



The Third Mid-term Business Plan (FY2019 - FY2021)



April 26, 2019
TOPCON CORPORATION
President & CEO
Satoshi Hirano



Topcon for Human Life

TOPCON CORPORATION

The Third Mid-term Business Plan (FY2019 - FY2021)

April 26, 2019

Event Summary

[Company Name]	TOPCON CORPORATION	
[Event Type]	Earnings Announcement Mid-term Business Plan Presentation	
[Event Name]	FY2018 Financial Results The Third Mid-term Business Plan (FY2019 - FY2021)	
[Date]	April 26, 2019	
[Time]	15:30 – 16:30 (Total: 60 minutes, Presentation: 45 minutes, Q&A: 15 minutes)	
[Venue]	Shin-Marunouchi Building 9F Shin-Marunouchi Building Conference Square Room 901 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6590	
[Venue Size]	240 m ²	
[Participants]	89	
[Number of Speakers]	4	
	Satoshi Hirano	Representative Director, President & CEO
	Takashi Eto	Director, Managing Executive Officer
	Haruhiko Akiyama	Director, Executive Officer
	Fumio Ohue	Managing Executive Officer

The Third Mid-term Business Plan **(FY2019 - FY2021)**

- I . Topcon's Future Direction**
- II . The Second Mid-term Business Plan Review**
- III. The Third Mid-term Business Plan**
- IV. Growth strategy by Business**



©2019 Topcon Corporation

Topcon for Human Life 1

Now, I would like to explain the third mid-term business plan. I will talk about Topcon's future direction first, and then review of the second mid-term business plan, and move on to the third mid-term business plan, and growth strategy by business.

Topcon's Future Direction

Vision

Expand our businesses and **solve the societal challenges** within the growing market of Healthcare, Agriculture and Infrastructure.

Long-term Goal

FY2025 Sales ¥250B, ROE over 15%



©2019 Topcon Corporation

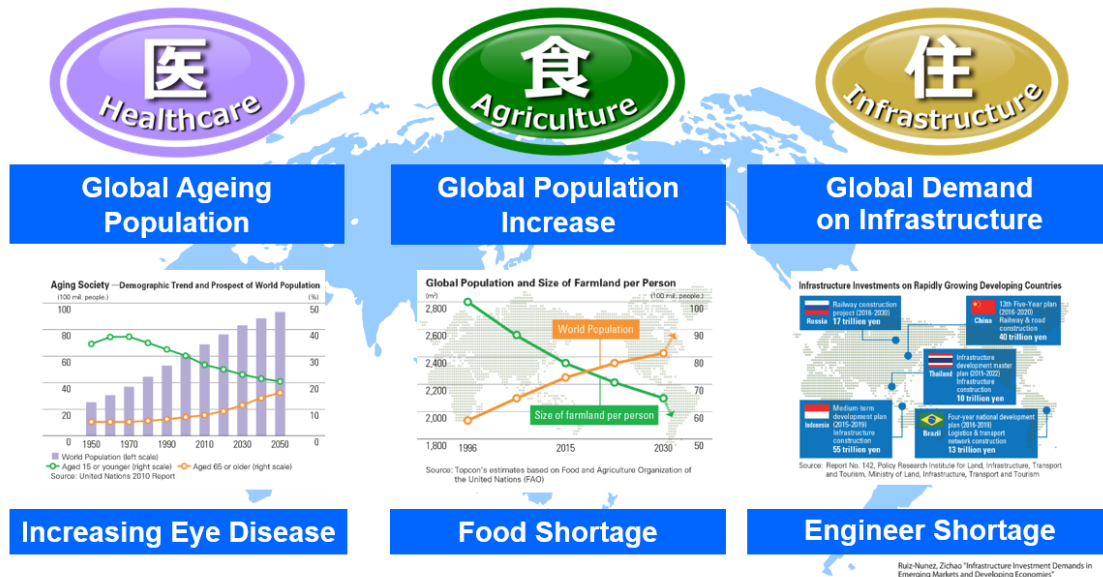
Topcon for Human Life

3

First, Topcon's vision is to expand our businesses and solve the societal challenges in the growing market of Healthcare, Agriculture and Infrastructure. Our long-term targets for FY2025 are total sales of 250 billion yen and ROE of 15% or more.

Topcon's Future Direction

Societal challenges to be addressed by Topcon

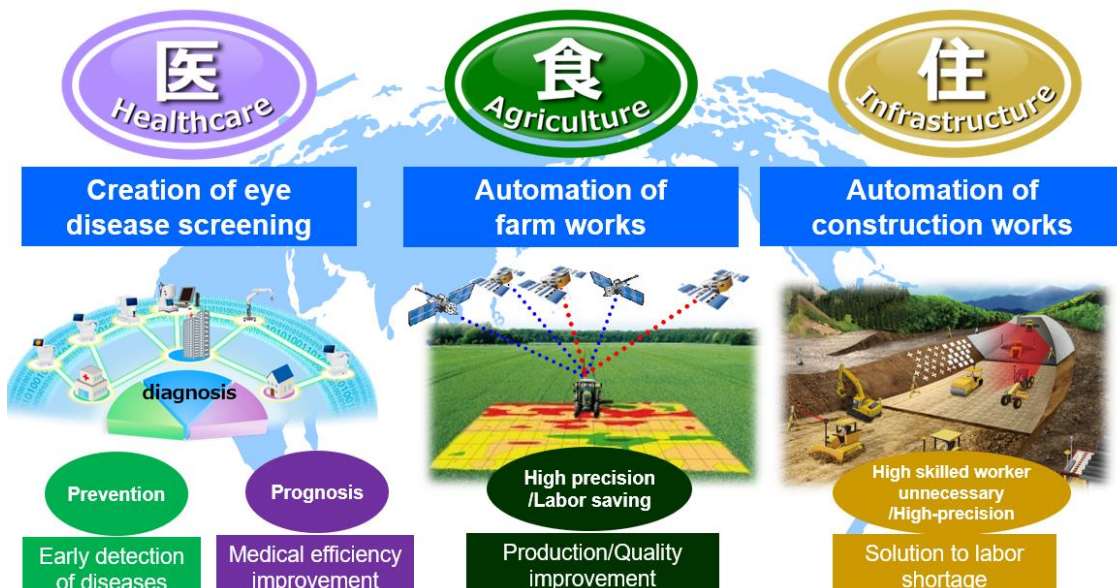


©2019 Topcon Corporation

Topcon for Human Life 4

Topcon's Future Direction

Topcon's solution for the societal challenges



©2019 Topcon Corporation

Topcon for Human Life 5

I will talk about the societal challenges that Topcon is being addressed and our solutions for such challenges later when I explain our growth scenario by segment in the third mid-term business plan.

Topcon's Future Direction

Although Healthcare, Agriculture and Infrastructure are **major industries**, they are **way behind in automating the process and adopting IT**



©2019 Topcon Corporation

Topcon for Human Life 6

Healthcare, Agriculture, and Infrastructure are major industries which are 7 to 8 times the size of automotive industry. I would like you to remember that these industries are way behind in automating the processes and adopting IT despite their huge markets.

II . The Second Mid-term Business Plan Review



©2019 Topcon Corporation

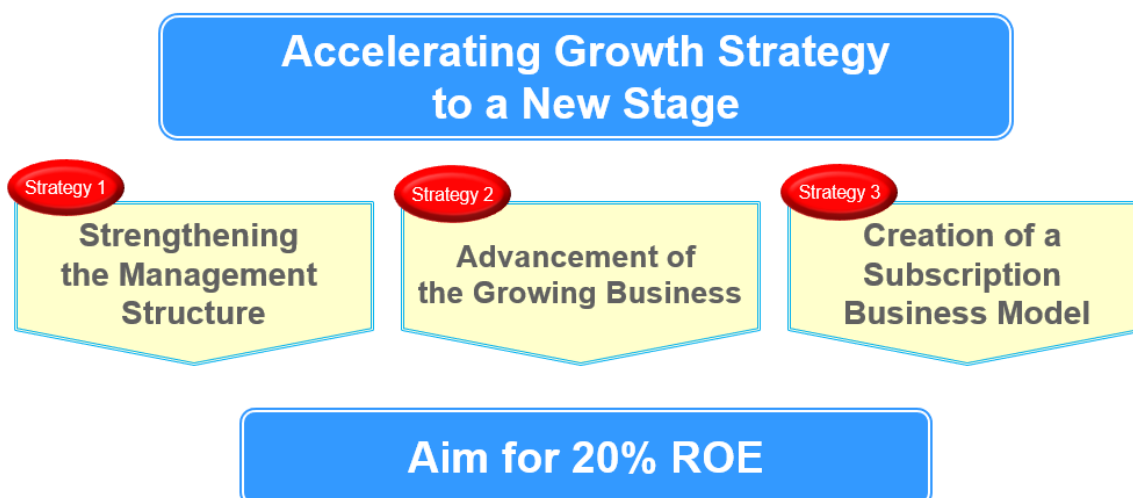
Topcon for Human Life 7

Now, I will review the second mid-term business plan.

The Second Mid-term Business Plan Review

The Second Mid-term Business Plan

(FY2016 - FY2018)

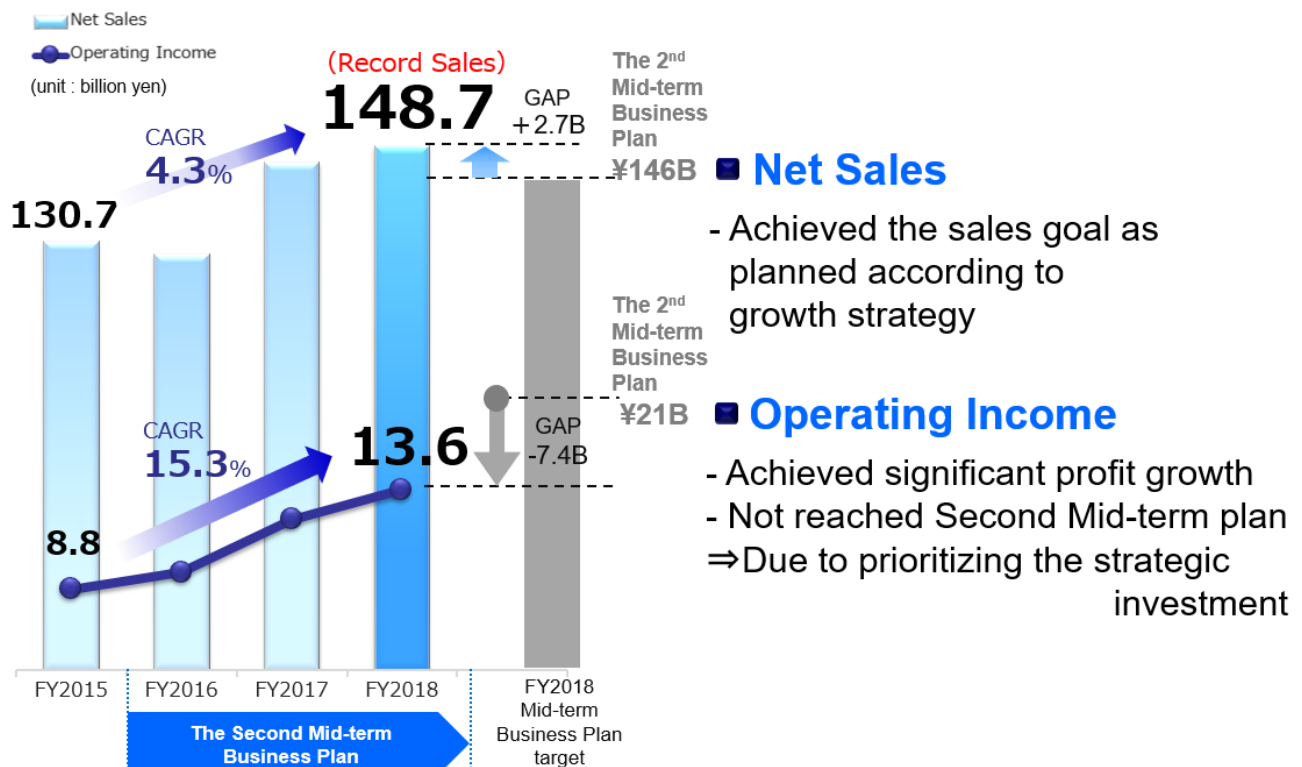


©2019 Topcon Corporation

Topcon for Human Life 8

The slogan for the second mid-term business plan was "Accelerating Growth Strategy to a New Stage." We had three strategies: strengthening our management structure, advancement of our growing businesses, and creation of a subscription business model. We set target ROE at 20%. We will review our results.

The Second Mid-term Business Plan Review



©2019 Topcon Corporation

Topcon for Human Life

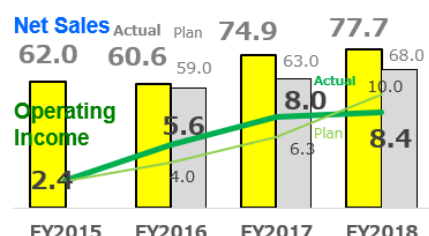
9

We achieved the planned sales goal set forth in our growth strategy. Unfortunately, our operating income was 13.6 billion yen, falling short of planned target of 21 billion yen due to prioritizing the strategic upfront investment. However, note that our operating income significantly increased from 8.8 billion yen for FY 2015 to 13.6 billion yen.

The Second Mid-term Business Plan Review



(unit: billion yen)



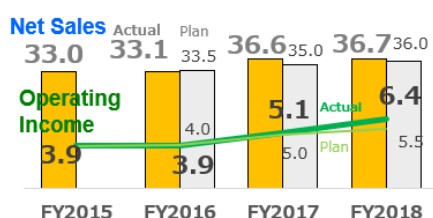
Positioning

Net Sales

- Significant revenue growth
- Achieved Mid-term plan

Operating Income

- Significant OP growth
- Achieved cumulative 3 year total in spite of temporal market stagnation in FY18



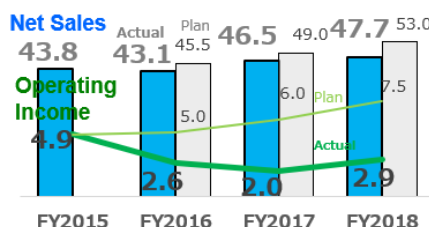
Smart Infrastructure

Net Sales

- Revenue increase
- Achieved Mid-term plan

Operating Income

- Significant OP growth
- Improvement of profitability
- Achieved Mid-term plan



Eye Care

Net Sales

- Revenue increase
- Growth of 3D OCT sales
- Not reached Mid-term plan

Operating Income

- Not reached Mid-term plan: Strategic upfront investment
- Confidence in Screening Business



©2019 Topcon Corporation

Topcon for Human Life 10

Now, I will go into detail. These colored bar graphs show net sales by business, and planned targets are shown in gray. Our results and planned targets of operating income are shown in bold and fine lines, respectively. In the Positioning, despite a slowdown in growth for FY2018, we achieved both significant revenue growth and planned targets. We achieved significant growth in operating income and cumulative three-year total in spite of temporary market stagnation in FY2018.

In the Smart Infrastructure, both net sales and operating income increased, and met planned targets.

In the Eye Care, both net sales and operating income increased compared with those for FY2017, but fell short of the planned mid-term targets, unfortunately. Shortfall in Eye Care contributed to shortfall in consolidated results. Note that this is due to upfront investment to start up the Screening Business. Confidence in Screening Business has led to increase in net sales for FY2018. I will discuss the third mid-term business plan in light of the above.

The Second Mid-term Business Plan Review



	The First Mid-term Business Plan		The Second Mid-term Business Plan	
	Actual		Actual	Plan
Management efficiency	FY2013-15		FY2016-18	FY2016-18
Effect of improving operating income over 3 year period	¥4.3B	➔	¥5.5B	¥6.0B
Cash Flow				
Operating CF over a 3 year period	¥29.4B	➔	¥47.2B	¥52.0B
Capital efficiency	FY2015		FY2018	FY2018
ROE	6.9%	➔	9.8%	15%
Shareholder Return				
Dividend/Payout Ratio			FY2016 ¥16/39%	FY2017 ¥20/35% ➔ FY2018 ¥24/39%



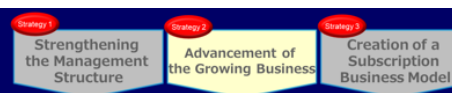
©2019 Topcon Corporation

Topcon for Human Life

11

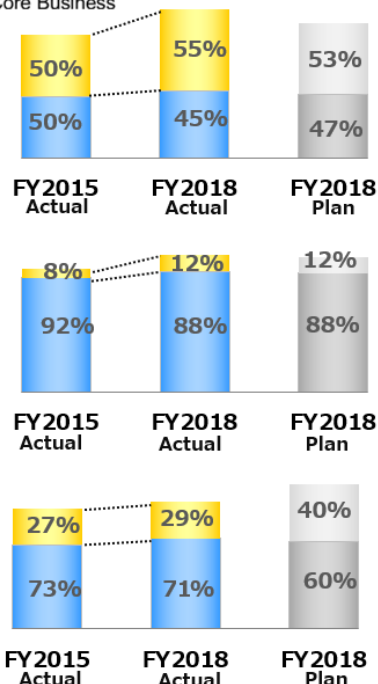
Next, I will turn to financial results. We have largely achieved improvement of management efficiency in terms of improving operating income: We have generated 5.5 billion yen against our planned target of 6 billion yen. Although cash flow of 47.2 billion yen has fallen short of our planned target of 52.0 billion yen, cash flow in the second mid-term business plan has greatly improved as compared to that in the first mid-term business plan. Our capital efficiency, or ROE has been 9.8% against planned 15%. As for shareholder returns, we paid an annual dividend of 16 yen, 20 yen and 24 yen per share, and achieved the dividend payout ratio of 39%, 35%, and 39% for FY2016, FY2017, and FY2018, respectively.

The Second Mid-term Business Plan Review



Advancement of the Growing Business

■ Growing Business
■ Core Business



Positioning

Achieved

Advanced Growing Business

- **IT Construction**
Expansion of OEM Business by differentiated technology
- **IT Agriculture**
Further expansion of after market and OEM

Smart Infrastructure

Achieved

Advent of ICT in Japan

- **i-Construction**
Opened 4 training centers nationwide to facilitate the spread of i-Construction in Japan
- **IT Agriculture in Japan**
Took a lead to develop the market by promoting Auto Steering System (after market)

Eye Care

Confidence on Launch of Screening Business

- **Screening Business**
 - Foreign optical chain store deployed the Maestro
 - Initiated autonomous AI diagnosis (for D.R.) in the US
 - Established software development subsidiary in the US
 - Launched new IoT platform



**"i-Construction" is a registered trademark of National Institute for Land and Infrastructure Management, MLIT, Japan.

©2019 Topcon Corporation

Topcon for Human Life

12

Now, I would like to discuss advancement of the growing businesses.

We have successfully increased Positioning to 55% versus planned 53%, up from 50%.

We have also increased Smart Infrastructure to 12% as planned with the advent of ICT in Japan.

In Eye Care, despite positive feedback on our launch of Screening Business, we have fallen short of planned target of 40% with shortfalls in net sales and operating income on a consolidated basis. On a positive note, I will talk about the introduction of our 3D OCT Maestro in overseas optical chain stores later. Furthermore, we have partnership with AI venture to start autonomous AI diagnostic service for Diabetic Retinopathy in the US. These new moves in establishing the screening business is now led by our software development subsidiary in the US, established last year. They already have released a new IoT platform and data management software associated with this business. I will discuss these developments later in the chapter of the third mid-term business plan.

The Second Mid-term Business Plan Review

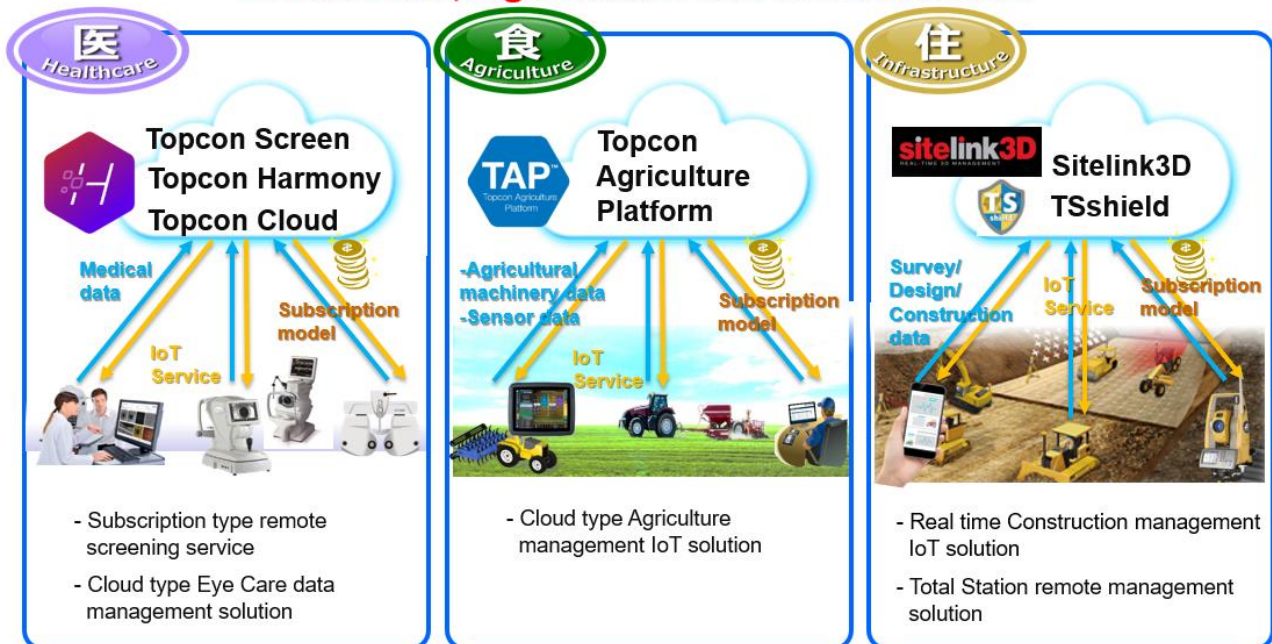
Strategy 1
Strengthening
the Management
Structure

Strategy 2
Advancement of
the Growing Business

Strategy 3
Creation of a
Subscription
Business Model

Creation of a Subscription Business Model **Achieved**

**Build a Subscription Business platform in all segments:
Healthcare, Agriculture and Infrastructure**



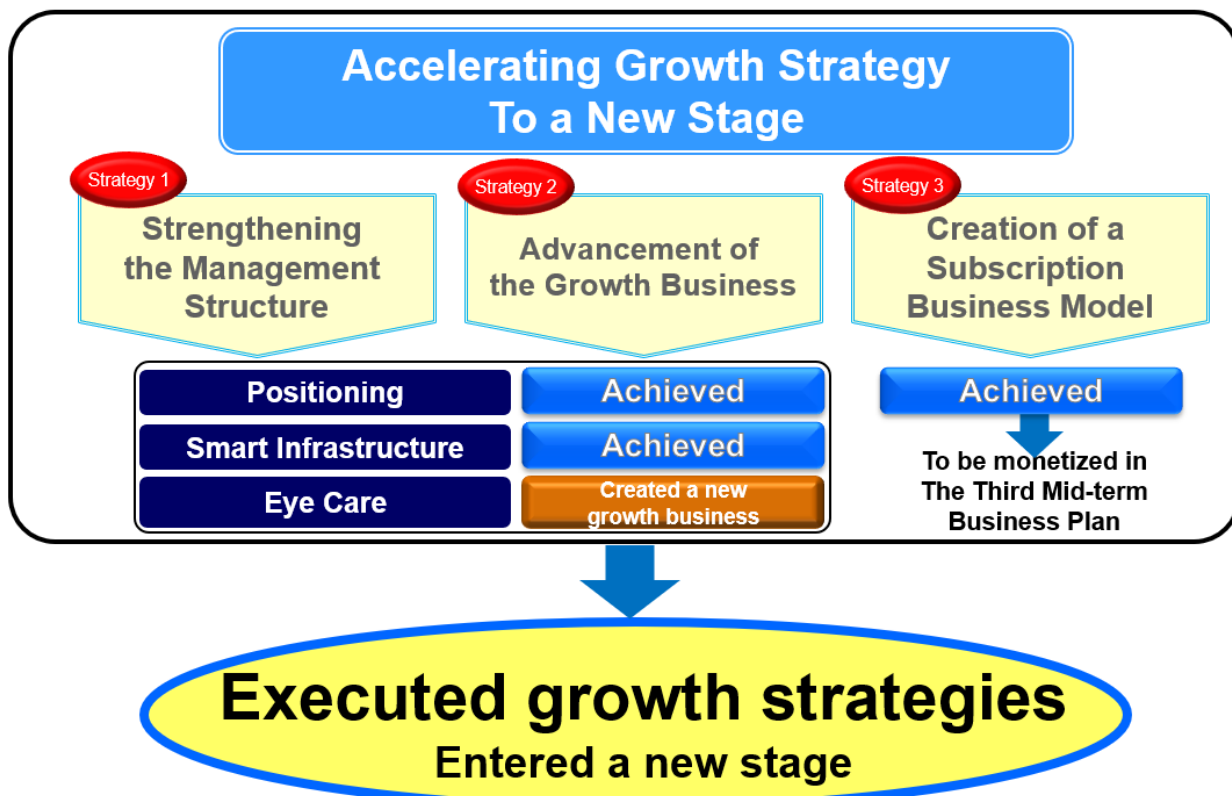
TOPCON

©2019 Topcon Corporation

Topcon for Human Life 13

Lastly, we say we have achieved creation of a subscription business model. We have built subscription business platforms in all segments of Healthcare, Agriculture, and Infrastructure. I believe these platforms will greatly contribute to the third mid-term business plan.

The Second Mid-term Business Plan Review Summary



©2019 Topcon Corporation

Topcon for Human Life 14

To summarize the review, we have achieved strategy 1 and Strategy 2 in Positioning and Smart Infrastructure. Unfortunately, we have not achieved them in Eye Care despite getting positive feedback.

We have achieved creation of a subscription business model, and expect to be monetized in the third mid-term business plan. All in all, we have executed growth strategy under the second mid-term business plan and successfully entered into a new stage which is the third mid-term business plan we will discuss about from now on.



Ⅲ. The Third Mid-term Business Plan



©2019 Topcon Corporation

Topcon for Human Life 15

Let's move on to the third mid-term business plan.

The Third Mid-term Business Plan

Long-term
Goal

FY2025 Sales ¥250B, ROE over 15%

The Third Mid-term Business Plan (FY2019 - FY2021)

Acceleration of Growing Business

Strategy 1

Acceleration of
business development
in the **growing market**

Strategy 2

Strengthen
profitability of
Core Business

Strategy 3

Creation of
new potential market

Aim for ROE 15%



©2019 Topcon Corporation

Topcon for Human Life 15

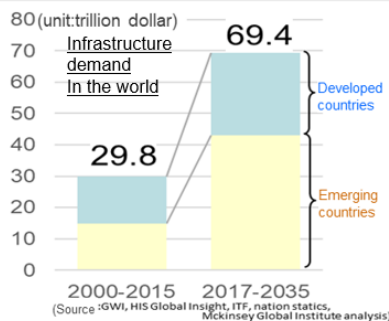
As mentioned earlier, we will aim for sales of 250 billion yen and ROE of over 15% for FY2025. Between FY2019 and FY2021, we will accelerate growth business by executing three Strategies: further business development in growing market, raise profitability of core business, and create a potential new market.

Before talking more about these three strategies, I will focus on our growth scenario leading to the long-term goal.

Societal Challenge

Shortage of skilled workers

Increasing demand for Infrastructure



Shortage of skilled worker in construction



Solution

Automation of construction

by robotization of construction machinery and unification of work flow

- Productivity improvement
- Elimination of labor shortage



Topcon's unique technology

① IT Construction technology

⇒ Machine Control System utilizing precision GNSS technology

② 3D Measurement technology

⇒ Sensor digitization which realize unification of work flow

IT Construction Machinery



3D printer robot



3D Measurement

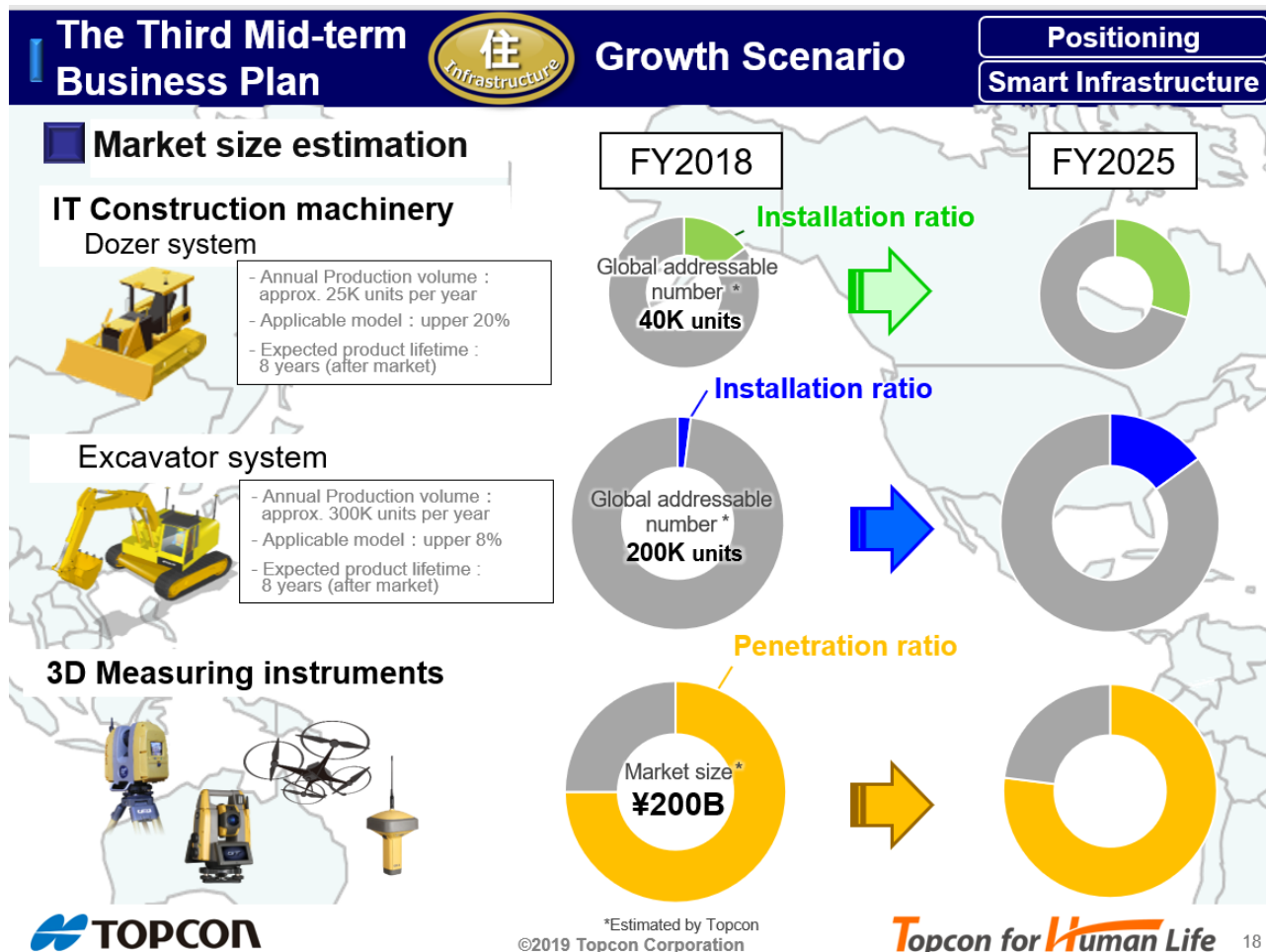
Precision GNSS



Aerial photogrammetry

17

First, I will discuss our growth scenario in Infrastructure: this is a common strategic scenario for both Positioning and Smart Infrastructure business. The societal challenge in this business area is shortage of skilled workers despite increasing demand for infrastructure. This chart shows the continued strong demands in infrastructure in global scale. Our solution is automation of construction process to improve productivity and eliminate labor shortage. This image shows construction workflow from survey, design, construction to inspection. We will robotize construction machinery which used to be operated manually that highly dependent on the experience and instinct of skilled operators. Automation requires unified 3D data. We will make full use of our surveying instruments including 3D measurement instruments to capture the 3D data, also supply machine control technologies utilizing precision GNSS technology to realize automation of construction workflow.



This shows our estimation of the market size of IT construction machinery and 3D measuring instruments.

We don't produce bulldozers or excavators, but we possess a system to automate these machines. We estimate current addressable market for dozer system to be 40,000 units. Let me explain how we estimate it. 25,000 units of dozers are produced annually worldwide. We think applicable models account for top 20% with a service life of 8 years.

$$25,000 \text{ units} \times 0.2 \times 8 \text{ years} = 40,000 \text{ units}$$

We estimate current installation ratio would be approximately 15%, which would nearly double in FY2025. This happens not cumulatively but annually.

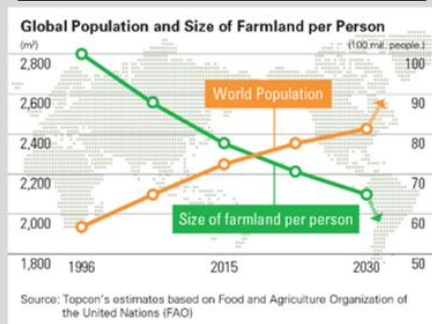
Meanwhile, annual production volume of excavators is 300,000 units, which is much more than that of dozers. We assume applicable models account for top 8% with a useful service life of 8 years. So it comes to close to 200,000 units. Out of 200,000 units, we assume installation ratio would be yet 2% annually, thus much room to grow for the future. On the other hand, we think that sales prices of excavator system would go down faster than those of dozer system.

3D measurement instruments include surveying instruments, 3D laser scanners, UAVs, and GNSS. All of them have been widely used already. We estimate their market size to be about 200 billion yen, but pretty much matured market where less penetration improve would be expected.

Societal Challenge

- Food Shortage
- Shortage of skilled workers

- Global population increase
- Decreasing size of farmland per person



Food shortage



Population aging /
Decreasing of skilled worker



Solution

Automation of Agriculture

by automation of steering and unification of data management

Improvement
of productivity
and quality



Topcon's unique technology

① IT Agriculture machinery

⇒Auto-steering system utilizing precision GNSS technology

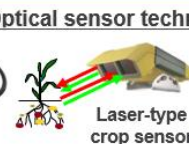
② Optical Sensor technology

⇒Digitization with crop monitoring sensor and yield sensor

IT Agriculture system

Optical sensor technology

Auto-Steering system
for farm machinery



Laser-type
crop sensor

Next, I will talk about growth scenario in our Agriculture which is related to our Positioning and Smart Infrastructure. The left graph shows that farmland per person will decrease as global population increases year by year. This brings about food shortage and shortage of skilled farmers. Our solution is automation of agriculture to improve productivity and quality. To realize our solution, we offer automatic operation of agricultural machinery and unified data management: first, we offer auto-steering system utilizing precision GNSS technology; second, our optical crop monitoring sensor and yield sensor allow digitization to measure crop growth easily so that necessary amount of water and fertilizer can be sprinkled. We have come up with systems and mechanisms and put them into commercialization.

Market size estimation

IT Agriculture machinery

Auto-steering systems for tractor

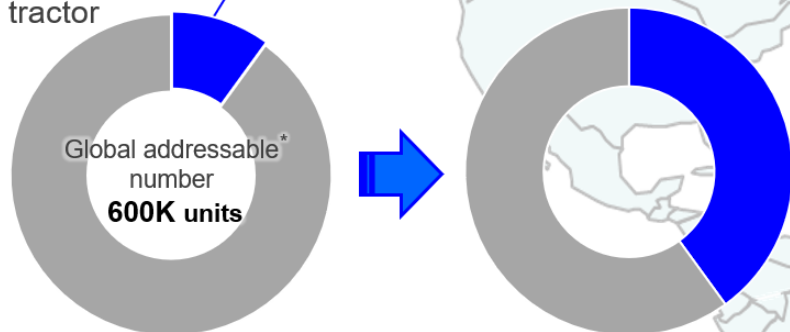


- Annual Production volume : approx. 1.5M units per year
- Applicable model : upper 5%
- Expected product lifetime : 8 years (after market)

FY2018

FY2025

Installation ratio



*Estimated by Topcon



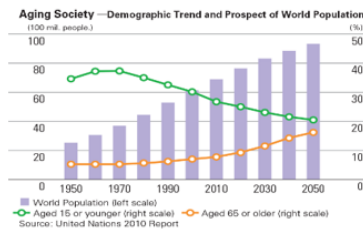
©2019 Topcon Corporation

Topcon for Human Life 20

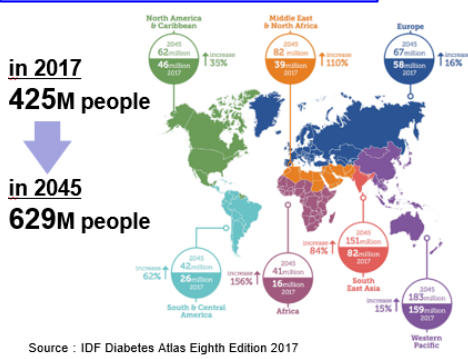
I will talk about the estimated market size of automated farm machinery. Annual production volume of tractors is 1.5 million units. The volume is higher than that of excavator. India produces the highest volume of tractors. Our potential market, or applicable models would account for upper 5% with a useful life of 8 years. It comes to about 600,000 units of estimated applicable tractors. The left chart shows new installation ratio in FY 2018. Given that automation of tractors and farm machinery is proceeding most rapidly, the right chart shows installation ratio in FY2025. The market size would be very large. On the other hand, we think sales prices of such automated farm machinery would go down.

Eye care market environment

Global aging population



Increasing diabetes population



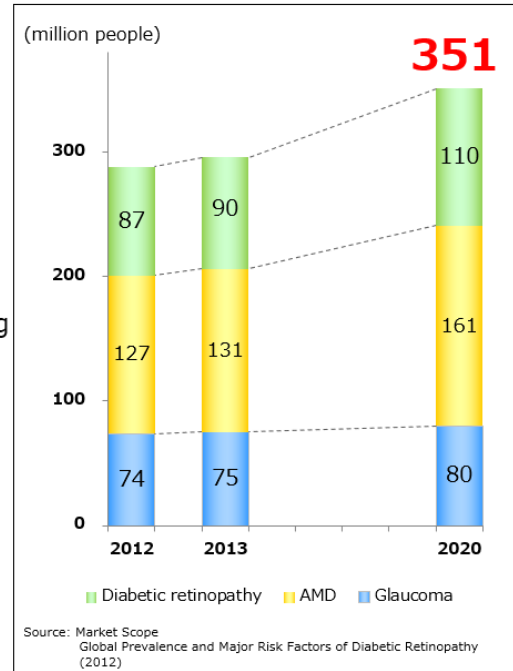
Societal Challenge

- Increase of eye diseases
- Rising medical cost

Natural increase



Complicating disease

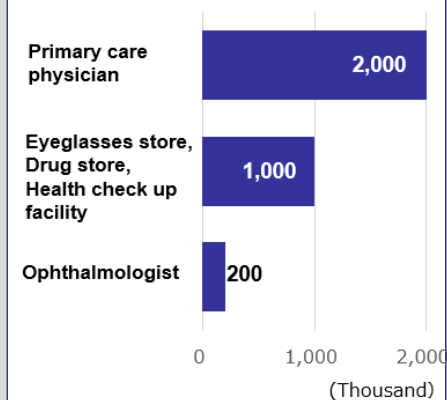


Now, I will turn to growth scenario in Eye Care. The world population is expected to rise to 9 billion in 2050. We estimate that ratio of the elderly aged 65 or older would account for nearly 20%. With global population aging, eye diseases are increasing. The diabetes population is increasing rapidly: 425 million diabetic patients in 2017 are expected to rise to 629 million in 2045. Retinopathy and other complications due to diabetes will become more common. The graph on the right shows that patients with glaucoma, AMD, or diabetic retinopathy are expected to rise to 351 million in 2020. The patients would further increase in the future.

Societal Challenge

Shortage of ophthalmologists to cope with rapidly increasing eye diseases
(351 million patients)

The world's number of Primary care physician, Ophthalmologist and Eyeglasses store, etc.



TOPCON

Solution

Creation of Eye disease screening
by Primary care physicians, Eyeglasses stores, Drug stores, etc.

Early detection
Early treatment
Medical efficiency improvement



Realization

Topcon's unique technology

**Full automatic Screening equipment :
Easy operation with less expertise**

Full Automatic



3D OCT Maestro

- fully automatic OCT and color fundus photography
- Reporting function indicating possibility of 3 major eye disease

TRC-NW400

- fully automatic color fundus photography
- Early detection of 3 major eye diseases



A major social challenge is serious shortage of ophthalmologists to cope with 351 million patients with eye diseases. This graph shows that there are only about 200 thousand ophthalmologists worldwide. On the other hand, there are two million primary care physicians. There are also one million eyeglasses stores, drug stores, and health checkup facilities. If 200 thousand ophthalmologists should see 351 million patients, one ophthalmologist has to see about 1,800 patients, which is impossible. As our solution to that problem, we offer screening machines of eye diseases aiming for early detection and early treatment. We have proposed a system for eye screening that has not been systematized. By creating an eye disease screening business, we aim for early detection and treatment. Of course, this is what is generally said throughout healthcare. There are only 200,000 ophthalmologists, so we thought it would be good if primary care physicians, optical chain stores, and drug stores can be utilized. The biggest bottleneck is that it must be a diagnostic device that can be used with less expertise. Topcon's unique technology realized the fully automatic screening equipment. The 3D OCT Maestro and fundus camera NW400 are the devices, which has been introduced many times. It is the key to realize easy operation with less expertise, so we think primary care physicians, optical chain stores, and drug stores can perform screening for eye diseases. We have focused on screening for some years, and continued upfront investment in Screening Business. Our investment is paying off.

Case example of Eye diseases' screening

Major optical chain store, Specsavers*, deployed
250 units of 3D OCT Maestro

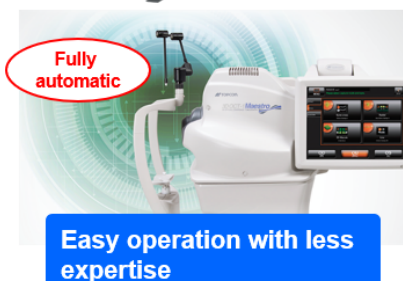
Effect **Early detection**

Specsavers' case :

Glaucoma Detection Rate : 8%

Approximately 10,000 cases of suspected glaucoma were detected
out of 125,000 people screened (in a year)

3D OCT-1 Maestro
3D OPTICAL COHERENCE TOMOGRAPHY

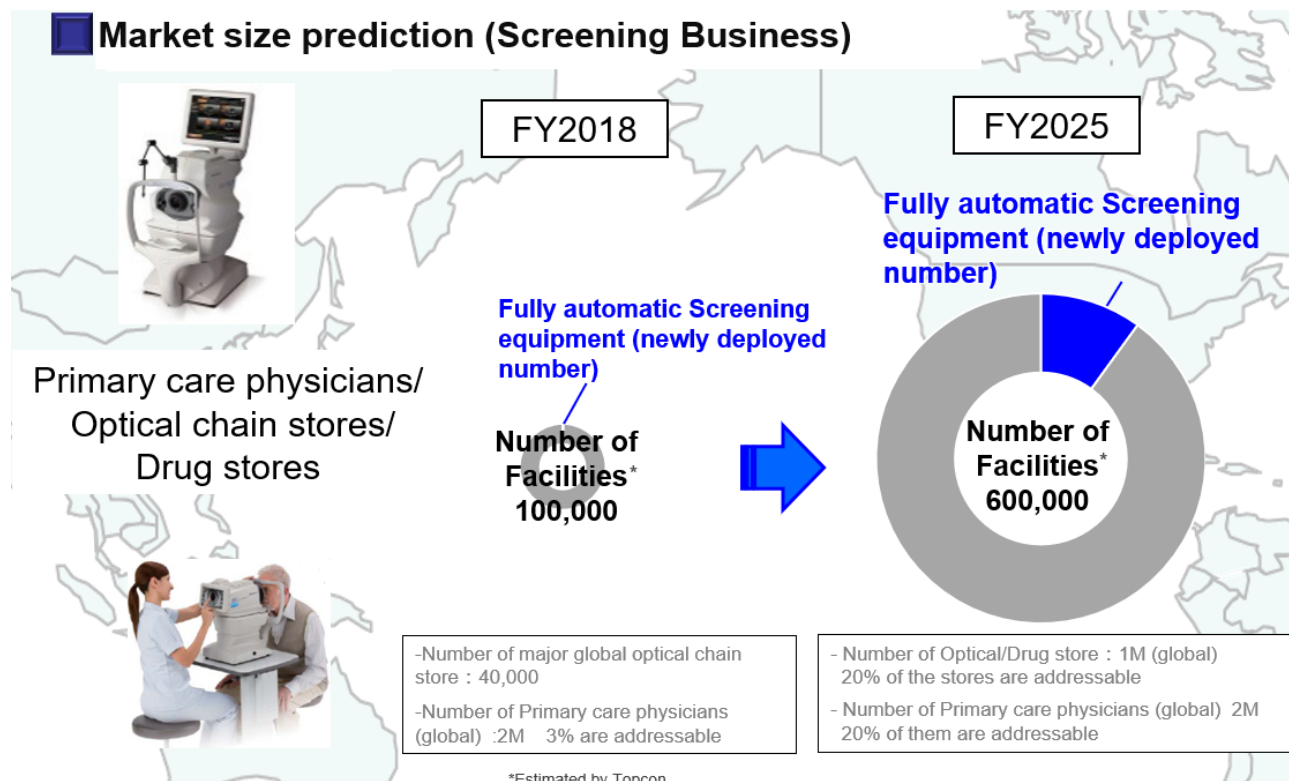


Expectations of early treatment,
improvement of medical efficiency and
medical quality

Specsavers* Optical chain store with 1,600 stores in 10 countries

To give an example, major optical chain store Specsavers deployed 250 units of our 3D OCT Maestro, and have deployed more than 300 units so far. As a result, 125,000 customers who came to buy eyeglasses were screened, and 10,000 cases of suspected glaucoma were detected in a year. The detection rate is 8% among people with no symptoms. We feel confident that our easy-to-use Maestro can contribute to Screening Business and can be used in optical chain stores.

Market size prediction (Screening Business)



©2019 Topcon Corporation

Topcon for Human Life 24

This shows market size prediction of Screening Business. There are still small numbers of fully automatic screening equipment newly deployed in FY2018. As I mentioned as an example, major optical chain store can be seen as our market. Out of two million primary care physicians worldwide, we estimated only 3% would deploy our screening equipment as Screening Business has not been established in ophthalmology. Fully automatic screening equipment have probably been newly deployed in 100,000 facilities, some percent of which installed our Maestro and fundus camera NW400.

Screening Business will definitely become a large market in FY2025 because eye diseases will increase among over 60s, leading to high demand for screening. So we estimate about 20% of optical chain stores, drug stores, and primary care physicians would become the market. That means around 600,000 facilities and stores. We expect that about 10% to 15% of them will grow in the target market. This is a promising new market that we are developing.

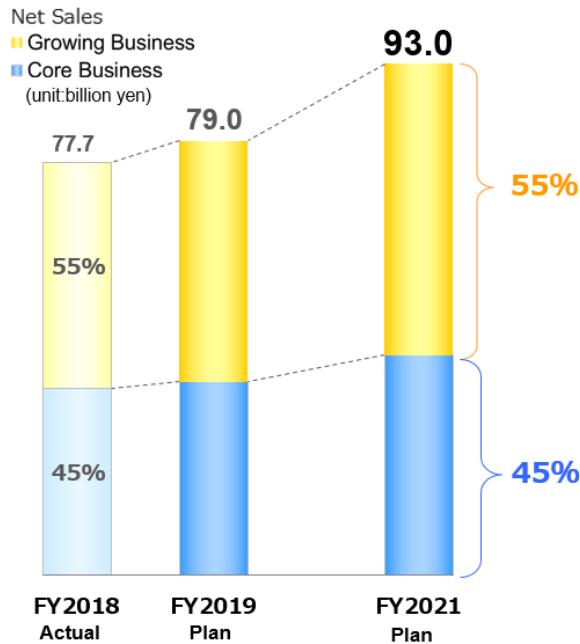
The Third Mid-term Business Plan

Growing business / Core business



Positioning

IT Construction : Acceleration of business growth
IT Agriculture : New customer development
Advancing IoT business



Growing Business

CAGR 9%

IT Construction

- Development of untapped market
- Market expansion by launching new strategic products
- Expand Road maintenance solution business
- Advancing subscription business in work progress management

IT Agriculture

- Further strengthening of OEM business
- Initiation of IoT platform business

Core Business

Enhancement of sales network - M&A

Launching the differentiated products

- Strengthening of competitiveness

*For details, see "IV. Growth strategy by Business"



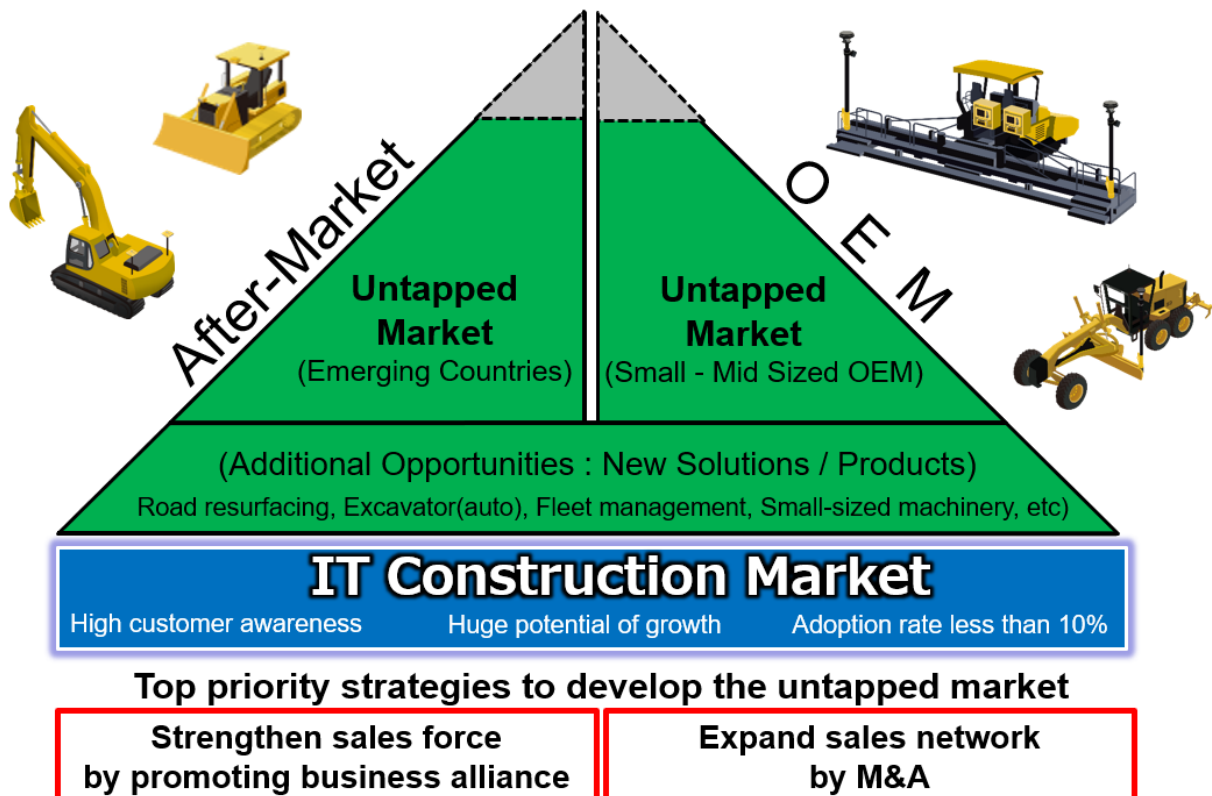
©2019 Topcon Corporation

Topcon for Human Life

25

Next, I will talk about our growing business and core business.

The material in front of you on page 33 and after illustrates our growth strategy by business. Please refer to it as well. We have to accelerate growth of our Positioning, that is, IT Construction and IT Agriculture, both of which are growing businesses. We expect CAGR of our growing business alone to be 9% in the business plan.



©2019 Topcon Corporation

Topcon for Human Life 34

In terms of IT Construction, I feel strongly that we need to accelerate the development of the untapped market of IT Construction. We will strengthen our sales force through business alliances, and expand our sales network through M&As.

IT Construction : Market expansion by launching strategic new products

Positioning

Sales growth by differentiated technology

Strategic differentiated products

New

Excavator system X-53x (auto)

- Autonomous operations according to the designed data
- Prevention of deep-digging
- Correspond to "MICHIBIKI" (correspond to multiple GNSS)



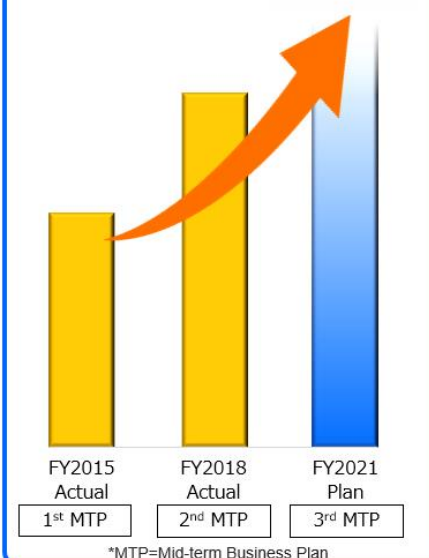
Mastless Dozer system 3D-MC^{MAX}

- Mastless
- High-speed and accurate operation



Sales of IT Construction

(unit: amount)



©2019 Topcon Corporation

Topcon for Human Life 35

We launched a strategic new product, that is, an excavator system to expand the market. We couldn't release the new excavator system in the previous year, which affected our net sales and operating income. We have high hopes for its launch. The expected sales is shown for the last year of the mid-term plan. We believe we can expand the sales further.

IT Construction: Expand Road maintenance solution business

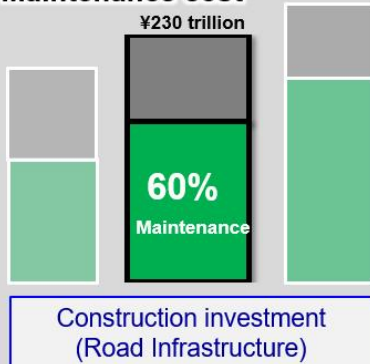
Positioning

Social issue

Aging Road Infrastructure



Rapidly increase the Maintenance cost



Solution

New Resurfacing / Paving Process

Road Scanning + ICT Paving + Logistics Management

Contribution by ThunderBuild (acquisition 2018 Aug)



Saving:
Material
Labor
Time

30% Cost Saving

©2019 Topcon Corporation

Topcon for Human Life

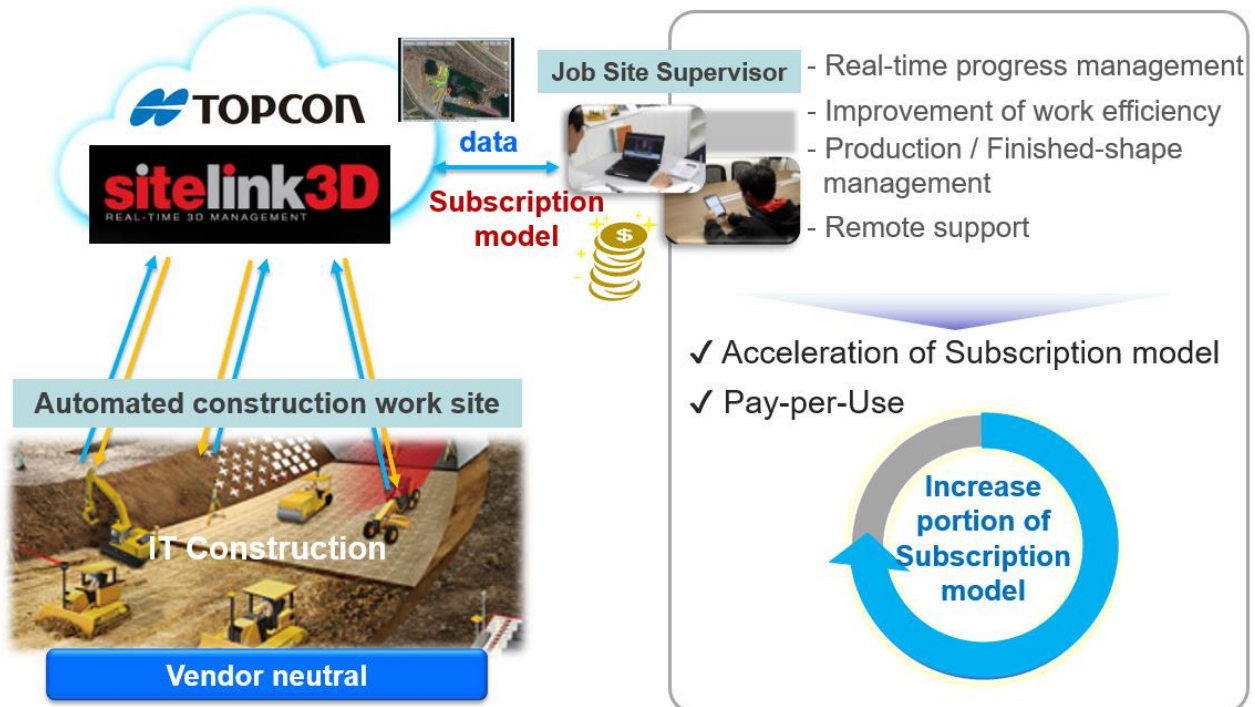
36

Next, we must improve and expand road maintenance business. Road pavement is aging in the developed countries. To maintain road pavement efficiently, we acquired ThunderBuild based in the Netherlands. Thanks to the acquisition, we have devised a system for managing all construction work flow that allows automated asphalt paving and resurfacing. With our streamlined process and labor-saving, we can expect cost reduction of as much as 30%.

IT Construction: Advancing subscription business in work progress management

Positioning

Utilization of Subscription model for IT construction solution



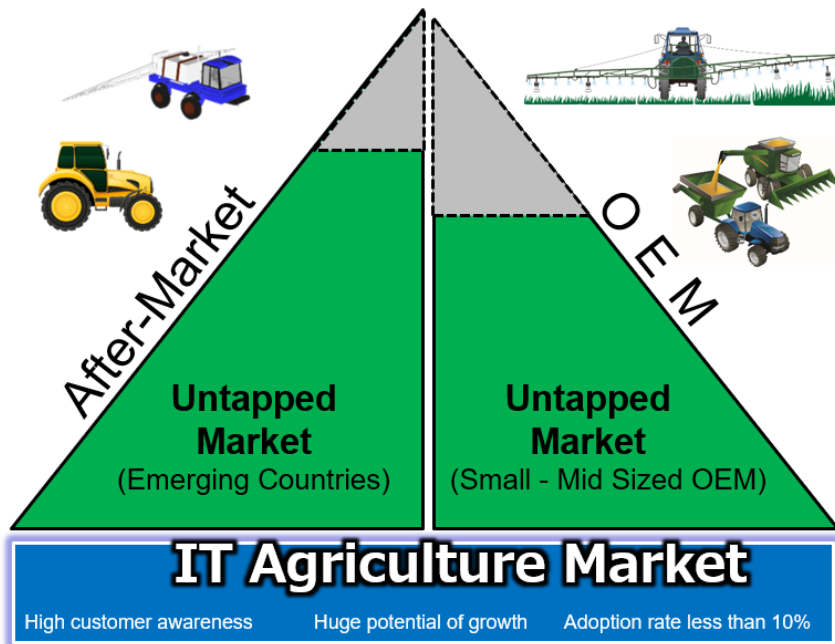
©2019 Topcon Corporation

Topcon for Human Life 37

Next, I will turn to subscription business. As this image shows, our subscription model can collect data from construction sites in the cloud to manage progress and provide monitoring support and other services. As we have already established subscription model business, we can increase the portion of subscription model from now on.

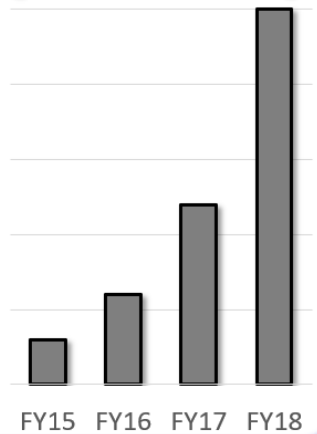
IT Agriculture: Further strengthening of OEM Business

Positioning



OEM Business Development

8 times growth in last 4 years
(number of OEM accounts)



Top priority strategies to develop the untapped market

Strengthen sales force
by promoting business alliance

Expand sales network
by M&A

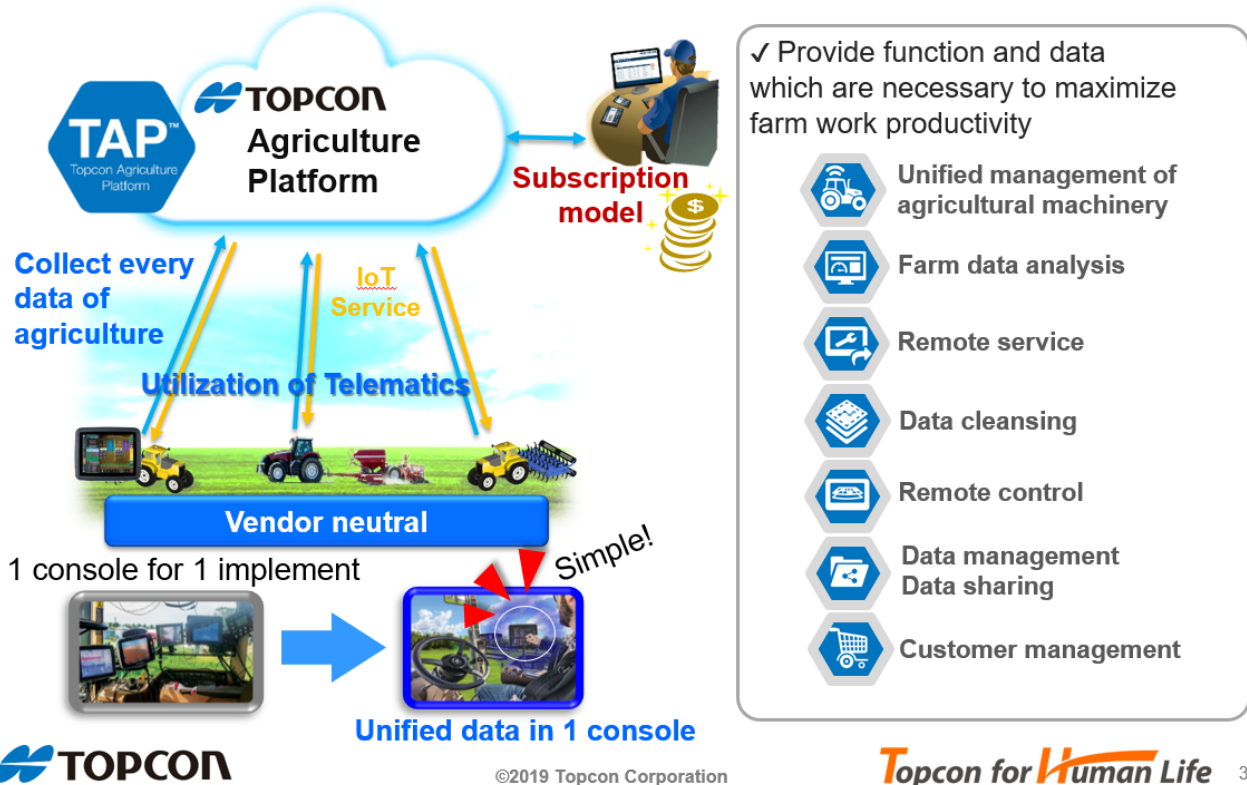


©2019 Topcon Corporation

Topcon for Human Life 38

The market potential for IT Agriculture is also huge as well as IT Construction, so we have to accelerate market penetration. The graph on the right shows the number of small/mid-size OEM accounts we have developed. The number has grown 8 times over the last 4 years. There are more markets still lying untapped. We would like to enter new markets with business alliances and M&As in mind.

Launched cloud-based Agriculture management IoT solution



We will collect data in a vendor neutral manner in IT Agriculture as well. We are ready to provide services with subscription model.

The Third Mid-term Business Plan Growing business / Core business

Strategy 1
Acceleration of
business development
in the growing market

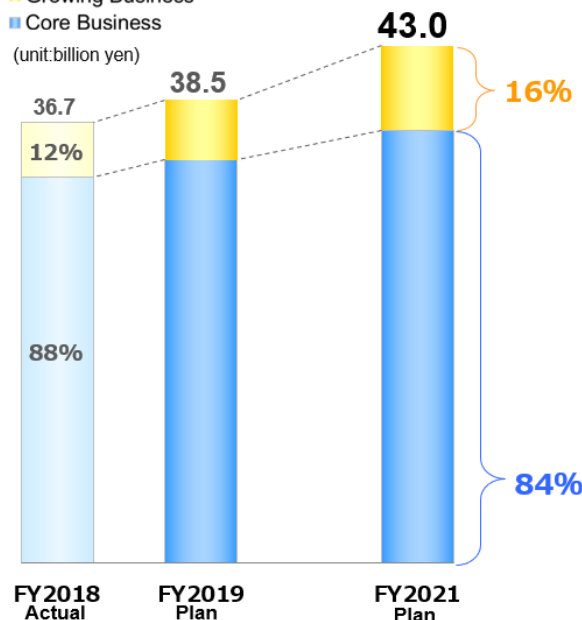
Strategy 2
Strengthen
profitability of
Core business

Strategy 3
Creation of
new potential market

Smart Infrastructure

Creation of new Growing Business Strengthening of Core Business

Net Sales
■ Growing Business
■ Core Business
(unit: billion yen)



Growing Business

CAGR 12%

IT Construction / 3D Measurement

- Advancement of i-Construction related business

IT Agriculture

- Business expansion in Japan and Asian market development

BIM market development

- Promoting combined solutions of 3D measuring devices and software

Creation of IoT business

- Utilization of high market share products

Core Business

Launching the differentiated products

- Improvement of business efficiency

Expansion of sales network in Asia and India

*For details, see "IV. Growth strategy by Business"
**"i-Construction" is a registered trademark of National Institute for Land and Infrastructure Management, MLIT, Japan.

TOPCON

©2019 Topcon Corporation

Topcon for Human Life

26

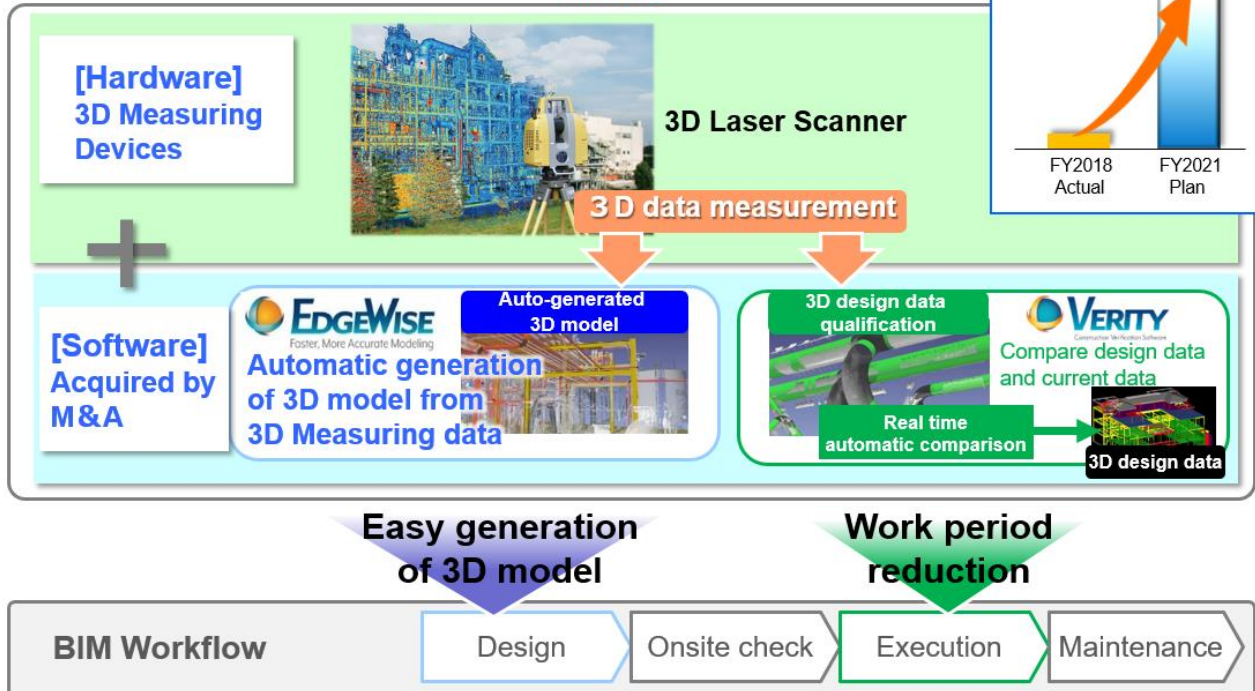
I will move on to the Smart Infrastructure. The strength comes from our core business so far, and will continue to strengthen our core business. We would like to create new growing businesses as well. The key is the development of BIM market. We continue to expand IT Construction and IT Agriculture in Japan and Asian market.

BIM market development : Promoting combined solutions of 3D Measuring devices and software

Smart Infrastructure

Significant increase of BIM work productivity

Significant work period reduction! 9 weeks to 3 days!
(15 times faster than conventional method)



TOPCON

©2019 Topcon Corporation

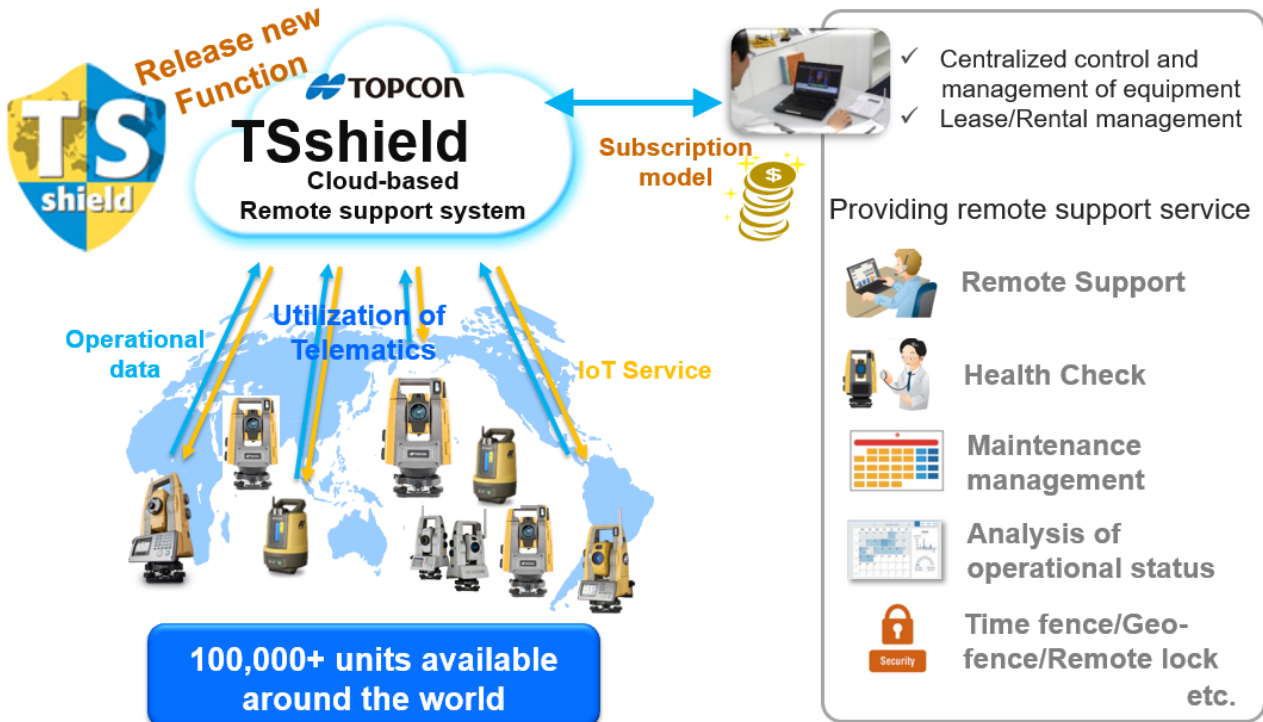
Topcon for Human Life 43

As explained about “Automation of construction” in the “Infrastructure Growth Scenario” page, we also need the automation of architecture. We acquired ClearEdge3D and its software which connects among our 3D measuring devices, drawings, and CAD drawings. This strategic move for automation will create new business opportunities.

Creation of IoT business Utilization of high market share products

Smart Infrastructure

Accelerate IoT business utilizing Total Station



TOPCON

©2019 Topcon Corporation

Topcon for Human Life 44

We will create IoT business utilizing Total Stations which we have strength. Our surveying instrument Total Stations are available around the world. Over 100,000 units are on the market. We installed modem into the Total Stations. We can collect data now. We are going to start remote support services with subscription model this year.

The Third Mid-term Business Plan Growing business / Core business

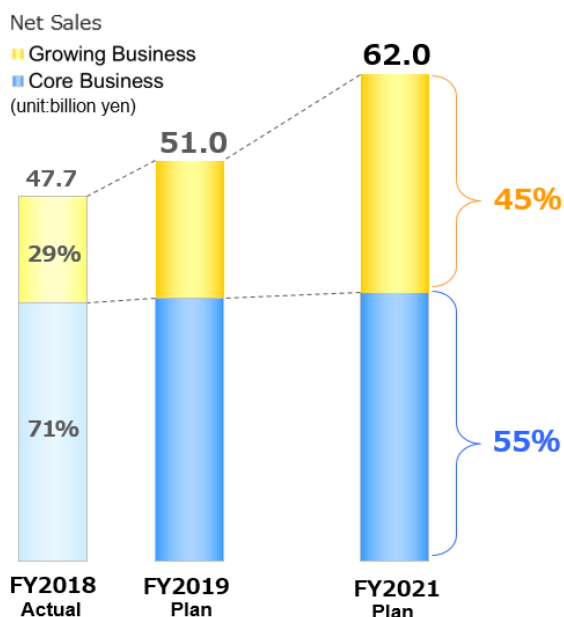
Strategy 1
Acceleration of
business development
in the growing market

Strategy 2
Strengthen
profitability of
Core business

Strategy 3
Creation of
new potential market

Eye Care

Expansion of the Screening Business



Growing Business

CAGR25%

Expansion of Screening Business

- Utilization of Software Development Subsidiary in the US
- Sales expansion of fully automatic screening equipments
- Utilization of subscription model

Business expansion in China

- Creation of Screening Business in the world's largest diabetes market

Core Business

Improvement of business efficiency

- Reorganization of sales structure

Reinforcement of competitiveness by cost reduction

*For details, see "IV. Growth strategy by Business"



©2019 Topcon Corporation

Topcon for Human Life 27

Growing business in Eye Care is Screening Business and business in China. In Eye Care growth business, we expect CAGR 25% to achieve the highest growth compared to other business segments.

Utilization of Software Development Subsidiary in the US



**Topcon
Healthcare
Solutions**

(Software Development Subsidiary(US))

- Established new company in the US in May, 2018
- Hiring competent engineers, planning and marketing staffs **from outside**, and the organization grew to over **120** employees
- **Established global organization** by setting up sales subsidiary in Europe and Asia respectively

THS(US)/THS EMEA(Europe)/ THS AP(Singapore)

Released software and started providing solution service

● Software



Topcon Harmony

- Data management software
- Possible to unify the diagnostic data thanks to vendor neutral system



Topcon Cloud

- Cloud Data Management
- Automatic data backup

● Solution service



Topcon Screen

- Screening Inspection Service
- Charge per inspection

Strong software development capability is to ensure the driving force of the screening business expansion



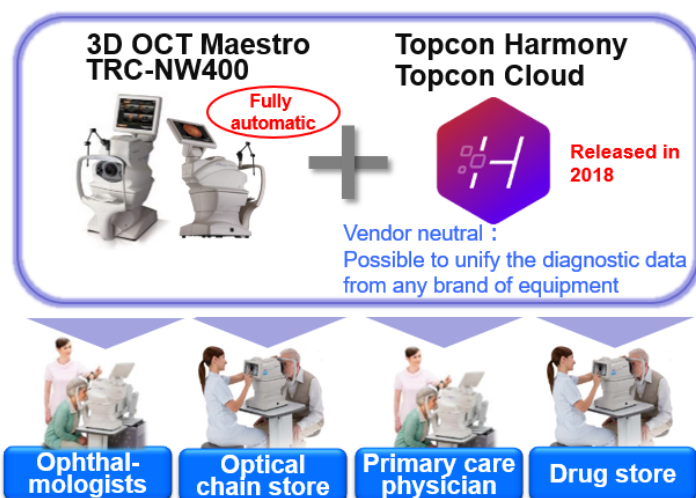
©2019 Topcon Corporation

Topcon for Human Life 46

We established a software development subsidiary Topcon Healthcare Solutions in the US which is critical to expand Screening Business. We hired software engineers from outside, and the company grew to 120 employees. We operate globally in close cooperation with Europe and Asia. We have released software for data management, cloud system, and subscription model. These softwares are essential for our Screening Business.

Sales expansion of fully automatic screening equipment

Expand the synergy sales of hardware and software



Making it possible for major optical chain stores to provide screening services besides Ophthalmologists

Sales of fully automatic Screening equipment

(unit: Q'ty)



*MTP=Mid-term Business Plan



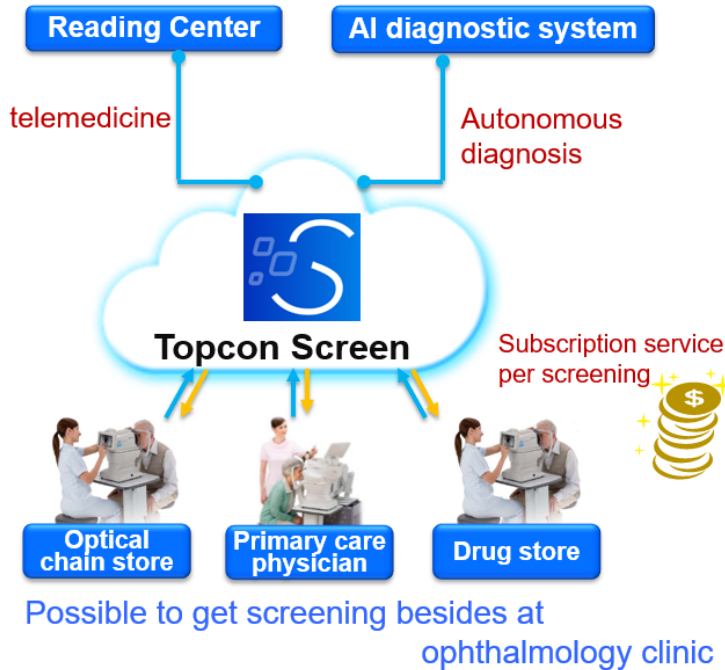
©2019 Topcon Corporation

Topcon for Human Life 47

To expand sales of fully automatic screening equipment (Maestro and NW400), we will bundle them with screening software for sales promotion to ophthalmologists, optical chain stores, primary care physicians, and drug stores. We aim to double the sales in three years.

Utilization of subscription model

Started offering screening service



Practical application of autonomous AI diagnosis



World's First FDA approved Autonomous AI diagnostic system

(as a condition to use with Topcon TRC-NW400)

- Early diagnose of Diabetic retinopathy
- Early detection, Early treatment
- Improvement of medical efficiency and quality



Started offering a screening inspection service through primary care physicians

IDx Technologies Inc.

*US venture company which develops algorithm of the disease detection based on retina or OCT image

*The above screening service by IDx-DR is not provided as a Topcon Screen service.

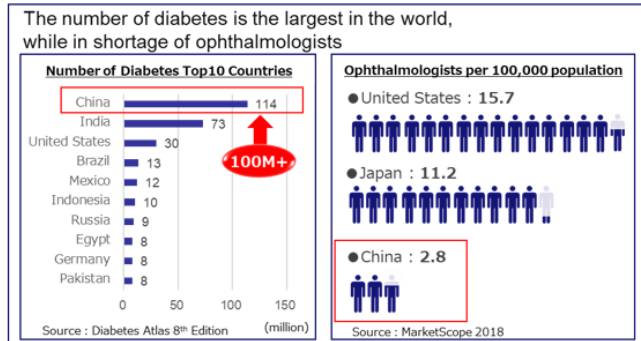


©2019 Topcon Corporation

Topcon for Human Life 48

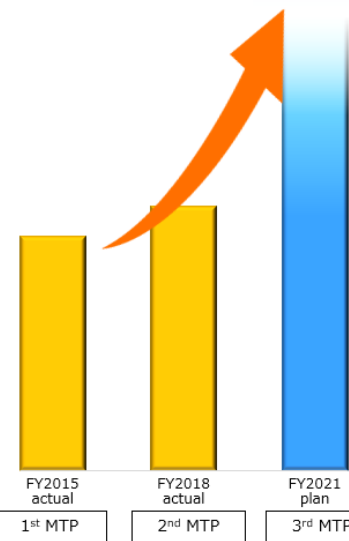
Topcon Healthcare Solutions also makes software for subscription model. For example, we utilize this software in Screening Business for remote diagnosis through reading center or AI diagnosis based on information from optical chain stores, primary care physicians, and drug stores. We are ready to start subscription service per screening. IDx's autonomous AI diagnostic system, which was approved by the FDA for the first time in the world, are not included in this subscription model. IDx's AI diagnostic device comes bundled with our NW400 in the US, both of which begin to become widely used.

Creation of screening business in the world's largest diabetes market



Sales of China market

(unit: amount)



Expand Screening Business in a huge growing market



©2019 Topcon Corporation

Topcon for Human Life

49

Lastly, we would like to expand our business in China. China is the world's largest diabetes market. We seek to develop Screening Business in this market. There are 114 million diabetic patients in China. China has the world's largest population of diabetes. India has the second largest, and the US the third. China has by far the largest diabetic population. On the other hand, there are only 2.8 ophthalmologists per 100,000 population in China. The market is huge, but ophthalmologists are few in China. This is why we will target Chinese market. We will bundle 3D OCT Maestro or NW400 with software, and roll out them along with cloud service and subscription model to expand our sales in China.

The Third Mid-term Business Plan

Strengthen profitability of Core Business



	The Second Mid-term Business Plan	The Third Mid-term Business Plan
Generation of Cash Flow	<u>FY16-18 total</u>	<u>FY19-21 total</u>
Operating Cash Flow	¥47.2B	¥50.0B
		<ul style="list-style-type: none"> - Improvement of profitability - Reduction of inventory
Management efficiency		
Effect of improving Operating Income	¥5.5B	¥7.0B
		<ul style="list-style-type: none"> - Consolidation of operating base - Further efforts in cost reduction by improving the productivity - Reduction of the procurement cost



©2019 Topcon Corporation

Topcon for Human Life 28

Next, I will move to strengthening profitability of core business. We would like to generate more cash flow: we would like to generate 50 billion yen during the third mid-term versus 47.2 billion yen during the second mid-term period. To improve management efficiency, we will increase operating income: we project operating income of 7 billion yen during the third mid-term, up from 5.5 billion yen during the second mid-term period.

The Third Mid-term Business Plan Creation of new potential market

Strategy 1

Acceleration of
business development
in the growing market

Strategy 2

Strengthen
profitability of
Core business

Strategy 3

Creation of
new potential market

Explore new potential market by new innovative solutions



Contribute to achieve **Long-term Target**

- Real time progress management
- Reduce administrative overhead
- Data correction according to the current situation

Positioning

Further utilization of 3D Measuring technology

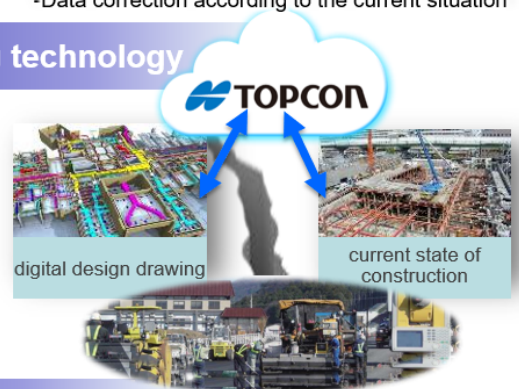
**Smart
Infrastructure**

Expand BIM Business

Mediate between the current state of construction and digital design drawings in real time

Create infrastructure Screening Business

Early diagnosis of infrastructure maintenance



Eye Care

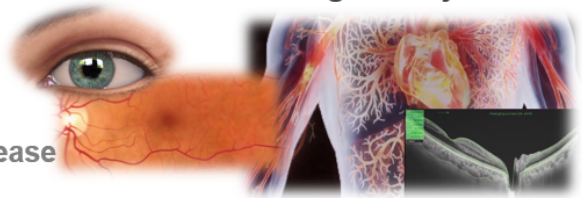
Expand Screening Business

Further utilization of 3D OCT

Early detection of the diseases other than eye diseases through the retina examination

- ✓ Diabetes
- ✓ Dementia
- ✓ Heart disease etc...

Healthcare through the Eye



©2019 Topcon Corporation

Topcon for Human Life 29

Lastly, as for creation of new potential market for Positioning and Smart Infrastructure, we would like to lay the groundwork for further utilization of 3D measurement instruments and expansion of BIM business in the next three years. We may conduct M&As. To address aged infrastructure, we will roll out our screening technology to create and expand our business. For Eye Care, we will apply our screening technology for eye diseases to the whole body, and to total healthcare. We will make efforts to operationalize screening for diabetes, dementia, and heart diseases over the next three years.

The Third Mid-term Business Plan

Financial Targets [Consolidated] (unit: million yen)

		The Third Mid-term Business Plan		
		FY2018	FY2019	FY2021
Net Sales		148,688	154,000	180,000
Operating Income (Operating Income Ratio)		13,596 (9.1%)	14,500 (9.4%)	20,000 (11.1%)
Ordinary Income		11,497	12,500	-
Net Income		6,548	8,000	-
ROE		9.8%	11%	13-15%
Dividends		¥24	¥28	-
Payout Ratio		39%	37%	Over 35%
Exchange Rate (Average)	USD	¥110.69	¥110	¥110
	EUR	¥128.43	¥125	¥125



©2019 Topcon Corporation

Topcon for Human Life 30

I have discussed planned figures for FY2019. Now, I would like to report planned figures for FY2021. We plan net sales of 180 billion yen, operating income of 20 billion yen, ROE of 13 to 15 %, and dividend payout ratio of over 35%. These forecasts assume foreign exchange rates of 110 yen to the dollar and 125 yen to the Euro.

The Third Mid-term Business Plan

Financial Targets by Business [Consolidated]

(unit: million yen)

The Third Mid-term Business Plan

		FY2018	FY2019	FY2021
Net Sales	Positioning	77,722	79,000	93,000
	Smart Infrastructure	36,744	38,500	43,000
	Eye Care	47,713	51,000	62,000
	Others	1,698	1,500	1,000
	Elimination	-15,190	-16,000	-19,000
	Total	148,688	154,000	180,000
Operating Income (Operating Income Ratio)	Positioning	8,358 (10.8%)	8,500 (10.8%)	-
	Smart Infrastructure	6,393 (17.4%)	6,600 (17.1%)	-
	Eye Care	2,896 (6.1%)	3,400 (6.7%)	-
	Others	-65 (-3.8%)	0 (0.0%)	-
	Elimination	-3,986	-4,000	-
	Total	13,596 (9.1%)	14,500 (9.4%)	20,000 (11.1%)



©2019 Topcon Corporation

Topcon for Human Life 31

Next, I will talk about financial targets for FY2021 by business. Net sales plans for Positioning, Smart Infrastructure, and Eye Care are 93 billion yen, 43 billion yen, and 62 billion yen, respectively. We had to revise operating income during the year in the past because it was quite difficult to predict due to often effected by external and internal factors. We have expanded the scale of our business while creating new markets. So we will skip planned operating income by segment, and we only present consolidated operating income over the next three years.

The Third Mid-term Business Plan

Investment plan

	The Second Mid-term Business Plan	The Third Mid-term Business Plan
	<u>FY16-18 total</u>	<u>FY19-21total</u>
CAPEX	¥15.9B	¥20B
Growth Investments (M&A, etc.)	¥6.3B	¥40B
R&D	¥37.4B	¥50B
	<u>FY18 Actual</u>	<u>FY19-21 Plan</u>
Payout ratio	39%	over 35%



©2019 Topcon Corporation

Topcon for Human Life 32

Lastly, I will touch on investment plan. We plan capital investment of 20 billion yen and growth investment of around 40 billion yen, as well as R&D investment of 50 billion yen over the next three years. Shareholder return is planned to reach over 35% during the third mid-term business period.

This concludes my explanation of the third mid-term business plan. Thank you.

Question & Answer

***For the FY2018 Financial Results briefing and held at the same time, will also be included in matters related to the FY2018 Financial Results are in question-and-answer session.**

<Positioning Company>

Q. Was there a shift in the momentum in the fourth quarter compared with the third quarter? What is your outlook for the current fiscal year?

A. Things started to pick up in the fourth quarter but uncertainty remains. In particular, agriculture is being impacted by the trade woes. We have kept our growth forecast at or below 4% for this fiscal year.

Q. What about the growth rate of IT Construction and IT Agriculture?

A. The figures are not disclosed, but IT Agriculture put more of a drag on the growth.

<Smart Infrastructure Business>

Q. What is the status of i-Construction?

A. There were orders but this did not quite lead to an increase in sales. However, as the government allocated a budget for its plan to strengthen the national resilience and mitigate natural disasters, we are positive about the outlook going forward.

<General Questions>

Q. The estimated market sizes for FY2018 and FY2025 were presented. Do you see any market expansion compare to the market size for FY2015?

A. Given the number of players in the markets where we compete has been limited, and market shares have not changed much, it can be said that our sales and the market size are, to a certain degree, correlated.

Q. What will the volume of the subscription service be after the 3-year mid-term business plan is completed?

A. We do not disclose specific figures for that.

Q. How do you plan to finance and growth investment?

A. We expect funds generated from operating cash flow will mainly be used. But as our financial position (D/E ratio) has improved over the last three years, we can afford to take on debt and we plan to procure funds that way.

Q. Your company has been aggressively making investments in the last three years, but what will happen to that stance under the third mid-term business plan?

A. We will continue to make aggressive investments in all segments during the third mid-term business plan.

Q. What is your variance analysis on increase/decrease of profits for the current fiscal year?

A. We estimate that sales change and sales mix amount to 4 to 5 billion yen. With about 1 billion yen worth of cost reduction and a fixed cost of 4 to 5 billion yen, we expect an increase of about one billion yen profit in total.

Q. You have not disclosed the breakdown of operating income figures by segment for the fiscal year just ended, but can you tell us your views on the outlook for each segment?

A. We expect the Smart Infrastructure to have a steady growth while sales and operating income ratio at the Positioning will likely improve. We also expect a two-digit increase in operating income ratio for the Eye Care as we have changed its business model for a better revenue structure.

Q. Can you give us the review on the M&As your company has conducted so far?

A. We would like to set up a meeting for that in the future.

*"i-Construction" is a registered trademark of National Institute for Land and Infrastructure Management, MLIT, Japan.

[END]