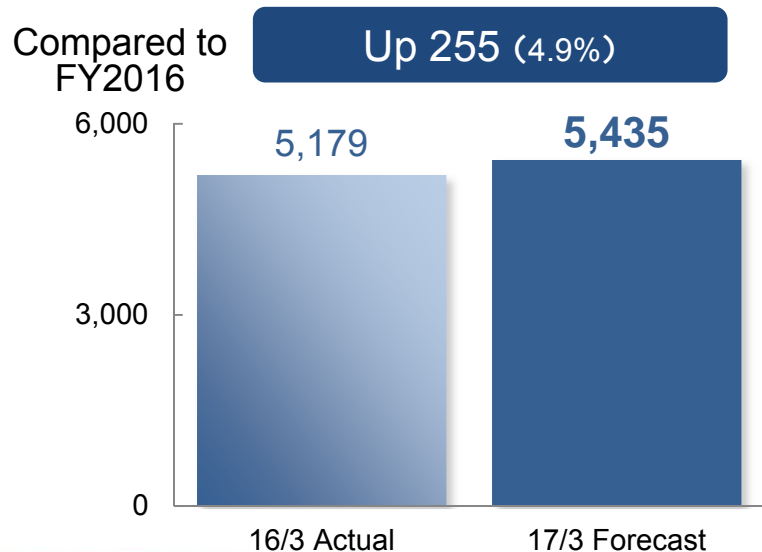
Net Sales



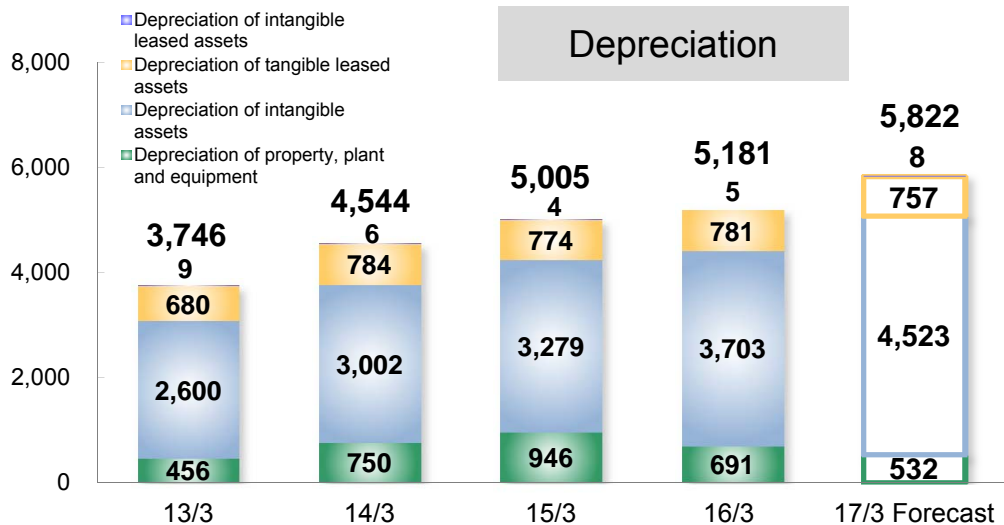
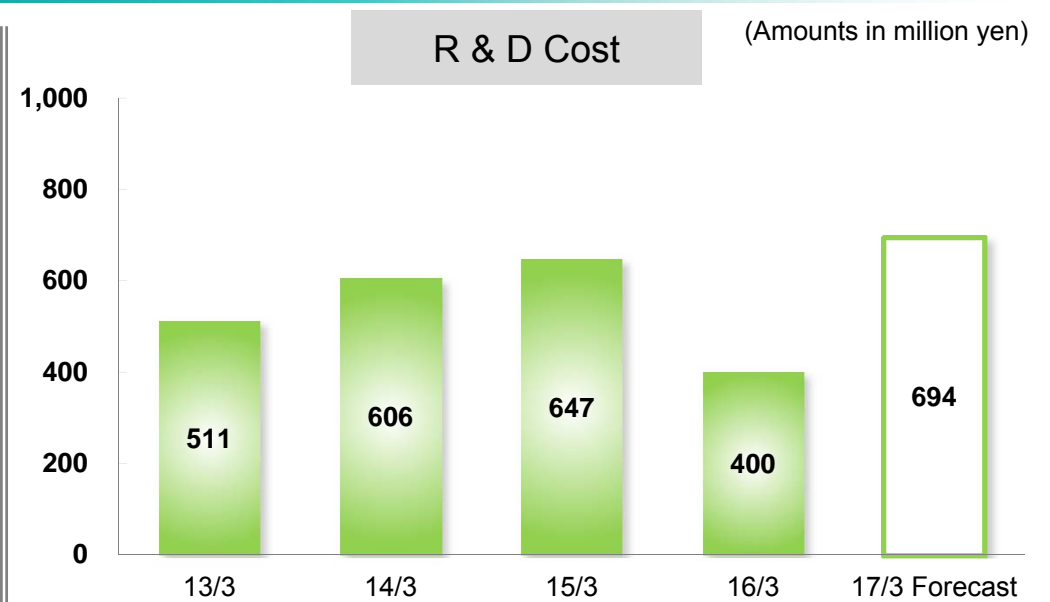
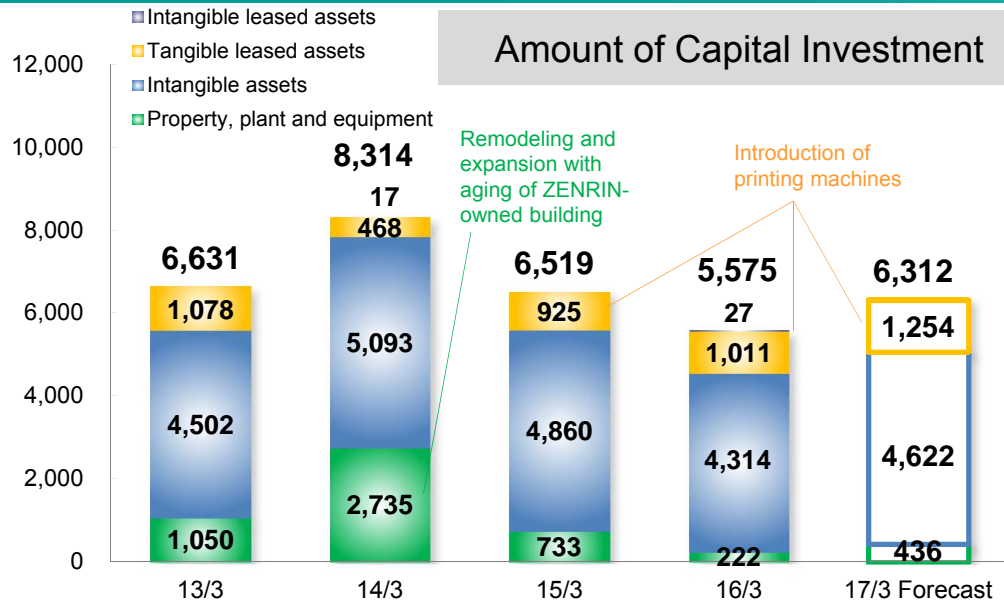
Operating Income



Other



4-2) Overview of Earnings Forecast for Fiscal 2017 (Amount of Capital Investment, Depreciation and R&D Costs)



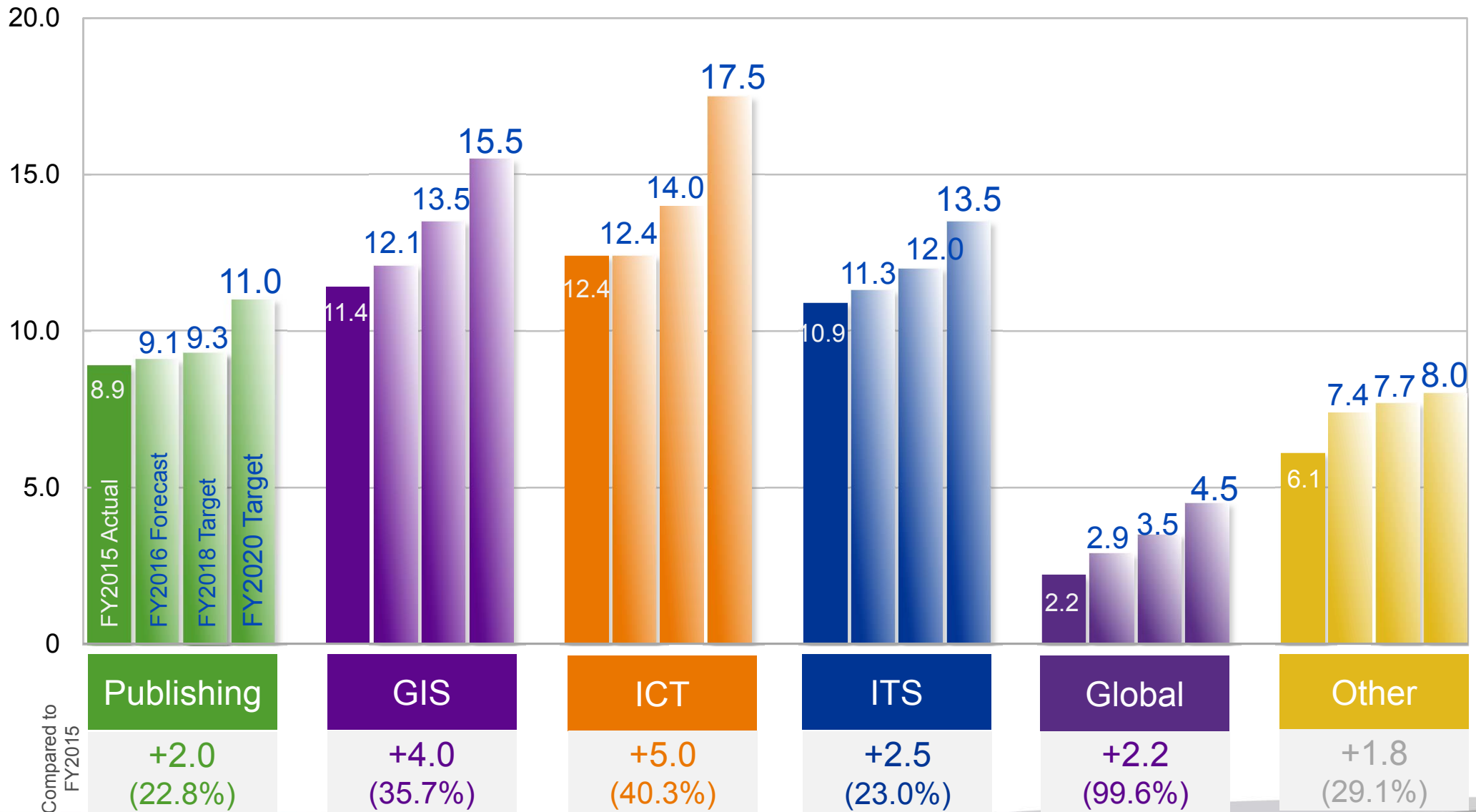
4-3) ZGP2020 Numerical Targets (From the announcement on 8 May 2015)

	FY2015 Actual	FY2016 Forecast	FY2018 Target	FY2020 Target
Consolidated Net Sales	52.2 bn yen	55.5 bn yen	60.0 bn yen	70.0 bn yen
Consolidated Operating Income (Margin)	2.3 bn yen (4.6%)	2.5 bn yen (4.5%)	5.0 bn yen (8.3%)	10.0 bn yen (14.2%)
ROE (Return on equity)	3.9%	4%	8%	12% or higher
DOE (Dividend on equity on a consolidated basis)	3.0%	3% or higher	3% or higher	3% or higher

4-3) Net Sales by Business under ZGP2020

(From the announcement on 8 May 2015)

(Amounts in billion yen)



* Net sales for fiscal 2015 are net sales compiled based on the business composition under ZGP2015.

4-4) Business Topics

■ The map stationery “mati mati” line-up expanded (July 20 and September 2, 2016)

Launched new items and new design areas (6 areas) as the original line-up that started selling in January 2016 gained popularity

◆ Line-up (4 items in total)

- TRAVEL TAG FUSEN (sticky tags) :480 yen 《New》
- 3LAYER mati FILE (clear file) :380 yen
- MAP WRAP NOTEPAD (note pad) :380 yen
- STREET MEMO TAPE (masking tape) :430 yen

◆ Map design areas (9 areas in total)

Kyoto, Umeda, Kobe, Yokohama, Sendai, Sapporo 《New》
Marunouchi, Omotesando, Kichijoji, Fukuoka Tenjin

◆ Distribution network

- Our official online-shop: ZENRIN Store
- Loft (shops in Hokkaido, Tohoku, the Tokyo metropolitan area, Kansai, Kyushu and other areas)
- Omni 7



Publication

■ Acquired 75% of the shares in Abalta Technologies (September 12, 2016)

◆ Outline of Abalta Technologies

Company name	Abalta Technologies, Inc.
Date of establishment	2003
Location (head office)	Torrance, California
Location (development facilities)	San Diego, California Sofia, Bulgaria
Representative	Michael O'Shea
Business	Licensing and contracted development for on-vehicle software solution and location information software <ul style="list-style-type: none"> • Provision of WebLink and SmartLink WebLink: Software to display smartphone applications on on-vehicle equipment and to enable operation of smartphone applications from on-vehicle equipment SmartLink: An environment that is necessary for the realization of connected vehicles that can perform data communication using smartphones as gateway. • Development of various on-vehicle software development kits in the area of on-vehicle infotainment system and software related to location information utilizing maps.

◆ Purpose of the acquisition

Aims to strengthen business particularly in overseas markets through the provision of solutions combining on-vehicle software in addition to our knowhow for map data development and contents development for in-car navigation that we had accumulated through our experience in both Japanese and overseas markets.

<Reference>

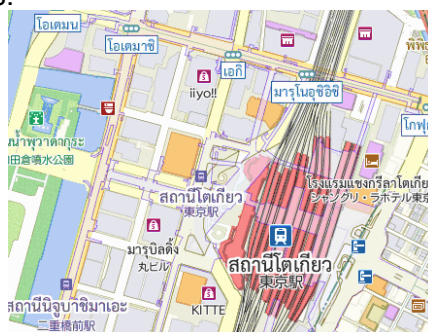
Global business consolidated sales: 4.5 billion yen (FY2020 target)

4-4) Business Topics

■ The “Multi-Language Map” started to accommodate Thai (September 13, 2016)

The “Multi-Language Map” service provided by ZENRIN’s consolidated subsidiary, ZENRIN DataCom Co., Ltd. for corporate customers now accommodates six languages of five countries.

- ◆ Japanese, English, Korean, Chinese (simplified), Chinese (original), Thai
- ◆ Can be incorporated into various services
 - Its-mo NAVI API
 - Store guide package service
 - Area Cutter



(Sample screen image in Thai)

■ “Multi-Language Map Plus” released (September 14, 2016)

ZENRIN’s consolidated subsidiary, Will Smart Co. Ltd. released a multi-language map service called “Multi-Language Map Plus,” which can use digital signage from tablet devices.

A packaged service incorporating the web service that can display information such as map, details of various locations on the map, and route guide on the browser in five languages of four countries with a CMS that enables the registration of original landmarks and a cloud server.



- ◆ Japanese, English, Korean, Chinese (simplified), Chinese (original)
- *Thai will be added.



■ “Its-mo NAVI” series version upgrades with added features

“Its-mo NAVI” series offered by ZENRIN’s consolidated subsidiary, ZENRIN DataCom Co., Ltd., have been upgraded with added features

- ◆ “Its-mo NAVI API/CGI”: A map service for corporate and commercial use (July 21, 2016)
 - Started to offer the multi-modal route search service “Door-to-Door Search” and the nearest bus station search service using “Norikae Annai Biz API” and “All Japan Bus Station Data,” proprietary services offered by Jorudan Co., Ltd.
- ◆ PC website “ZENRIN Its-mo NAVI [Multi]” (September 16, 2016)
 - Three paid maps added for use in different situations
 - Now the maps can be expanded to fit the large screen on the PC site as appropriate in different uses/situations (sightseeing map, landmark map, rain cloud radar)
- ◆ “ZENRIN Its-mo NAVI [Drive]” (September 16, 2016)
 - Upgraded to accommodate “Spin n’ Click,” an application program that assist the use of a smartphone with remote operation, and the “KKP” smartphone remote commander developed by Denso Corporation.



The map can be scrolled and scaled.



4-4) Business Topics

■ Held an exhibition booth at 2016 Melbourne World Congress on Intelligent Transport Systems (October 10-14, 2016)

◆ Introduced the map solution initiatives to realize dynamic maps and an ADAS*1 automatic driving function

<Exhibition contents>

① The automatic driving map solution “ZGM Auto”

“ZGM Auto” is an advanced map solution consisting of a 3D high precision space database and road network data that is being developed by ZENRIN for the realization of an automatic driving function

Introduced map solution initiatives to realize automatic driving function by 2020



② Research and development toward the realization of the generation of dynamic information and timely updates of map data

To realize an automatic driving function, the realization of a function to incorporate dynamic information reflecting the ever-changing situation on the road into the map database and timely updates and provision of map changing point information is expected.

At the exhibition, we introduced our R&D initiative to aggregate, analyze, and utilize car running data (probe information) using an IoT*2 solution for the automobile industry based on IBM Cloud with the cooperation of IBM Japan, Limited.

③ Introduced the initiatives of Dynamic Map Planning Co., Ltd., which was established jointly by 15 companies including ZENRIN, Mitsubishi Electric and PASCO.

*1 ADAS : Advanced Driver Assistance System

*2 IoT : Internet of Things: A mechanism in which various things connected to the Internet control each other through information exchange

ZENRIN

Maps to the Future

ZENRIN CO.,LTD. <http://www.zenrin.co.jp>
Corporate Management Division, Management Control & IR Department
IR contact email: zenrin-ir@zenrin.co.jp