

A Venture Company with 89 Years of Tradition

—The History and Future of Creating New Markets—

Satoshi Hirano President & CEO



We offer our heartfelt sympathy to all those who have been affected by COVID-19, and would also like to express Topcon's sincere gratitude to the healthcare professionals working on the front lines of treatment and vaccination.

The impact of the COVID-19 pandemic placed significant restrictions on our business activities all over the world in FY2020. However, as we see a clear recovery trend, we are ready to take bold steps again toward the future. President Satoshi Hirano discusses herein the current situation and future of Topcon, as well as the history and the detailed background of our business in the domains of healthcare, agriculture and infrastructure.

Topcon and the COVID-19 Pandemic

Q How has the COVID-19 pandemic affected Topcon's businesses?

Amid the stagnation of the global economy due to the spread of COVID-19, there is one thing I have become sure of: Our business is essential business (business that must be a part of people's day-to-day lives), and there are always strong needs for our business regardless of how favorable or severe the external environmental factors are.

When the COVID-19 pandemic began to rage, I felt a strong sense of urgency. Our business was not subject to a shutdown order because it is related to people's daily lives, such as food production and healthcare. However, restrictions on sales activities caused our order volume to drop. For a short period, our sales were down to about 50%

year-on-year, and our plant utilization rates declined as well.

However, we carried on with faith and confidence in our future. We are involved in eye care, farming, and construction, i.e., the fields of healthcare, agriculture, and infrastructure, which are needed by society no matter what conditions it faces.

Each division of our global Group implemented a variety of measures to continue the business without waiting for direction from upper management. I was very encouraged by the strength our employees displayed. As soon as society resumed its activities, our performance was immediately on a powerful recovery track. At that moment, I recognized that our business is essential, and we are responsible for business that is indispensable for people's day-to-day lives.

Although it was temporary, the impact of COVID-19 was severe, and it also affected our Mid-Term Business Plan. Therefore, we have extended our mid-term business plan by one year to FY2022. However, as I mentioned earlier,

society is in need of our business even under difficult circumstances. We will promote our businesses under the same policies thus far, with our unchanging management vision of: "Expand our businesses and solve the societal challenges within the growing market of healthcare, agriculture and infrastructure."

Topcon's Growth Trajectory

Q Please tell us about the history of Topcon's growth from its founding to the present.

Topcon is a venture company with 89 years of tradition. We were founded in 1932 as Tokyo Kogaku Kikai Kabushikikaisha (Tokyo Optical Co., Ltd.), a manufacturer of surveying instruments, binoculars, cameras, and other goods for the army. After WWII, we transitioned to serving civilian demand and leveraged our knowledge in the optical

field to begin manufacturing instruments for examination and diagnosis in the ophthalmological field. We subsequently expanded into a global business through the export of surveying instruments and ophthalmic medical devices.

During this time, we arrived at a major turning point. Due to our overseas M&A strategy which we began pursuing in the 1990s, we became a solution provider in the fields of healthcare, agriculture and infrastructure.

At the time, the foundation of our business was the manufacture and sale of surveying instruments. When we were considering the expansion of this business domain into the field of civil engineering, we encountered a venture company located in California, the U.S., with a vision that surveying and construction in the civil engineering field would be digitized and automated. I was working in the U.S. at the time, and together with Raymond O'Connor, our current Senior Managing Executive Officer and President & CEO of Topcon Positioning Systems, Inc., we shared the vision that "This business has a bright future." We convinced our headquarters in Japan to launch an automation business for construction machinery, which was something nobody had ever thought of at the time.

We subsequently grew this technology into a core solution in our current infrastructure business. It is contributing to the digitization and automation of construction processes which used to be mainly analog. Specifically, we made a dramatic improvement of productivity in the construction field by using 3D digital data to integrate the entire flow of construction processes from survey to design, construction, and inspection. Currently, the civil engineering and construction industries around the world are facing a shortage of skilled engineers to meet the demand for infrastructure. Amid this trend, we contribute to the society through automating construction machinery, like factory robots and also providing digitization and IT solutions to improve productivity. Our focus is to accomplish the precision of construction process to a level unachievable by human hands and eyes to create a world in which people can live at ease.

We established our Agriculture Business in 2006. We have been providing digitization and automation of farm operations in consideration of concerns over future food shortages due to global population growth. We obtained this solution by acquiring a venture company located in Australia, a leading country in the field of IT Agriculture. We are contributing to maximizing productivity by digitizing the analog activities that typically rely on farmers' accumulated skills in all processes from planning to planting/seeding, growing, and harvesting.

We also have an optical crop sensor solution, which applies the optical technology we have been developing since our founding, that analyzes the nitrogen content of agricultural products in real time. Simply by driving a tractor, the optical crop sensors detect the level of crop growth and

Message from the CEO

automatically spray the optimal levels of fertilizer and pesticides. Combining this solution with the automatic operation of farming machinery will result in the automation of farm operations. We will achieve digital transformation (DX) in agriculture by automating tractor operations which depend on skilled workers, while also digitally converting tasks that depend on farmers' experience and intuition into cumulative data of operations and harvesting.

In this way, we converted ourselves into a solutions provider that solves societal challenges in the respective fields of infrastructure and agriculture businesses. We have achieved this by pursuing globalization, being highly attuned to needs around the world, and maintaining the venture spirit we have had since our founding of continually tackling new challenges. Currently, overseas markets account for about 80% of our sales. Topcon will continue to solve societal challenges within healthcare, agriculture and infrastructure around the world by maintaining a global perspective, developing new technologies, and proactively pursuing M&As.

The Present and Future of Topcon

Q Which business fields do you expect to see growth going forward?

We are aiming to transform the healthcare field as we did in the fields of infrastructure and agriculture. The eyes are vital organs. It is said that 80% of the information humans perceive is through their eyes. However, regular eye examination is not widely adopted, and we are now facing the issue of increasing eye diseases resulting from global population aging. What we offer is a solution to this issue. One of the major products is our 3D Optical Coherence Tomography (3D OCT) which features fully automatic capture of tomographic images of the retina. This product eliminates complex mechanical operations by using a touch screen for all operations and can be used in facilities other than ophthalmologic clinics and hospitals. Overseas, neighborhood optical stores and drugstores are able to provide eye disease screening thanks to this function. This business can contribute to reducing the number of people who lose their eyesight. Additionally, in recent years, it has become possible to obtain more health information from the images of the fundus, in addition to eye diseases. The eyes are sometimes said to be the windows of the body. Going forward, we will contribute to maintaining the health of the whole body through eye screening.

Furthermore, digitization has not progressed much in the field of building construction while the size of its market is roughly double that of civil engineering. We believe that our solutions can contribute to this field as well. Specifically, our technologies can link the virtual digital world of design (BIM) with the (real,

analog world of) actual construction sites. Through this, we hope to achieve DX of the construction process, thereby advancing the automation of building construction process.

Q Developing new businesses requires investment. Can you tell us about the businesses that generate the source of these investments?

Our founding business of surveying instruments has supported our investments into DX in the construction and agricultural fields. Although the surveying instruments market is mature, demand will never go away because surveying instruments are, and will always be used at construction sites. As a top manufacturer in this market, we sell innovative products through a powerful sales and distribution network that extends throughout the global marketplace, and have maintained a high market share for over 30 years.

Meanwhile, our Eye Care Business has also supported our long history. Our main products are instruments for ophthalmic examination and diagnosis, and optometers for optical stores. We laid the foundation for our overseas sales and distribution locations in the U.S. and the Netherlands beginning in 1970, and since then we have focused on developing sales channels overseas. As a result, our optometry systems and instruments for ophthalmic examination and diagnosis are used in many countries and regions around the world today. Although this is also a mature market with stable growth, some of these products have made major contributions to our sales even after more than a decade since their launch, and we maintain a large market share.

We are a company that continuously pursues new innovation. This challenge has been made possible by our robust businesses with large shares in the global market such as surveying instruments, optometry systems and instruments for ophthalmic examination and diagnosis.

Carrying on lsm and SDGs

Q Please tell us about Topcon's SDG initiatives.

Sustainability initiatives, including the SDGs, are vital for a company's lasting prosperity. In our case, our healthcare, agriculture and infrastructure businesses are closely linked to social contributions including improvement of the global environment.

For example, automation technology by IT Construction shortens the operating time of construction machinery by approximately 30%. If we multiply this by the total number of



construction machines with our systems installed, we calculate a reduction in CO₂ emissions by about 600,000 tons per year worldwide. Similarly with farming machinery, our Auto Steering System shortens operating time by approximately 20%, and we calculate a reduction in CO₂ emissions by about 500,000 tons per year worldwide.

Furthermore, I believe that there is an even greater potential in the healthcare field. The fundus of the eye is the only part of the body where the blood flow can be observed directly. For this reason, AI developers around the world are analyzing images of the fundus and working on the early detection of various diseases. The developments aim to realize reducing immense medical costs while providing a higher quality of life (QoL) to people around the world. Our instruments are a good match for AI image analysis because they can capture stable images with high resolution, and I expect that we can make a large contribution to progress in this area.

We are heading into an era in which companies that focus on solving societal challenges will be chosen by all stakeholders. We will continue to contribute to society through our businesses themselves.

Q In closing, do you have a message for our shareholders and investors?

Topcon is a company that has always been focusing on the future. When I was working on the launch of an

unprecedented project to automate civil engineering construction in the U.S., I was asked by the headquarters in Tokyo: "Can we really commercialize this business?" However, when we called over the executive team of the time to the U.S. and showed them machinery operating automatically, they all supported the project. They said, "This is how civil engineering worksites will change in the future," and "We should go ahead even if it may take some time to recoup our investment!" I believe that this Topcon principle, namely the corporate culture of "A venture company with traditions," will always remain unchanged. We have also continued to invest in the Eye Care Business since I assumed the position of President, and we are finally beginning to see the returns from our Screening Business.

When you dive into a blue ocean market, there are no maps drawn by someone else. It takes time to not only develop a new business but also to popularize it. This is exactly why I would like our shareholders and investors to dream about the future with us. Last year, we were faced with the unprecedented crisis of the COVID-19 pandemic. When the impact of COVID-19 was at its worst, one of the shareholders supporting us for many years told us, "My expectations are for growth over the long term rather than short term performance." It really made me happy.

Like the stakeholders who have built the history of Topcon until today, I would like to share the exciting dream of bringing health, happiness and prosperity to people around the world.