The Third Mid-term Business Plan

The Start of the Third Mid-term Business Plan

Expand our business by solving societal challenges in the growth markets of healthcare, agriculture, and infrastructure.

We have started the third mid-term business plan for three-year period ending FY2021. As we met almost all of our goals for the second mid-term business plan, we accelerate our growth business in the third mid-term plan.

We aim for sales of 180 billion yen for the last FY 2021. Our long-term goal is sales of 250 billion yen and ROE of 15% or more.

Review of the Second Mid-term Business Plan

Our slogan of the second mid-term business plan was “Accelerating Growth Strategies to a New Stage”. The slogan was supported by three strategies: 1) Strengthening the Management Structure; 2) Advancement of the Growing Business; 3) Creation of a Subscription Business Model. Positioning and Smart Infrastructure achieved Strategy 1) and 2), but Eye Care did not. Nevertheless, Eye Care got a good response or sign for future growth. As for Strategy 3), subscription models were created in all of our business areas, and we plan to monetize them in the third mid-term business plan.

In general, we steadily carried out growth strategies in line with our plan, and entered into a new stage.

The Second Mid-term Business Plan Review Summary

Accelerating Growth Strategy!! To a New Stage

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Positioning | Achieved |
Smart Infrastructure | Achieved |
Eye Care | Created a new growing business |

Executed growth strategies Entered a new stage!
With our long-term target of 250 billion-yen sales and more-than-15% ROE for FY 2025 in mind, we put up a slogan of “further acceleration of our growing business” for the third mid-term business plan from FY 2019 through FY 2021. This plan is supported by three strategies: 1) acceleration of business development in the growing markets; 2) strengthening the profitability of core business; 3) creation of new potential market. We aim for ROE of 15% through implementing these strategies.

### 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%**

Through employing the above three basic strategies in healthcare, agriculture, and infrastructure, we aim for the target figures shown below in the third mid-term business plan.

#### FY2021 Financial target (KPI)

1. **Sales:** ¥180B, CAGR (average annual growth rate) 6.6%
2. **OP:** ¥20B, CAGR (average annual growth rate) 13.7%
3. **ROE (Return on Equity): Aim for 15%**

#### Investment Plan

We continue strategic growth investment to meet the above target figures. Our planned target figures for the third mid-term plan are capital investment of 20 billion yen, growth investment of 40 billion yen, and R&D expenses of 50 billion yen.
The Third Mid-term Business Plan

Infrastructure

We address the issue of shortage of skilled engineers increased global demand for infrastructure by robotizing construction machinery and unification of construction workflow with 3D data.

Societal Challenge

- Increasing demand for Infrastructure
- Shortage of skilled engineers

Solution

- Automation of construction by robotization of construction machinery and unification of construction workflow with 3D data
- Productivity improvement
- Elimination of labor shortage

Realization

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 workflow
Growth Scenario

1. Development of untapped market
   There are still many unexplored areas for IT construction business. For instance, in existing OEMs, we will further expand the number of ICT models, in addition to developing small-scale OEMs, also develop untapped markets in emerging countries.

2. Advancing subscription business in real time job site management
   Based on the subscription business model created in the second mid-term plan period, we will monetize it in the third mid-term plan. We provide real-time visibility of construction projects and assets. This is useful tool for project managers to effectively manage their work progress.

3. Expand road maintenance solution business
   In developed countries, measures against road deterioration are becoming a serious issue. Last year, we acquired a Dutch company, ThunderBuild, who has a technology for managing entire road paving workflow that allows automated asphalt paving and resurfacing. By streamlining and labor-saving, this maintenance business is expected to enable cost cuts by 30%.

4. BIM market development
   Last year, we acquired ClearEdge3D, and obtained software that connects 3D point cloud data to CAD drawings seamlessly. For example, “Verity” is a software that cross-checks the blueprint against actual 3D data, which is capable of finishing the work in just three days, 1/15 of the conventional work method that takes nine weeks. We will utilize these “game-changer” tools to promote the BIM business.
To tackle global food shortage and skilled farmers, we strive to enhance productivity and quality through automatic steering of farm machinery and unification of various farm data.

**Societal Challenge**
- Global population increase
- Decreasing size of farmland per person
- Food shortage
- Shortage of skilled farmers

**Solution**
Automation of agriculture by automation of steering and unification of various farm data management.

**Realization**
Topcon’s unique technology

1. **IT Agriculture machinery**
   Auto-steering system utilizing precision GNSS technology

2. **Optical Sensor technology**
   Digitization by crop monitoring sensor and yield sensor
1. Further strengthening of OEM business

With the development of small-sized OEMs, the number of our OEM customers has increased eight times over the last four years, but there still remains untapped markets, and in order to accelerate our endeavor, we continue to explore new strategic alliances partners in OEM.

2. Business expansion in Japan and market development in Asia

While IT agriculture is booming in Japan, it is still unfamiliar in Asian countries. Auto-steering has spread mainly in large-scale farms in Europe and the U.S. so far, but we will propose a new work method suited to Asian market to develop Asian market and expand sales in Asian market.

3. Initiation of IoT platform business

We have promoted the digital transformation of agriculture mainly around hardware using optical sensor technology and automation technology using high precision GNSS, but with recent progress in R&D by academic-industrial alliance, farm data management utilizing the IoT platform becoming a crucial issue. We will offer the solution that enable data obtained from hardware to be uniformly managed with cloud-based software. For example, we will provide various services to improve productivity and quality of farm works such as farm data analysis for the optimum fertilizer application planning. We provide this kind of service with subscription model.
To tackle shortage of ophthalmologists while increasing eye diseases caused by global aging, we strive to create a screening business for eye disease utilizing primary doctors, optical chain stores, and drugstores to realize early detection and early treatment.

### Societal Challenge
- Lack of number of Ophthalmologists
- Increase of eye diseases
- Rising medical cost
- Difficulty of corresponding to rapidly increasing eye diseases (351 million people)

### Solution
Creation of Eye disease screening by Primary care physicians, Optical chain stores, Drugstores, etc.

### Realization
Topcon’s unique technology

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

- **3D OCT Maestro**
  - Fully automatic OCT and color fundus photography
  - Reporting function indicating possibility of 3 major eye diseases

- **TRC-NW400**
  - Fully automatic color fundus photography
  - Early detection of 3 major eye diseases
Growth Scenario

1. Utilization of Software Development Subsidiary in the U.S.
   In 2018, a new software subsidiary, Topcon Healthcare Solutions (THS), was established in the U.S. It is now staffed with over 120 employees, also have two branch office in Europe and Asia, working to build a medical network solution.

2. Sales expansion of fully automatic screening equipment
   We aim to double the sales of fully automatic screening equipment (Maestro and NW400). To this end, we take positive approach to build new customer bases including major optical chain stores and drugstores.

3. Utilization of subscription model
   Among the software developed by THS, there are some software solution suit for the subscription model. For example, a system that allows optical chain stores, primary care physicians and drugstores to send the image data to the reading center to be remotely diagnosis as a subscription service per screening. In addition, there is the alternate service that offers AI diagnosis at charge per inspection as well.

4. Business expansion in China
   -Creation of Screening Business in the world’s largest diabetes market-
   Diabetic retinopathy is a complicating symptom developed by around 30-40% of diabetic patients, which leads to the risk of losing eyesight. Currently, it is said that 1 in 4 working-age adults in the world are diabetic, and China in particular has the largest number of diabetic patients. The number of diabetic patients in China is an astounding 114 million, followed by India and the U.S. (these three countries cover 51% of all diabetic patients).
   While China has the largest number of diabetic patients, there are only 2.8 ophthalmologists for every 100,000 people. The number of ophthalmologists is too small compared to the size of the market, and demand for screening will inevitably increase. Topcon (Beijing) Medical Technology established in 2018 will lead our full-scale business deployment in China.

What is “eye disease screening”?
Rapidly increasing eye disease while lack of ophthalmologists necessitates, eye examination by those other than ophthalmologists for early detection and early treatment. Topcon has utilized fully automatic screening equipment that can be operated by those other than expert ophthalmologists and aimed to expand the business through eye examination in optical stores and drugstores. We will aim to further expand the eye examination environment, and strive to expand the screening business.