

## ► Four Growth Strategies of the Medium-Term Management Plan: Timepiece Business



### Utilize strengths of the G-SHOCK brand to achieve sustainable growth

#### Yuichi Masuda

Senior Executive Managing Officer

Senior General Manager of Product Development Headquarters, Senior General Manager of Timepiece Business Unit, Business Strategy Headquarters

#### Quantitative Goals

	FYE 3/2019 (Results)	FYE 3/2020	FYE 3/2022
Net sales	171.8 billion yen	178.0 billion yen	200.0 billion yen
Operating margin	20%	20%	20%

#### Qualitative Goals

<b>Further expand G-SHOCK</b>	<ul style="list-style-type: none"> <li>• Use robustness to expand G-metal sales in G-SHOCK market</li> <li>• Expand in ASEAN and other emerging markets</li> <li>• Further grow G-SHOCK as a growth driver (aim for 3-year average growth rate exceeding 10%)</li> </ul>
<b>Establish smartwatch position</b>	<ul style="list-style-type: none"> <li>• Develop and sell G-smart               <ul style="list-style-type: none"> <li>- Use robustness to establish position as de facto standard for smartwatches</li> </ul> </li> </ul>

#### Sustainability Goals

- Promote user health by providing and supporting sports experiences through our watches and wrist devices
- (Environmental load reduction) Reduce use of resources in our business activities



## Market Changes Driven by Rapid Expansion of Smartwatch Market

During the fiscal year ended March 2019, Timepiece Business net sales were largely unchanged year on year, increasing 1% to 171.8 billion yen. As its stable position as an unparalleled global brand, G-SHOCK continued to achieve stable growth and the fiscal year ended March 2019 was particularly firm on sales of new full metal products. As a result, net sales increased year on year to 89.5 billion yen.

On the other hand, we were also impacted by sales of analog quartz products, which faced the global contraction of the conventional analog wristwatch market. This is due to the growing global popularity of the smartwatch and technology innovation that has erased the line between smartwatches and conventional wristwatches.

The rapidly growing smartwatch market has already surpassed the period of excessive competition and the elimination of weak brands has seen major players solidify their position in the market. As functions and

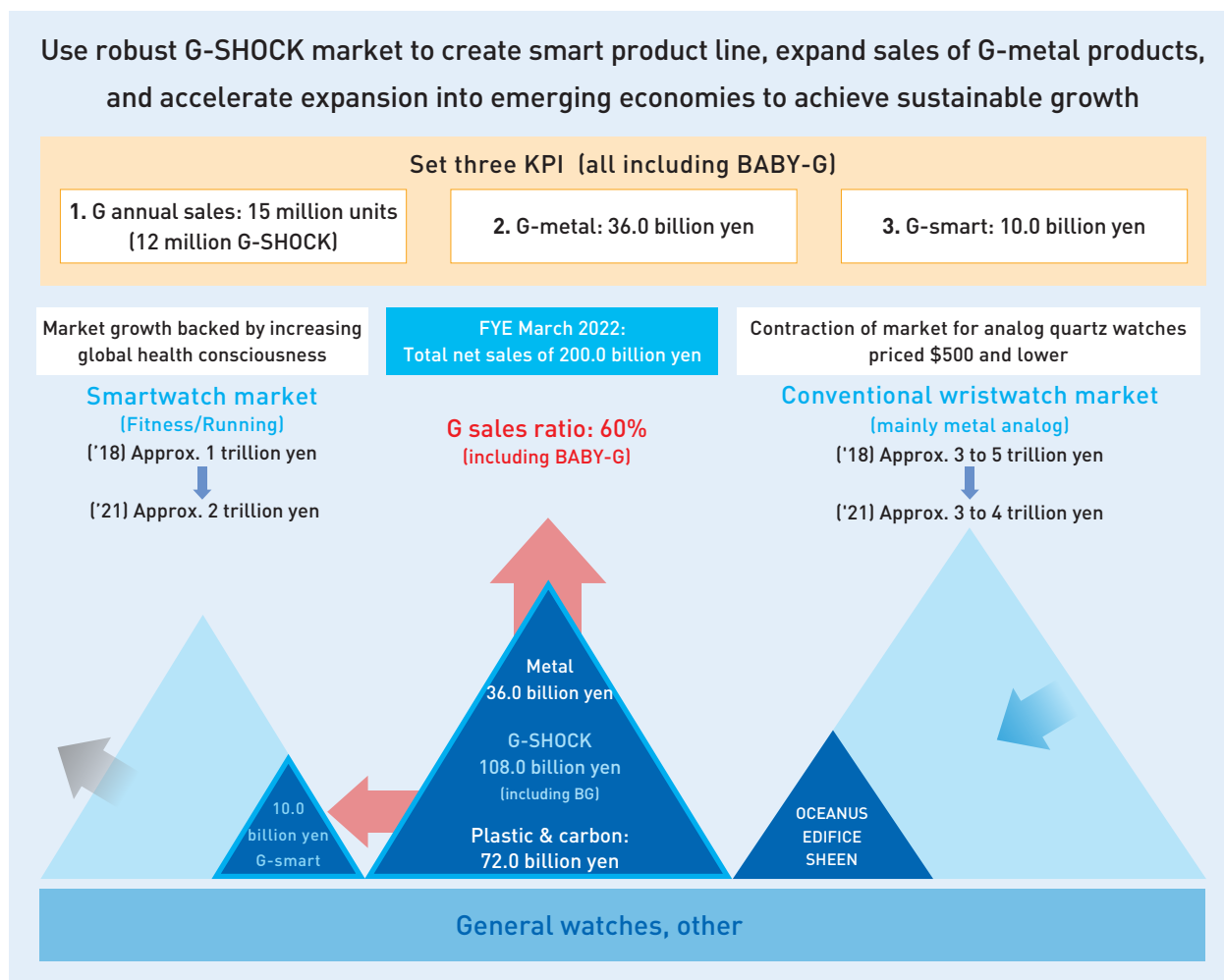
applications become commodities, it has become more difficult for brands to distinguish themselves based on hardware differences. We are entering a stage in which companies use brand recognition to secure market position.

## Mission of Our Medium-Term Management Plan

Since launching the Timepiece Business in 1974, Casio has changed how society views timepiece and created a new culture around timepiece. It is important that we respond to market changes today by using the brand recognition and knowledge we have cultivated over the years to disseminate a sound market presence.

During our medium-term management plan, we will use the brand recognition of the G-SHOCK product line, for which we have shipped over 100 million units worldwide, to expand the metal watch product line and develop smartwatch products. We also will accelerate expansion into emerging markets. By the fiscal year

### Growth strategy for the Timepiece Business



ending March 2022, we aim to increase total annual G-SHOCK sales to 12 million units and aim for metal G-SHOCK sales of 36.0 billion yen. We also aim to establish a position on the smartwatch market and are forecasting net sales of 10.0 billion yen for G-SHOCK smartwatch products.

Through the above initiatives, we will increase the ratio of sales for the highly profitable G-SHOCK to 60% and aim for Timepiece Business total net sales of 200.0 billion yen.

## Business Growth Driven by Innovative Metal Model

In the fiscal year ended March 2019, the newly launched full metal series drove sales of the G-SHOCK brand as a product that uses stainless steel and other metal materials for the outer body, which up to this point had been made from resin materials. Amid a lack of new themes to attract customers to the conventional wristwatch market, our metal models provided a new user experience by using an innovative design that allowed the tough G-SHOCK to be worn in everyday situations. Today, continuously sparking market change is a prerequisite to being chosen by users. During our medium-term management plan, we will continue to exceed market expectations by creating a vast variety of new designs for the metal series.

Technological innovation is key to creating new designs. For example, with metal materials, conventional colors such as silver and gold are common but Casio is currently challenging itself to creating a diverse range of color variations. By overcoming difficult

technical challenges such as adding color to metal, we will be able to create products with textures that are completely different compared to resin colors.

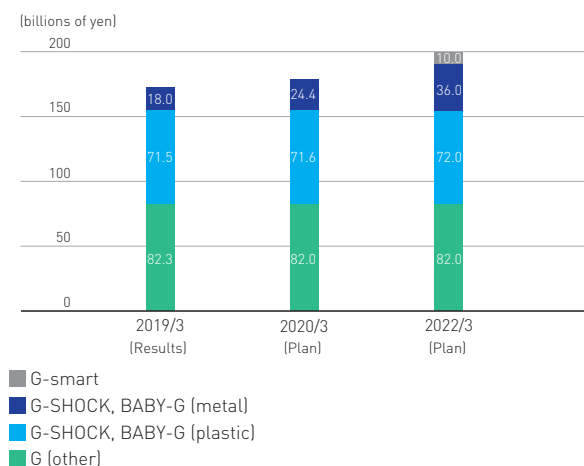
From the fiscal year ending March 2020, we will vastly expand on our line of metal products as we aim for further market growth. We forecast the ratio of G-SHOCK sales represented by metal watches will increase from 20% in the fiscal year ended March 2019 to 30% in the fiscal year ending March 2022.

## Establishing Position in the Smartwatch Market

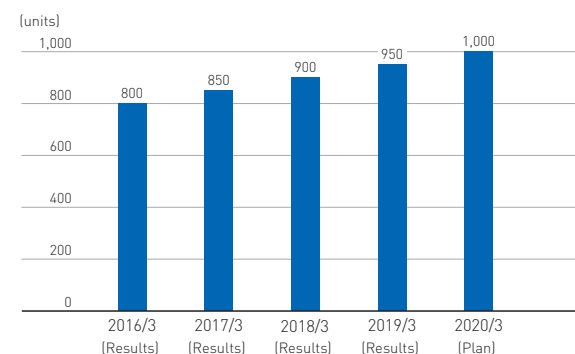
Casio is the only watch manufacturer with experience engaging in the smartphone market. We will apply the strengths of the G-SHOCK brand to establish a firm position in the market. With certain players having already established themselves in the market, the challenge for Casio will be to promote the robustness of the G-SHOCK to capture a position as the de facto standard in the active and outdoor market. We will combine the fashion sense unique to the G-SHOCK brand with GPS and other user-friendly features to provide new experiences. By adding smart features to increase user value for conventional G-SHOCK users who demand robustness in their work and outdoor watches, we will generate demand for new and replacement purchases.

Ahead of a new sales launch in FY 2021, we are making technology investments towards making our devices more compact, faster, and requiring less power consumption. We also are enhancing software development for apps. Smart functions are the key to

### Plan by Genre



### Transitions in G-SHOCK Sales



global market expansion. In the future, we will aim to capture new users in markets for everyday use created by our metal products.

## Enhancing Sales Structure for Untapped Areas

In the Timepiece Business, areas tagged as core markets are untapped areas in emerging economies such as China, ASEAN, and India. In addition to advancing sales strategies customized to the level of market development in each country, we will strengthen relations with partner dealers to aim for business expansion. We also will strengthen head office support for local offices by establishing a Market Development Department and create multiple sales channels by engaging in both e-commerce and digital marketing as we establish a strategic sales structure.

For promotions, we will focus on establishing the G-SHOCK global brand feel in storefront presentations. We will use storefront displays that fully feature metal products to convey to consumers that G-SHOCK has changed and create new topics. We will take successful case studies from China, a market that continues to record annual growth, and other markets and apply them towards other core markets.

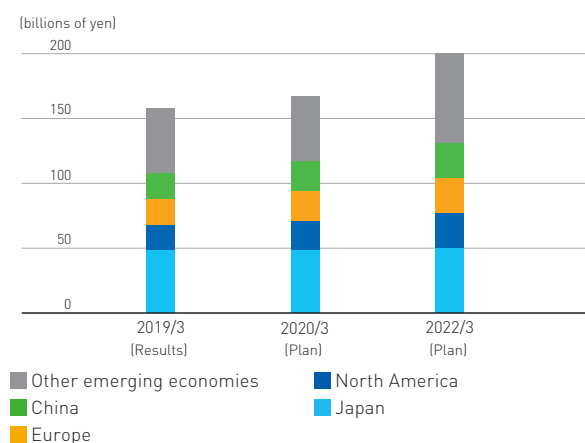
We recently signed global partnership contracts with pro basketball player Rui Hachimura, who will serve as a G-SHOCK ambassador. Moving forward, Hachimura will use social media and other formats to disseminate information to young audiences as part of our initiative to strengthen the G-SHOCK brand.

## Contributing to Environmental Load Reductions and Improved Health

We believe that the ideal final form for a timepiece is to be something that continues to display the time properly in any environment and without the need for user interaction and that can be used forever. Put another way, this means having no need for recharging, battery replacement, or any maintenance, as well as not producing any waste products. With this ultimate form in mind, throughout all our business activities we take an environmentally friendly approach to our pursuit of low-energy, low-resource products. As part of this initiative, we are focusing on the growing problem of plastic waste in our oceans by working to reduce the use of plastic in packaging materials.

In the current smartwatches we are developing, we are using the characteristics of wearable devices to increase user value through walking and running to contribute to increasing sports opportunities. By providing smartwatches and applications used on a regular basis by consumers, we will increase the fun and joy of exercise and contribute to health improvements.

### Plan by Area



## Four Growth Strategies of the Medium-Term Management Plan: Educational Computer Business



### Global growth of scientific calculators and establishing electronic education business

#### Shinji Ota

Executive Officer

Senior General Manager, Educational Computer Business Unit,  
Business Strategy Headquarters

#### Quantitative Goals

	FYE 3/2019 (Results)	FYE 3/2020	FYE 3/2022
Net sales	44.6 billion yen	45.0 billion yen	55.0 billion yen
Operating margin	16%	15%	16%

#### Qualitative Goals

<b>Accelerate growth of scientific calculators in core overseas markets</b>	<ul style="list-style-type: none"> <li>• Business model (GAKUHAN*) that enables continuous sales to the stable student market</li> <li>• Analyze untapped markets, particularly emerging economies, and identify core target countries to increase profit margin and share in core overseas countries</li> <li>• Strengthen measures against counterfeit products in existing markets and expand sales</li> </ul>
<b>Establish new business domains</b>	<ul style="list-style-type: none"> <li>• Develop web apps that take advantage of Casio strengths in the growing electronic testing and electronic textbook markets</li> <li>• Establish business with collaborative partners in the electronic education business (start with North American and European markets)</li> </ul>

#### Sustainability Goals

- Achieve better mathematics education by providing finished products that meet the educational needs of each country
- Improve education levels by providing scientific calculator training to math teachers
- (Environmental load reduction) Reduce use of resources in our business activities



\*GAKUHAN: Positioned as activities to achieve better education by supporting schools and teachers, GAKUHAN is a unique Casio business model that we implement worldwide. With our scientific calculators, which boast a majority share of global markets, we provide ongoing support after product sales, including providing guidance to teachers on how to use our products and creating training manuals. We promote sales to new students each year while contributing to improving student learning levels.

## Forecasting Stable Conventional Markets and Growth in Untapped Markets

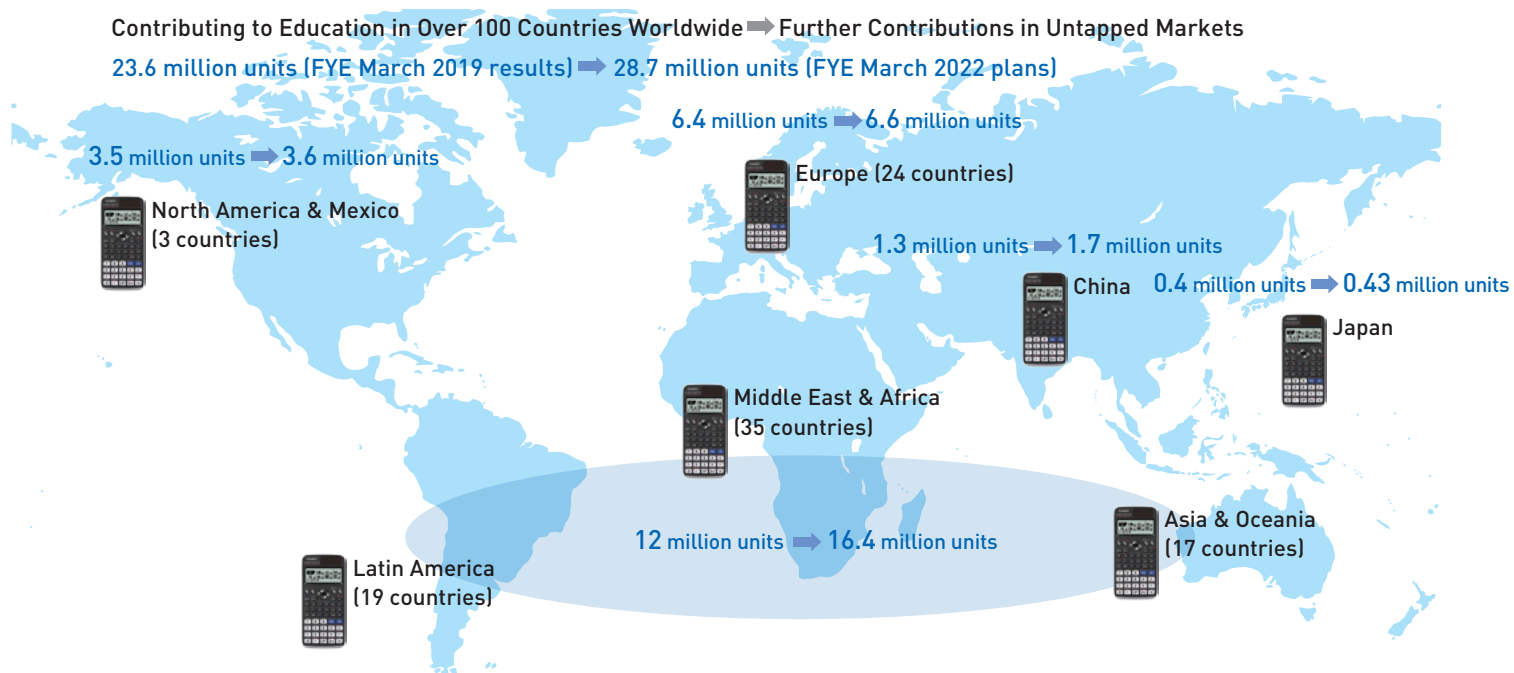
In the Educational Computer Business, sales of scientific calculators to schools continue to record stable growth on a global scale. During the fiscal year ended March 2019, sales of scientific calculators totaled 23.6 million units across over 100 countries and posted a high profit margin of 16%. In Asia, Africa, South America and other untapped markets, we expect to achieve future market growth by rapidly responding to the ongoing issue of delays in promotional activities.

In the education market, Europe and America in particular are beginning the transition from paper to electronic media. With the move towards digital textbooks and the use of computers for the creation and scoring of tests, the current markets for e-textbooks and e-testing in North America alone are 1.4 billion dollars and 5.3 billion dollars, respectively. These markets represent new keys to business growth.

## Strengths of the Casio Original Business Model GAKUHAN

GAKUHAN is at the core of our Educational Computer Business. GAKUHAN is a proprietary business model established by Casio to help realize better education by supporting schools and teachers. Casio scientific calculators boast a majority share of the global market. After product sales, we continue contributing to improving student academic potential by providing teachers with continued training as well as by proposing mathematics classes and developing teaching materials.

For over 30 years, we have engaged in GAKUHAN activities in various countries and regions around the world. Through this powerful network of educational institutions, we have created a flow in the countries we operate through which new first-year students purchase and learn using Casio products. By engaging in customized activities to suit the needs of each education environment, we are providing high added value to our users.





## Identify 13 Core Countries and Enhance GAKUHAN Activities

During our medium-term management plan, we will further accelerate the overseas scientific calculator business to achieve stable growth for the GAKUHAN business model. For untapped markets, we have identified 13 core countries in Asia, Africa, and Latin America and aim for market growth by introducing products that are compatible with the educational needs of each country. We will engage in a bidirectional approach to GAKUHAN activities: top-down engagement involving lobbying local education ministries on education reform and a bottom-up approach that involves having school students and teachers use scientific calculators and providing guidance on more efficient learning methods.

From the fiscal year ending March 2020, we will establish a dedicated market development team in the head office and strengthen our structure by enhancing human resources. To effectively promote products in regions where Casio does not have a sales office, we strengthened dealer responses in each region. We also are planning annual line enhancements at our Thai production base and will engage in aggressive investments to increase production capacity.

We also will focus on strengthening our anti-counterfeiting measures. We will adopt a two-way approach involving both technical and legal measures, including developing new products that are difficult to counterfeit, registering trademarks and concepts, and adopting a web-based authentication system. Eliminating counterfeit products protects users from harm and is vital to increasing Casio brand reputation and market share in each region.

Through these initiatives, during the period of the medium-term management plan, we will aim for general and scientific calculator sales of 53.0 billion yen.

## Creating Business Model in the E-Testing and E-Textbook Markets

We believe that, right now, responding to the accelerating shift from analog to digital in global education markets is extremely important. With the e-testing and e-textbook markets expected to see significant growth, we will accelerate our response, which will center on software development.

Specifically, we will use the knowledge cultivated through GAKUHAN to focus on web app development, including test

modules, math learning tools, and automatic scoring tools. For example, if we can popularize the electronic textbooks that enable problem solving and graph plotting on a browser, we can significantly contribute to improving the quality and convenience of mathematics education. Using North America and Europe as a launching point, we will partner with the test management companies and textbook publishers of each country to promote joint development that incorporates Casio computer technology. In the current medium-term management plan, we have allocated a software development budget of 600 million yen as we establish the platform for Casio's first software business.

In the fiscal year ending March 2022, the final year of our current medium-term management plan, we will aim for net sales of 2.0 billion yen from new segments. Through the medium- and long-term global development of new business models established in those segments, we will respond to changing educational workplace needs and contribute to the development of global e-learning systems.

## Mission to Support Learning Potential for Students Around the World

At Casio, our unwavering social mission is to contribute to the development of global education through our Educational Computer Business and to support student learning potential.

Today, Casio develops and provides products suited to the educational needs of each country in hopes of achieving better mathematics education across the world. By promoting our proprietary GAKUHAN business model, we will provide training using scientific calculators to more teachers and contribute to improving educational levels around the world.

At the same time, as we accelerate our global expansion, we will work aggressively to reduce the use of resources and reduce the impact our business activities have on the environment. For example, annual sales of 23.6 million scientific calculators means a massive amount of paper is used for the included user manuals. However, we can avoid using those resources by shifting to web-based versions. Protecting the trees used as raw material for paper pulp will contribute to sustainable forests.

## TOPICS

### Concluded Partnership Agreement With the Indonesia Ministry of Education and Culture

In September 2018, Casio concluded a partnership agreement with the Indonesia Ministry of Education and Culture. This partnership aims to develop teacher and student potential in the STEM fields (science, technology, engineering, and mathematics).

Since 2016, Casio has engaged in GAKUHAN activities in Indonesia. By providing training to mathematics teachers and by holding mathematics contests, Casio aims to promote the educational benefits of education focused on using scientific calculators to simplify the process of mathematics calculations, which will in turn lead to increased problem-solving skills.

Through this partnership agreement, Casio will provide training for teachers with mathematics classes using scientific calculators and hold trial classes as pilot schools across the country. The results gained from these trials will be applied towards developing class teaching methods and class materials. Through our partnership with the Indonesian government, we will apply the knowledge cultivated through the scientific calculator business to contribute to increasing STEM education levels in Indonesia.





## ► Four Growth Strategies of the Medium-Term Management Plan: New Businesses



Apply Casio's unique technology to  
create new markets

### Jin Nakayama

Executive Officer

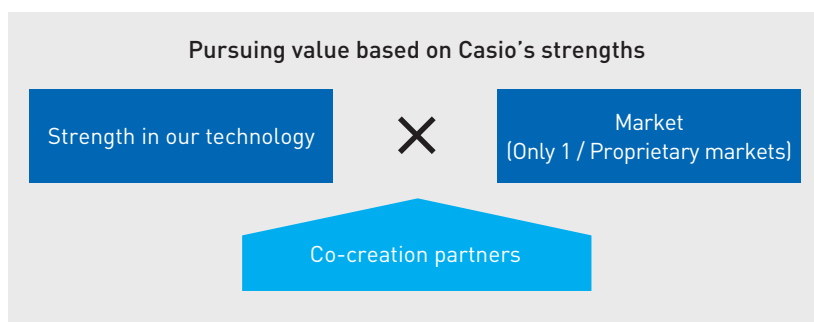
General Manager of Business & Technology Development Center and Senior  
General Manager of Imaging Development

### Quantitative Goal

	FYE 3/2022
Net sales	20.0 billion yen

### Qualitative Goals

Return to our originals of Creativity and Contribution to create new markets  
based on Casio's unique and proprietary technology



### Sustainability Goals

- Promote IT in human health and beauty to provide personal support customized to each individual
- Create social platform that provides people with peace of mind
- Expand creation of innovative customer value experiences with open innovation



## Focusing on Four Business Themes

The Business & Technology Development Center oversees the development of new businesses. Our mission is to create new markets that take advantage of Casio's strengths.

In FYE 3/2019, we initiated a broad-based inventory analysis of the various assets of the Casio Group, including our technology, brand, offices, and distribution channels. At the same time, we worked to analyze long-term trends from the perspective of identifying markets that are highly demanded by society and that have potential for significant growth. We spent the year outlining what Casio can do and what Casio should be doing when we combine Casio's technology with market trends. What we discovered was four themes: health and sports tech, beauty tech, image-based diagnosis support, and imaging modules. In each of these latent markets, Casio will create new businesses by working with co-creator partners capable of providing added value.

## New Business Model for Co-Creation With Asics

We have partnered with major sports equipment manufacturer Asics on health and sports tech to commercialize services for individual runners.

Today, more than 140 million people worldwide engage in running activities. Of those people, some 75% have reported struggling with some form of injury. We will develop a service to act as a personal running coach throughout the running season for individuals seeking to develop a running form that allows them to run faster without injury. By combining Casio G-SHOCK, sensor and

AI technologies with the Asics running knowledge grounded in sports science and big data gathered from the Asics customer base of 46 million professional athletes and amateur runners, we will create a completely new service that provides total customized proposals for everything from form coaching to selecting the optimal shoes.

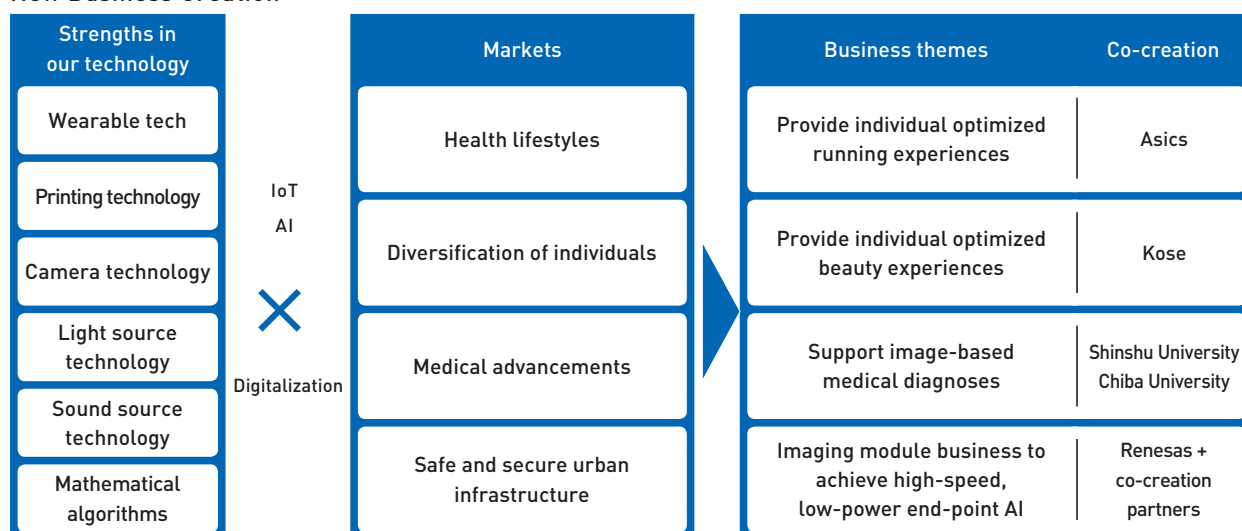
Starting gradually from 2020, Casio and Asics are planning to develop omni-channels encompassing their respective flagship stores and retail shops. We will develop this partnership into a major business that may even entail establishing a joint venture in the future.

## Continuous Development of New Businesses

We are advancing this type of initiative, which turns a page on the conventional one-off sales business approach, into three other segments. In beauty tech, we have started on a business using Casio proprietary printing technology in a business alliance with Kose. A dermocamera was developed through a collaboration with Chiba University and Shinshu University, which developed PC software to manage photo images. The imaging module, which uses image processing technology and mathematical algorithms, involved collaborations with multiple co-creation partners and has potential as a new business.

This new business creation will accelerate Casio towards the next stage of growth. In the fiscal year ending March 2022, the final year of our medium-term management plan, we will aim for net sales of 20.0 billion yen. Furthermore, we will look ahead to future growth by developing new markets from a medium- and long-term perspective.

### New Business Creation



## ► Four Growth Strategies of the Medium-Term Management Plan: Profitability Improvement Initiative

Language education devices

Electronic musical instruments

Projectors

Systems equipment

### Disengage from a low-profit business structure to establish a stable profit platform

#### Quantitative Goals

	FYE 3/2019 (Results)	FYE 3/2020	FYE 3/2022
Net sales	74.7 billion yen	76.0 billion yen	85.0 billion yen
Operating margin	-2%	1%	5%

#### Qualitative Goals

<b>Promoting structural reforms for sales and head office staff</b>	<ul style="list-style-type: none"> <li>• Effect of operating expense reductions by implementing early retirement system for domestic sales and head office staff</li> <li>• Operating expense optimization by reviewing sales structure based on business environment</li> </ul>
<b>Efficient business management</b>	<ul style="list-style-type: none"> <li>• Promote manufacturing efficiency to improve profitability</li> </ul>

#### Sustainability Goals

- Provide opportunities to acquire broad-based knowledge
- Use projectors to develop education infrastructure and provide effective learning environments
- (Environmental load reduction) Reduce use of resources in our business activities



#### Implement Structural Reforms

Language Education devices, musical instruments, projectors, and systems equipment have had business structure issues that have made it difficult to generate profits based on current sales volume. As such, in addition to implementing an early retirement scheme, we also optimized sales expenses by reviewing sales structures and reducing expenses companywide by assessing cost performance. Through structural reforms to development, production, sales, and head office functions under the concept of One CASIO, we will disengage from an unprofitable structure to establish a stable profit platform.

## Apply Business Strengths to Restore Businesses to Growth Trajectories

We will apply the strengths of each business to create new genres and new products to establish and expand markets and restore businesses to trajectories for growth. In the Language Education Business, we will take advantage of Casio proprietary technology, brand recognition, and business models. For the Musical Instruments Business, we will focus on obvious markets. In the Projector and Systems Equipment Businesses, we will maximize potential by expanding sales in untapped areas.

## Examples of Initiatives for the Electronic Musical Instruments Business

The Musical Instruments Business was the first business unit to engage in such initiatives. The markets for musical instruments are stable and this business unit has secured sales by maintaining a certain share of the markets for digital pianos and electronic keyboards. However, problems related to product manufacturing methods and sales methods have resulted in losses. We have implemented various initiatives to address this situation, including revamping the previous business model that involved offering 60 different keyboard models. We reduced our product line for keyboards in half, reinforced centralized procurement for raw materials, strengthened our internal production structure, and developed channels through specialty shops. Through these initiatives, we have created a structure that can secure stable profits from the fiscal year ending March 2020 onward.

### Major Reform Initiatives

#### Production optimization

- Optimized keyboard product line  
Reduced models from 60 to 30 models
- Developed new sound sources (featuring Aix sound source)
- Strengthened internal production structure (transferred from EMS)
- Reduced costs by optimizing supply chain
- Promoted automation

#### Optimization of Distribution

- Restructured distribution (selection of retail stores)
- Dependency on mass retail > Developing specialty shop channels



Automated assembly line for keyboards



PX-S1000