Research and Technological Development

Creating new value by technologies of "Craftsmanship, Miniaturization, Efficiency"



"Craftsmanship, Miniaturization, Efficiency" is a technological philosophy that means: "Craftsmanship" creates new value based on our advanced techniques and know-how. "Miniaturization" reduces product size through precision processing and high-density assembly technologies. "Efficiency" promotes the most efficient use of all resources including energy. Seiko creates new value with "Craftsmanship, Miniaturization, Efficiency" technologies, and continues to contribute to the creation of a prosperous society.



Miniaturization Innovation through precision technologies Efficiency Potential to create a future prosperous planet

Toward a new stage for "Craftsmanship, Miniaturization, Efficiency"

The many technologies we have created in our involvement in the manufacture of clocks and watches since our founding in 1881 support the current Group. Craftsmanship, which creates new value through advanced techniques and know-how, Miniaturization, which condenses functionality to the ultimate limit, and Efficiency, which uses materials and energy efficiently to achieve environmentally conscious manufacturing, are the manufacturing philosophy we have passed down through generations of people involved in technology development.

Based on the foundation of this technological philosophy, the Watches Business and Electronic Devices Business lead our research and development efforts aimed at creating functional value as well as emotional value and the value of self-expression. In addition, by fusing nextgeneration digital technologies such as AI, simulations, and IT, we will offer products and services that exceed our customers' expectations in our existing businesses as well as in significantly growing fields, such as medical care, healthcare, and IoT.

Furthermore, we are pursuing new technologies and creating new businesses in partnership with educational and research institutions, such as research into the topic of the importance of biomechanics in orthodontics, which we are conducting jointly with a university. We will continue to strengthen our industry-academia partnerships, while at the same time carrying out initiatives such as reforming the development process as a whole to make it more environmentally friendly and improve developers' work styles.

Pursuing the value of sensibility in watches

When developing watches, the Group focuses on such functional elements as high precision and longer power reserves, as well as new materials and processing technologies in order to impart the status and joy of wearing them, including beauty, color, and texture, in addition to technologies that support the design process that is vital for creating emotional value. In June 2020, we released the Seiko Prospex Seiko diver's watch 55th anniversary models. These models adopted a new material called Ever-Brilliant Steel, which is a highly corrosion-resistant material used in marine structures and chemical plants, but was considered unsuitable as a material for watches because it is difficult to cut. However, we made repeated improvements, until we succeeded at commercializing a material with a beautiful brilliant white appearance, and the world's highest level of corrosion resistance for stainless steel. We will also use MEMS technology, which has contributed to higher precision in mechanical watches, in our pursuit of function as well as beautiful shape and finish.



steel material is perfect for diver's watches subjected to severe environments

Electronic devices assist with human health

Wearable devices and healthcare products have become established in people's lives, and there is demand to make them more compact, more precise, and consume less power. In order to create products in the field of electronic devices, including micro batteries, guartz crystals, and sensors, which the Group is commercializing, the Group develops technologies that meet these needs. For example, batteries used in healthcare devices must be compact, thin, and lightweight, while simultaneously satisfying the competing demand of increasing the available battery capacity. We succeeded in developing a micro battery with the world's highest level of energy density per unit of weight and volume by eliminating wasted space inside the battery, which reduces capacity, while changing the battery's outer material from metal to resin. With regard to sensors that capture the status of the human body, we are aiming to establish technologies to make infrared array sensors, which are used in noncontact thermometers, more compact and sensitive. Making the sensor itself more sensitive enables us to make the elements smaller, while also reducing costs. This makes it possible to use non-contact sensors for temperature measurement in fields where it was previously deemed impossible in terms of size and price.



A newly developed micro battery: In addition to healthcare, it can be used in such devices as wireless earphones (TWS).



Infrared array sensor SMH-01B01 (left) and next-generation infrared array sensor in development (right)

Predicting DX, equipment abnormalities, and failures before they occur

We offer a service that notifies of abnormalities before they occur, using AI to predict abnormalities and failures based on data from customers' mechanical equipment, IT systems, and sensors for IoT. By continually receiving data, the service system automatically learns normal states. When it detects a silent failure state from behavior different from normal, it sends an alert via the specified means.

This feature has benefits including minimizing equipment downtime and avoiding the risk of data loss by performing maintenance before an actual failure occurs. Over the long term, we expect the service to offer other benefits as well, including reducing maintenance personnel and redirecting human resources with specialized knowledge to tasks with higher added value.



Research and Technological Development

Basic supports for technology development (simulations and analytical evaluation)

Many of the Group's products are small in size, which posed an issue that it is difficult to stably evaluate characteristics using our actual products. We therefore make active use of computer simulations during development processes. In addition to introducing the latest hardware and software, we partner with outside research institutions to support technology development period of with shorter development times and higher quality of development.

In addition, the Group has an analysis functions including morphological observation, composition analysis, and thermal analysis. Analysis equipment specialized for the Group's products, many of which require analysis at the nano level, and highly experienced dedicated staff resolve fundamental issues on the development and production sites. These activities help us provide highly reliable products that our customers can use with peace of mind.





Evaluating the impact for the time accuracy with airflow simulations of the interior of a mechanical watch

Simulation of the magnetic characteristics to the motor in analog quartz motor with lower power . consumptior





Analysis and evaluation works during the development process (left) and a result of analysis of microstructure evaluation of materials (right)

Intellectual property activities

In order to build a competitive advantage in each business field, we carry out strategic activities to strengthen our intellectual property rights, centered on building a patent portfolio focused on our core competencies and acquiring key patents. Dedicated staff for each product category supports engineers from the stage of idea creation to patent application, in order to ensure that we acquire our rights. Over the past 10 years, our patent acceptance rate has increased about 1.5-fold, and we exceed that of corporate average in Japan. As of March 31, 2020, the Group as a whole holds

approximately 4,000 patents and utility models in Japan and overseas. We also actively enter national and local commendations for invention awards sponsored by Japan Institute of Invention and Innovation. In fiscal year 2019, our patent for watch drive circuits won the award of the Governor of Chiba Prefecture. We will continue these activities to maintain and strengthen our businesses and brand value.

Bottom-up vitalization of the organization

Ensuring each engineer highly motivated is highly effective for the technology development process. Each year, the Group holds the Manufacturing "Tokimeki" Forum as part of its bottom-up activities. The Forum serves as an opportunity for organizations and individuals to exhibit various ideas and results, as well as for engineers to interact across organizational boundaries. A contest is held where all attendees vote for the best exhibits, some of which are considered for commercialization as products or businesses. The actuator using air hydro technology, which was proposed in 2019, is currently being considered for commercialization as a product. If this technology is commercialized, we can expect to reduce equipment costs and save energy, because it does not require hydraulic pumps or pipes.



the Manufacturing "Tokimeki" Forum held in FY2019. Groups of engineers were having animated discussions.



TOPICs

Historic New Steps

Concept creation achieving Seiko's highest level of precision ever

In order to make mechanical watches more in time accuracy, it is vital to eliminate the effects of gravity, and ensure that the energy obtained from the power spring is constant. We developed the complex mechanism "TØ Constant-force Tourbillon", which solves both of these problems simultaneously. This is the world's first mechanism that integrates a constant force mechanism and tourbillon on the same axis.

Integrating on the same axis achieves high precision in the time accuracy by improving the efficiency of energy transfer from the power spring to the balance. This new mechanism makes it possible to tell the time with extremely high precision for 50 hours, achieving the most precise mechanical watch in Seiko's 140-year history.

Fruits of 15 years of technology development

In March 2020, we announced Grand Seiko Caliber 9SA5, which is a next-generation mechanical watch completed after more than 15 years of cross-organizational collaboration between our engineers. Our research and development division developed the elements in accordance with the engineering requirements from business divisions, including the dual impulse escapement that is the heart of the watch, hair springs that control precision, power springs in twin barrels, spring components with complex shapes created using MEMS technology, and high-precision lightweight components.

Meanwhile, this mechanical watch could not be inspected during mass production, because its escapement mechanism was so different from previous ones that its characteristics could not be evaluated using conventional measuring instruments. The production engineering division responded by developing several of its own measuring instruments, including a highly precise acoustic rate measuring instrument. Furthermore, in the planning and design division, designers and engineers worked together from the conceptualization stage, pursuing a design with a sophisticated and beautiful appearance. We conduct development from medium- to long-term perspectives and collaborate across organizational boundaries on a daily basis.





Quality

Uncompromising value in all things

One of the things that has always symbolized Seiko is "quality." So it was no surprise when the 32nd NIKKEI Corporate Image Survey, released in February 2020, ranked Seiko as best-in-class for "Quality of products and services." We see this as further evidence that many people have the same impression of the Seiko brand.

Consumers in the Japanese market have very high expectations for quality, and the "Made in Japan" label is synonymous with high quality in the global market. We believe that we have been able to earn this reputation because of our sincere efforts to meet the expectations of all our stakeholders, always aiming to embody our corporate philosophy: "A Company that is Trusted by Society." We also have a long history of focusing on quality. Long ago, our founder believed that he should provide increasingly precise measurements of Time as part of his contribution to supporting society. Since then, Seiko has constantly honed its skills by competing with world-class rivals in the watch industry, which demands ever-higher levels of precision. In 1967, Seiko was acknowledged to have achieved the global pinnacle of guality and precision when it received prestigious awards for outstanding mechanical watches at the Neuchatel Observatory Competition in Switzerland. Since then, Seiko has continued to work ceaselessly toward achieving the world's best quality. For us, "quality" is not merely about durability or

strength (making things that never break or become damaged), but also includes what we think of as usability value. To realize true quality, a product must offer users high levels of precision, visibility, functionality, texture, and fit, and in addition, provide them with a true sense of satisfaction.





Commitment to Quality

Morioka Seiko Instruments, Inc., operates the Grand Seiko Studio Shizukuishi, one of the few fully integrated watch manufacturers in the world, which handles everything from parts manufacture to hand-assembly. It is here where Grand Seiko mechanical watches are crafted. We asked President Yoshiaki Hayashi about the company's commitment to quality manufacturing.

Many people who are somewhat familiar with watchmaking have the sense that it is the detailed process of assembly and adjustment by a skilled craftsman that ultimately breathes life into a watch. In fact, it is not only the assembly process, but actually the process of manufacturing the individual parts that builds in guality from the very beginning. A single mechanical watch requires over 200 tiny parts. It is no exaggeration to say that the most important thing necessary to achieve perfect quality in making a great watch lies in the precise crafting of each of these hundreds of parts. It may sound obvious, but each of the parts in a luxury mechanical watch requires a higher level of precision than the parts of affordable watches. To put it another way, one of the reasons that a luxury watch is more expensive is the tremendous precision necessary in the crafting of each part that goes into it.

We improve that precision by incorporating new processing technologies, such as MEMS (Micro Electro-mechanical Systems), into our manufacturing process. Then, the parts are finished by craftspeople working by hand. These highly precise parts must be assembled by experts, and the watch can only be considered complete after it has undergone a series of very strict inspections. For Grand Seiko, the final inspection process takes more than two weeks. By improving precision in upstream processes, we are

able to simultaneously achieve lower costs, higher quality, and higher production volumes. While we pride ourselves on the outstanding level of our craftsmanship, we are not constrained by tradition. We actively combine the old and the new, incorporating cutting-edge technologies that can add to our pursuit of exceptional quality.

In addition to making luxury mechanical watches, we also mass-produce quartz movements (the key components inside most affordable watches) on an automated production line, which we have created in-house and fine-tuned for maximum efficiency. This is another example of Seiko's worldclass manufacturing ability. Maintaining superb quality in highvolume mass production of very small, highly sensitive parts requires extremely precise control to reduce variation, which is a considerable challenge for any factory.

It goes without saying that we are not the sole reason for Seiko's reputation for superb quality. It is essential for us to maintain a relationship of trust with our many suppliers and partner workshops, and that sense of absolute trust must be mutual. We all share a powerful bond in our joint commitment to maintaining quality. This philosophy is not some convenient company slogan, but is a real, integral part of the daily lives of each and every one of our employees here at Morioka Seiko Instruments. We all aim to create the highest quality products possible and offer them to consumers worldwide to be used, relied upon, and cherished.



In this way, achieving the highest levels of quality stems from a tradition of constant efforts, accumulating multiple technologies, innovations, and manufacturing systems, as well as building relationships of trust that extend from initial design and parts manufacturing to after-sales service. I believe that true Seiko quality means never being satisfied with the current situation and continually upgrading our approaches to keep pace with the times, and by doing so, to meet and exceed our customers' expectations.



Beyond Quality

At first, our quality target was merely to guarantee that our products functioned properly and would satisfy our customers so that they would become repeat customers. Of course, as we began to aim for higher and higher levels of quality, we discovered that the very highest levels provide excellent functionality as well. In addition, that level of quality leads to a special emotional value, such as the joy one gets from presenting a gift. Furthermore, high-quality manufacturing makes effective use of resources, saves energy, and takes advantage of other techniques to help address social problems. We are not only committed to assuring the outstanding quality of our products, but also the quality of the solutions that we offer. At Seiko, we want to touch the hearts of people all over the world by exceeding the expectations of customers and of society in general. We aim to do this not only with watches, but also in the fields of clocks, electronic devices, systems solutions, and our Wako specialty store.



Branding Strategy

Moving ahead. Touching hearts. Sharing fun and excitement with all our stakeholders throughout the world.

Seiko has continued to provide the world with more than just products, services, and technologies. To demonstrate our strong commitment to "Moving ahead and touching hearts," we want to support individuals who display real passion in the areas of sports - where athletes strive to establish new records - and music, which lifts people's spirits and can almost make time stand still. We aim to increase our brand value by being seen as a company that shares these powerful human emotions with people around the world.



Sports

Sports Branding

We continuously pursue brand investment to strengthen the image of "sports timing = SEIKO," a reputation we have been building up since 1964.

Seiko Golden Grand Prix Athletics

Seiko has been an Official Timer of the IAAF World Athletics Championships since 1985 and a special cosponsor of the Seiko Golden Grand Prix since 2011. The August 2020 Grand Prix, which was held without spectators, gained a great deal of attention for being the first athletics event to be held at the new Japan National Stadium. Seven-hundred children participated in the Rising Star Athletics event on the previous day, enjoying the experience of a real sporting competition with professional time measurement. For many of them, this was a dream come true.

Team Seiko and Supported Athletes

Team Seiko includes such athletes as track and field stars Ryota Yamagata and Chisato Fukushima, swimmer Masato Sakai, and trampolinist Ginga Munetomo. We also support fencer Karin Miyawaki and swimmers Natsumi Sakai and Shoma Sato. They push each other to perform their best through friendly competition







Music

Music Branding

Seiko supports music and cultural activities with the aim of giving people "quality time through music."

Seiko presents Sound Inn "S"

The Sound Inn "S" televised music program spotlights exceptional artists

In sympathy with the many people suffering directly or indirectly from the pandemic, several musicians performed a remote "Sound Inn

S@HOME" concert on YouTube. Many viewers responded by saying the event cheered them up.



Digital

We are strengthening our branding activities by leveraging the power of digital communication tools, in particular, our Website and various social networking services. 心動かす時を共に







THE SEIKO MUSEUM GINZA

As part of the activities to commemorate the 160th anniversary of the birth of Seiko's founder, Kintaro Hattori, we moved the Seiko Museum of time and timepieces to Ginza, the birthplace of Seiko. On the 2nd floor is a special Kintaro Hattori Room, where visitors can see the challenges and efforts of the founder and come to understand his spirit of "always being one step ahead of the rest."

Ambassador

Kabuki actor Ebizo Ichikawa becomes Group Ambassador



Seiko prides itself on its ability to communicate Japan's craftsmanship and technology to the world. That was further enhanced with the appointment of Ebizo Ichikawa, a highly regarded Kabuki actor and successor to the theater's head family, as Group Ambassador Like Seiko, Ichikawa has a strong connection to the Ginza area, and both parties share a desire to respect and uphold tradition while at the same time promoting innovation.



Human Resources Strategies

Aiming for sustainable growth of the Group by creating a virtuous cycle of "recruiting," "cultivating," and "leveraging" human resources

Basic policy

The labor environment is expected to change due to such factors as advances in information technology, labor shortages due to the aging population and falling birth rates, and increasing diversity in forms of hiring and employment. Amid these changes, the Seiko Holdings Group will aim for sustainable growth over the threeyear period of the 7th Mid-Term Management Plan through a virtuous cycle of "recruiting," "cultivating," and "leveraging" human resources by preparing an environment where personnel with diverse senses of value can work enthusiastically.





"Recruiting"

In order to achieve what we aim to be in 2025, we will further promote diversity, with active initiatives to hire globally (hiring foreign nationals), with a focus on midcareer hires in addition to new graduates. We believe that gathering diverse people together will be our source of continuous innovation.



"Cultivating"

Because we operate a wide range of businesses in the global market, we have a variety of employees in the Seiko Holdings Group of various nationalities, backgrounds, and job types. We strive to develop the capabilities of each employee through a range of education programs matched to the characteristics of each business and local region where we operate. We also work to develop leaders demanded by the era of the "new normal" and provide stratified training to improve skills, as well as training to develop global human resources and other types of education.



"Leveraging"

In addition to developing human resources, the Seiko Holdings Group works to improve productivity and create an environment where diverse employees can feel job satisfaction and fully leverage their capabilities. We also strive to strengthen the Group's human capital as a whole and maximize the organization's capabilities by optimizing personnel assignments.



From FY2019, the Seiko Holdings Group have added the perspective of health management to our initiatives for promoting the active role of all employees to send out "Declaration of Health Management" and have built the promotion system. The Employee Empowerment Committee, HR management at each company, and health insurance societies work together to promote initiatives for the health maintenance and improvement of the employees. In recognition of this initiative. Seiko Holdings Corporation and Seiko Watch Corporation were recognized under the Certified Health & Productivity Management Outstanding Organizations Recognition Program in March 2020.



SEIKO Career Academy

The Seiko Holdings Group has various cross-Group recruiting measures aimed at hiring a diverse workforce.

One of these measures is a seminar named "SEIKO Career Academy," which we have been holding since 2015. The Academy is grabbing attention for its programs that give advice to students as well as enabling them to learn knowledge and ways of thinking that will be useful once they are out of school, and it has given us the opportunity to meet many students. Additionally, in

Global human-resource development program and passing on skills

Seiko Instruments Inc., which operates many of the Seiko Holdings Group's overseas manufacturing bases, conducts major training that forms the backbone of its operations using the same training program in Japan and its overseas bases. The HR staff in Japan and

at overseas bases work together to establish HR development policies, educational systems, and training plans for each location and create structures for advancing them.



Skills guidance by a "meister" (Dalian, China)

Work systems supporting diverse work styles The Seiko Holdings Group believes that

promoting work-life balance, harmonizing and enriching work and private life (e.g. caring for children and family members, self-development, and volunteering) develops new knowledge and rich creativity in our employees and encourages them to perform their duties autonomously. Some distinctive programs introduced by Group companies include a shortened working hours program, which enables permanent employees to work fewer hours each day, and a shortened workweek program, which reduces the number of days worked per week. We are aiming to recruit diverse human resources and improve productivity by enabling our employees to focus on their work in a form that matches their individual lifestyles.

Internal open recruiting program

Seiko Instruments Inc. has created an internal open recruiting program that encourages employees to play leading roles in their job choices and how they leverage their skills, speeds up personnel assignments in response to changes in the business environment, and aims to make effective use of human resources. This program enables any employee to apply for job openings from each division provided they meet certain criteria. We respect our employees' ambitions and support giving broader career choices. order to increase understanding in the Seiko Holdings Group, we build a relationship of trust by striving to hold company orientations that take on the perspective of students. These measures help us recruit personnel that

settle in after hiring and are highly motivated. We will continue our commitment to hiring people who can grow together with us for the sustainable growth of the Group.



Additionally, we introduced the "meister" certification in FY2018 for highly skilled employees at our manufacturing bases, in order to pass on skills and techniques and develop successors.

Making a creative organization and corporate culture As a company in the IT industry, where change is particularly intense in this rapidly changing social environment, SEIKO Solutions Inc. continuously conducts "Design Thinking Training", where change is particularly intense. The training is focused on design thinking to continuously provide new value from the customers' perspective. Through efforts to disseminate and strengthen design thinking within the company, this training leads to creative innovation throughout the organization.

From empowerment of women to active roles for all employees

Many women have long played an active role within the Seiko Holdings Group. Since FY2013, we have been promoting further empowerment of women, including setting up an environment and changing awareness, starting with the adoption of various programs. As a result, we had increased the ratio of women in managerial positions in the Group as a whole from 5.3% as of April 1, 2013, to 13.4% as of April 1, 2020. Distinguished among the Group are Seiko Holdings Corporation, with a ratio of 28%, SEIKO WATCH CORPORATION, with a ratio of 17%, and WAKO Co., Ltd., whose ratio of female employees is a high 54%. The 7th Mid-Term Management Plan sets a target ratio of 15% women in managerial positions for the Group as a

whole. We currently are expanding our activities to promote the active role of all employees in order to further promote diversity.



Employee Empowerment Committee

Ratio of women in managerial positions



Foundation Supporting Value Creation

Corporate Governance - List of Directors & Officers (current as of October 1, 2020)

SEIKO HOLDINGS CORPORATION

SEIKO HOLDINGS C	URPURATION				SEIKO NPC C	ORPORATION		
airman & Group CEO & Group CCO	President Yoshinobu Nakamura	Senior Executive Direc Human Resources and Akihiro Ok	tor I IT Planning	Executive Director Finance & Corporate Strategy Planning, ESG-SDGs Promoting, Accounting and Procurement Planning	President	Director, Senior Vice Preside Production Department, Humar Resources & General Affairs De	n epartment Direc	
hinji Hattori	TUSTIITUJU NAKAITUT		uma	Shimesu Takizawa	Yoichi Endo	Kimio Yomogida	<u>a Yo</u> s	shinobu Nakamura
ecutive Director rporate Branding	Director Legal & Intellectual Property and Real Estate	Director Secretariat and Gener		Director Watches Business and DX Promoting				
yoko Niwasaki	Kazuhiko Sakamoto	Makoto Icl		Shuji Takahashi	Director Kunio Nakajima	Director Hitoshi Muraka		porate Auditor Aruhiko Takagi
ır		7/17/11/1						
ch & Development and Production Engineering		Outside Director		Corporate Auditor				
u Kobayashi	Tsuyoshi Nagano	Yasuko Te	aura	Haruhiko Takagi	SEIKO Solution	ns Inc.		
rate Auditor	Outside Corporate Auditor	Outside Corporate Au	litor	Outside Corporate Auditor		Director, Chief Executive Vice	e Dire	ctor, Senior Executive Vice
ashi Nishimoto	Tomoyasu Asano	Hideki Am	ano	Masatoshi Yano	President Jun Sekine	President, CTO Tatsumi Hasega		sident Ishio Kobayashi
							10	
					Director Yoshinobu Nakamura	Director Akihiro Okuma	Direc	_{ctor} 1uji Takahashi
SEIKO WATCH C	ORPORATION					Executive Vice President Senior Executive Manager, D		cutive Vice President tegic Promotion, Quality
Chairman & CEO	President & COO & CMO	Director, Deputy Sales Division I	Chief Operating Officer	Director, Deputy Chief Operating Officer Sales Division II	Corporate Auditor	Service Business Unit	Assu	urance Dept.
Shinji Hattori	Shuji Takahashi	Minoru Is	shiguro	Akio Naito	Haruhiko Takagi	Hiroyuki Watan		roaki Onishi
	Director, Senior Executive Vice Pre				Executive Vice President, Senior Executive Manager, Strategic Business	Senior Vice President	Seni	ior Vice President ior Executive Manager, tagia Rugingga Unit II, Strategia
Director, Senior Executive Vice President Corporate Strategy & Planning Division	Planning & Development Division a Production Planning Division		ve Vice President nd Planning Sales Dept.	Director, Senior Vice President Sales Division II and Marketing Dept. (Americas)	Unit I, Executive Manager, IoT Div., Mobile Solutions Business Unit	Senior Executive Manager, D Transformation Business Uni	it Netw	tegic Business Unit II, Strategic work Unit
Taku Yoneyama	Hiroshi Nakahara	Hiromi K	anagawa	Teruyo Ishimaru	Takeshi Ichikawa	Nobuchika Mats	Joka Hi	rofumi Sakamoto
Director, Senior Vice President Sales Division II	Director	Director		Director				
Yoshikatsu Kawada	Yoshinobu Nakam		ttori	Kiyoko Niwasaki	SEIKO Clock I	nc.		
				Senior Vice President		Director, Senior Exective Vice President	Director	Director
Corporate Auditor Atsushi Kaneko	Outside Corporate Auditor Yutaka Nishimura	Corporate Audito		Sales Division I Hiroshi Shimizu	President	Business Strategy & Product Planning Division	Domestic Marketing Div	ivision General Administr
Alsusiii Kalleku		Haruhiko	lakayi		Kenji Hagiwara	Ichiro Doi	Akira Bann	no Satoshi I
Senior Vice President	Senior Vice President	Senior Vice Pres		Senior Vice President Corporate Strategy & Planning Division and	Director	Director	Director	Corporate Audito
Planning & Development Division Yasunori Hagiwara	Marketing Communications Office Toru Tsuchiya		ing Division akenaka	Corporate Management Dept. Naoaki Tanimura	Yoshinobu Nakamura	Kazuhiko Sakamoto	Satoshi Yos	shino Takashi Ni
	_							
Senior Vice President Planning & Development Division, SDGs Plan Office and Movement Design & Engineering [and Design			WAKO Co., Ltd	d.		
Akira Takakura	Kiyomi Tanemura							
					Chairman	President		naging Director, Senior Vice sident
					Shinji Hattori	Shuntaro Ishii	<u> </u>	detoshi Okamoto
Seiko Instruments	s Inc.				Director	Director	Direc	ctor
		Director, Senior Executive Vice President	Director, Senior Executive Vice Preside		Shuji Takahashi	Kiyoko Niwasal	<u>ki Ta</u>	kashi Aizawa
Chairman	President	General Manager, Electronic Components Business Headquarters	General Manager, Human Resources & General Administration Division	Corporate Environmental Administration Department	Senior Vice President	Senior Vice President		ior Vice President
Yoshinobu Nakamura	Tetsu Kobayashi	Shinji Nureki	Akihiro Okuma	Shimesu Takizawa	Toshihiro Machida	Mitsuo Shibuya	Ak	kiko Seno
Director, Executive Vice President General Manager, Precision Device Business Headquarters	Director, Senior Vice President General Manager, Printing Device							
General Manager, Motion Device Division Takahiro Naito	Business Headquarters Kenji Otsuka	Director Hideo Hattori	Director Kazuhiko Sakamot	o Shuji Takahashi	SEIKO Time S	vstems Inc		

Takashi Nishimoto

Senior Vice President General Manager, Micro-Energy Division Koji Tomitsuka

Corporate Auditor

Corporate Auditor

Makoto Hirota

Tatsuo Sagami

Senior Vice President General Manager, Printing Device Business Management Office Outside Corporate Auditor

Norimasa Kuroda

Senior Vice President General Manager, Finance Division

Takumi Yoshitomi

Corporate Auditor

Hiroaki Sahara

Senior Vice President General Manager, Printek Division

Yoshihiro Takeda

ninobu Nakamura

Akihiro Okuma

Director

Senior Vice President Administration Department

Hideaki Tadokoro

Director Shimesu Takizawa

Senior Vice President Sales & Design Solution Division Toshimitsu Ogasawara

ofumi Sakamoto

Director, Executive Vice President CFO

Yoshiyuki Hashimoto

Corporate Auditor Shunji Tanaka

Executive Vice President Senior Executive Manager, Mobile Solutions Business Unit

Toshimasa Ike

Corporate Auditor Seiichi Mikami

Director, Executive Vice President

Makoto Ichimura

Executive Vice President, Senior Executive Manager, Region Business Unit, Network Solutions Business Unit, Food Service Solutions Busines Unit

Junichi Fujii

Director General Administration Division Satoshi Morita

Corporate Auditor Takashi Nishimoto Director Research & Technology Division Osamu Sugita

Senior Vice President Research & Technology Division Hironori Yamada Director International Marketing Division Susumu Kawanishi

Managing Director, Senior Vice

Kazuhiko Sakamoto

Director

Director

Director

Director

President

Director

Kenji Hagiwara

Satoshi Yoshino

Sales Division Headquarters and Head of Construction Management

Shogo Sumida

Kiyoko Niwasaki

Director

Makoto Ichimura

Senior Vice President Takayuki Arai Director, Senior Vice President Takeshi Endo

Corporate Auditor Haruhiko Takagi

Engineering Division Headquarters and Administrative Headquarters

Ryozo Suenaga

Naoki Tajima

Director Sales Division Deputy Headquarters Kazuo Yamamura

Corporate Auditor Takashi Nishimoto Director Manufacturing Division Headquarters and Factory Automation Division Headquarters Mitsunaga Yata

Corporate Auditor

Hideo Hattori

Corporate Governance

Basic Principle of Corporate Governance

Based on the principle "being a company that is trusted by society", Seiko Holdings Corporation considers "compliance with relevant laws and regulations", "implementation of management transparency and fairness", and "honoring social ethics" as core business goals. In order to achieve these goals, the Company will strengthen and promote its corporate governance framework and strive to achieve the Group's sustainable growth and increase corporate value.

Basic Policy

(1) Securing the Rights and Equal Treatment of Shareholders

The Company strives to develop a necessary environment that effectively ensures the rights of shareholders including voting rights at the general meeting of shareholders, and provides them with the necessary information accurately so that they can exercise their rights appropriately. The Company also committed to securing equality among shareholders, such as minority shareholders and foreign shareholders.

(2) Appropriate Cooperation with Stakeholders other than Shareholders

The Company recognize that its social responsibility is to contribute to the realization of a sustainable society through implementation of the Group's basic principle "being a company that is trusted by society". Under such recognition, the Company strives to cooperate appropriately with its various stakeholders, including its shareholders, customers, business partners, members of local communities and employees.

(3) Ensuring Appropriate Information Disclosure and Transparency

In order to obtain appropriate evaluation from its various stakeholders including its shareholders, and to engage in a constructive dialogue with shareholders, the Company strives not only to disclose appropriate information in compliance with relevant laws and regulations, but also to disclose other information in a timely and appropriate manner so that such information would be clear and useful for the people who use it.



(4) Responsibilities of the Board of Directors

The Board of Directors will engage in free and constructive discussions and exchanges of opinions, and will appropriately fulfill its roles and responsibilities for the sustainable growth of company and the enhancement of corporate value over the medium to long-term, including making decisions on important management matters such as business strategies, establishing an environment that supports swift and decisive decision-making by the senior management, and enhancing management supervision.

(5) Dialogue with Shareholders

The Company will promote constructive dialogue with its shareholders to contribute sustainable growth and enhancement of corporate value over the medium to long-term based on "Basic Policy on Constructive Dialogue with Shareholders".

Corporate Governance Structure

As the holding company, the Company clarifies the management responsibilities in each business and develops an organizational structure for accelerating management decision-making, enhancing the function of business execution and strengthening the management oversight function.

The Board of Directors continually ascertains the circumstances of the operating companies and receives explanations when necessary, as well as carries out quick and appropriate decision-making. The Company holds a Management Council comprising full-time officers of the Company and the respective Presidents of operating companies for the purpose of working to share the management policy and management information of the Group. The Company also holds a Strategic Conference for Management for the purpose of deliberating basic matters of business execution and promoting management activities appropriately and promptly. Furthermore, the Company has established the Corporate Governance Committee as an advisory committee for the Board of Directors.

Board of Directors

The Board of Directors is composed of eleven (11) Directors (including two (2) female directors), of whom two are Outside Directors. The Board of Directors, pursuant to the Regulations of the Board of Directors, is engaged in decision-making concerning fundamental management matters and important business execution, in addition to matters set forth in laws and regulations and the Articles of Incorporation, as well as the monitoring of business execution. Decisions regarding business execution other than the above have been delegated to the management pursuant to the Regulations of Administrative Authority. There are two (2) Outside Directors who have broad experience and considerable insight in business management and in respective fields of specialization. With their independent positions, they contribute to improvement of monitoring functions of the management.

Evaluation of the Effectiveness of the Board of Directors

As part of efforts to strengthen the corporate governance system, the Company evaluates the effectiveness of the Board of Directors each year.

Analysis and evaluation methods

All Directors and Corporate Auditors were asked to fill out a questionnaire regarding the effectiveness of the Board of Directors, and replies were collected from all of them. External consultants tabulated and analyzed the results by ensuring the anonymity of the respondents.

The questionnaire was prepared based on initiatives and discussions on the Company's corporate governance to date, and the following evaluation items were set.

<Evaluation Items>

- 1) The status of deliberations and operation of the Board of Directors
- 2) The composition and roles of the Board of Directors
- 3) The support system for Outside Directors
- 4) Roles of and expectations for Corporate Auditors
- 5) The Corporate Governance Committee
- 6) Relationships with investors and shareholders

The results of the analysis by external consultants based on the above process and content were reported to the Board of Directors, which, in turn, performed its own evaluation of board effectiveness and discussed the future measures by referring to these results.

Board of Auditors

The Board of Auditors is composed of two (2) Corporate Auditors and three (3) Outside Corporate Auditors. Its role is to make decisions and discussion on important matters relating to the audit. Corporate Auditors audit the compliance and validity of the Directors' business execution by participating in the Board of Directors meetings and other important meetings. Outside Corporate Auditors offer necessary advice, suggestions and opinions, making use of their broad experience and insight in business management and in respective fields of specialization.

Corporate Governance

Corporate Governance Committee

In order to enhance the objectivity and transparency of management, the Company establishes the Corporate Governance Committee where outside officers account for the majority of members, as an advisory committee for the Board of Directors. The Committee deliberates on matters relating to compensation for officers, nomination of officer candidates, appointment and dismissal of Representative Directors, Directors with special titles, and Directors who execute business duties, and other matters regarding corporate governance from an objective and fair perspective, and reports to the Board of Directors. The members and the chairperson of the Corporate Governance Committee are as follows:

Chairperson	President	Yoshinobu Nakamura	
Members	Chairman & Group CEO	Shinji Hattori	
	Outside Director	Tsuyoshi Nagano	
	Outside Director	Yasuko Teraura	
	Outside Corporate Auditor	Tomoyasu Asano	
	Outside Corporate Auditor	Hideki Amano	
	Outside Corporate Auditor	Masatoshi Yano	



(From left front) Yasuko Teraura, Tsuyoshi Nagano, Tomoyasu Asano, Hideki Amano, and Masatoshi Yano (From right front) Shinji Hattori and Yoshinobu Nakamura

Compensation of Officers

1. Basic policy of the compensation of officers For determining compensation for officers of the Company, the basic policy is as follows:

- To ensure transparency and objectivity of compensation as well as to set the compensation level appropriate for their roles and responsibilities.

- To encourage the execution of duties in line with the management philosophy and the management strategy, and to motivate the achievement of management objectives, in order to achieve sustainable growth of the Company and the Group and to enhance corporate value in the mid to long term.

The level of compensation for officers is determined based on results of the survey on compensation for officers by third parties targeting similar companies in terms of business contents and scale, etc.

2. Compensation system for officers

Compensation for Directors who execute business duties consists of "basic compensation," which is a fixed compensation, and "bonuses" (short-term incentive compensation) and "stock compensation" (mid- to longterm compensation), which are performance-linked compensation. Compensation for Directors who do not execute business duties, including Outside Directors, and Corporate Auditors consists of "basic compensation only." The ratio of payment of the fixed compensation to the performance-linked compensation is determined at an appropriate level to serve as an incentive to contribute to improving the corporate value of the Company, taking into account the levels of the above peer companies. The ratio of payment of each type of compensation is as follows:

	Fixed compensation	Performance-linked compensation	
	Basic compensation	Bonus	Stock-type compensation
Representative Directors	1.0	0.2	0.2
Directors who execute business duties other than Representative Directors	1.0	0.15	0.15

The above 1. and 2. were determined by the Board of Directors after being deliberated on by the Corporate Governance Committee, a majority of the members of which are outside officers.

3. Calculation method for performance-linked compensation (Bonuses)

The standard payment amount of bonuses is the amount determined by multiplying the basic compensation by the coefficient set by position. The individual payment amount is determined by multiplying the standard payment amount by the payment rates according to the performance achievement ratio. Bonuses vary from 0% to 200% according to the target achievement level.

(Stock compensation)

For stock compensation, points that the individual payment amount converted into the number of shares are granted in each fiscal year. The individual payment amount is a total of the standard payment amount (fixed portion), calculated by multiplying the basic compensation by the coefficient set by position, and the amount (performance linked portion), obtained by multiplying the standard payment amount by the payment rate according to the performance achievement ratio. The performancelinked portion of stock compensation varies from 0% to 200% according to the target achievement level. The ratios of the fixed portion and performance-linked portion are 50% each.

Indicators for performance-linked compensation are consolidated net sales and consolidated operating profit, which are set as important management indicators for the company's performance evaluation to serve as an incentive for achieving the Group's management targets.

Appointment and Dismissal of Senior Management and Nomination of Candidates for Directors and Corporate Auditors

The Company believes that it is essential that candidates for Directors and Corporate Auditors have the character and knowledge suitable for their respective duties. Based on this concept, in the nomination of candidates for internal Directors and the selection of senior management, comprehensive consideration is given from the standpoint of appointing the right person for the right position, so that talent is appointed in a well-balanced manner to cover functions of the Company as a holding company as well as the Group's business fields, while ensuring accurate and timely decision-making. In the nomination of candidates for internal Corporate Auditors, comprehensive consideration is given from the standpoint of whether the candidate possesses knowledge of the Group's businesses as well as insight regarding finance, accounting and legal affairs, and whether the candidate can contribute to ensuring the soundness of management.

In the nomination of candidates for Outside Directors, comprehensive consideration is given from the standpoint of whether the candidate possesses abundant experience and high degree of knowledge of corporate management and specific fields.

In the nomination of candidates for Outside Corporate Auditors, comprehensive consideration is given from the standpoint of whether the candidate possesses insight regarding finance, accounting and legal affairs, as well as abundant experience and high degree of knowledge of specific fields.

Based on the above policy, the Board of Directors determines the candidates proposed by the representative directors, upon deliberation by the Corporate Governance Committee, the majority of which comprises outside officers. In addition, with regard to the dismissal of senior management, in situations in which dismissal standards determined by the Board of Directors apply, such as when senior management is not fully fulfilling his or her function in light of evaluations including the Company's performance, the Corporate Governance Committee conducts deliberations in a timely manner, and the Board of Directors, based on the results of such deliberations, dismisses the Directors from the office of representative directors, Directors with special titles and Directors who execute business duties.

Cross-Shareholdings

From the perspective of improving the corporate value of the Group in the mid- to long-term, the Company has a policy to reduce shares that are deemed not to have a significance of holding them, taking comprehensively into consideration the Company's management strategy, business relationships with clients, and the benefits and risks, etc., associated with holding in view of its capital cost.

- Disclosure of the verification of the propriety of cross-shareholdings

The Company's Board of Directors verifies each year the rationale for the holding of all listed shares held in cross-shareholding by the Group through examination of the importance of the issuer as a business partner and benefits and risks of shareholding in light of capital costs and other factors.

Most recently, an individual verification was conducted at the meeting of the Board of Directors held in August 2020.

With regard to certain shares, which were determined to be lacking in significance or rationale for continued holding, the Company proceeds with discussions toward their disposal.

- Standards for exercising voting rights on crossshareholdings

With regard to the exercise of voting rights on crossshareholdings, the Company exercises its voting rights, upon fully respecting management policies and strategies, etc. of the issuing company, by comprehensively determining on whether the proposal contributes to the sustained growth and the mid- to long-term enhancement of corporate value of the issuing company, and whether or not it undermines shareholder value, among other factors.

In addition, in making such decisions for particularly important proposals, the Company holds dialogue with the issuing company, as necessary. The proposals deemed important by the Company are as follows.

- Proposals on appointment of Directors and Corporate Auditors
- Proposals of reorganization including mergers
- Proposals on takeover defense measures
- In addition to the above, proposals that may undermine shareholder value

Internal Control System

The Company, in accordance with its basic policy on the internal control system, has established a Group-wide internal control system, including the Group's business management, corporate ethics, compliance with laws and regulations, risk management and internal audits. Furthermore, the Company monitors the operation status of internal controls and periodically reports the results to the Board of Directors.

Corporate Ethics / Compliance

Seiko Holdings Corporation fulfills its corporate social responsibility by complying with statutes, respecting social ethics, and setting up healthy and sensible corporate ethics. Based on this approach, Seiko Holdings Corporation has established the following as its Basic Principles of Corporate Ethics.

Basic Principles of Corporate Ethics

- Complying with the laws and rules of the countries and regions where business is conducted and engaging in fair practices in the light of social ethics.
- Aiming to become a sensible corporate citizen, and striving for harmony with society.
- Disclosing information in a timely fashion, and engaging in honest and transparent communications.
- Protecting the irreplaceable earth and contributing to the preservation of the environment.
- Respecting fundamental human rights and individuality, and building up a corporate culture with a broad vision which fosters the spirit of corporate ethics.

Structure for the Promotion of **Corporate Ethics and Compliance**

In accordance with the Basic Principles of Corporate Ethics, the Company has established the Corporate Ethics Committee and Action Guidelines for Corporate Ethics, and consistently promotes education and enlightenment, consultation and reporting, auditing, and evaluation, etc. to all its officers and employees. Each operating company of the Group has established its own system of corporate ethics and action guidelines in accordance with characteristics of its business, relevant laws, regulations, and rules. Accordingly, when an incident involving corporate ethics occurs at an operating company, the operating company is responsible for resolving the issue. When requested by an operating company, the Company provides full cooperation and support toward resolving issues involving corporate ethics.

Group work at a seminar for Officers and employees at managerial positions on the topics of risk management and harassment



Implementing Corporate Ethics and Compliance Structure

The Company regards maintaining and implementing Corporate ethics and compliance structure as a crucial management issue and therefore implements business ethics training for all executives and employees. In FY2019, as a Group-wide initiative we held corporate ethics training for Officers on the topic of crisis management following a scandal, and provided seminars on risk management and harassment aimed at Officers and employees at managerial positions. We also conducted corporate ethics training for employees on the topics of corporate fraud and insider trading regulations, by means of lectures led by an outside lecturer and e-learning.

One of the Group's major medium-term risks is brand impairment. Since noncompliance with laws and regulations is highly likely to expose the Group to the risks of impairing brand image, the entire Group is committed to education, awareness raising, and other activities aimed at strengthening compliance.

Internal Reporting System

The Company has established a "Corporate Ethics Helpline" as a contact point to receive consultations and reporting from employees regarding corporate ethics and compliance. In addition to the internal contact point, the Company has set up an external contact point at a law firm and provides an environment that facilitates consultation and reporting for the user. Under this system, rules have been established to protect the user from any disadvantageous treatment on account of the consultation or reporting, and information that may identify the user and information relating to the consultation and reporting are strictly managed.

Seiko Holdings Procurement Activity Policy

Seiko Holdings Procurement Activity Policy

- Through the implementation of the Seiko Holdings Group's corporate philosophy of being "A Company" that is Trusted by Society," we will contribute to the realization of a sustainable society and fulfill the social responsibilities of the Group.
- Seiko will establish trust in the Seiko Holdings Group by conducting fair and equitable procurement transactions, and will conduct procurement activities in a manner that will further enhance the strength of the SEIKO brand.
- The Seiko Holdings Group will promote the extension of the group procurement policy throughout the group with the aim of maximizing the synergy effect through collaboration among the Group companies.

Seiko Holdings Group Procurement Policy

The Seiko Holdings Group has stated its procurement policy to be "Coexistence and co-prosperity with business partners," "Promoting procurement activities with consideration for the environment, society, and governance" and "Fair and impartial evaluation and selection of business partners." The Group will expand its procurement activities globally based on the following individual policies.

1. Coexistence and co-prosperity with business partners The Seiko Holdings Group and its business partners aim to build a relationship of mutual trust over the long term, to continue to exist and prosper together by helping each other.

2. Promoting procurement activities with consideration for the environment, society, and governance

We will respect global social norms and work together with our business partners to promote procurement activities that consider the environment, society and governance. We will promote procurement activities that take into consideration factors such as the following: (1)Compliance with laws and regulations (The subcontract laws, foreign exchange laws, commercial codes, antitrust laws, personal information protection laws and others in each country and region) (2)Respect for human rights

(3)Consideration for occupational health and safety (4)Promotion of global environmental conservation (Green Procurement etc.) (5)Promotion of BCP (Business Continuity Planning) (6)Prohibition of bribes (such as illegal gifts, payments and benefits) to any stakeholder

3. Fair and impartial evaluation and selection of business partners

We respect the "fair, transparent and free competition" that is a fundamental rule of a freely competitive society and select business partners based on the following evaluation viewpoints. (1)The partner must be active in environmental, social, and governance initiatives (2)The partner must be highly trusted as a company (Stable business conditions, risk management system) (3)The partner must have technological capabilities that can contribute to Seiko Holdings Group products (4)The quality, price and delivery times of the items procured must be at appropriate levels We will conduct comprehensive evaluations based on these and other viewpoints. In addition to sharing supplier certification standards within the Group based on the Seiko Holdings Group Procurement Policy, we will also aim to establish and utilize group-wide mechanisms for selecting business partners appropriately and to conduct activities to increase value throughout the entire supply chain.

Risk Management

In order to respond promptly and properly to the various risks in business management, Seiko Holdings Group promotes risk management based on the Risk Management Rules that set the basic policy for risks facing the Group.

Business Risks

Risks that may seriously affect the operating results and/or financial position of the Group are outlined below. The Group considers brand-impairment risks and risks that affect the safety and health of employees and others to be critical risks. Both are medium-term risks, apart from the risks that have a significant impact on the business results in short term.

(1) Economic trends	The Group handles certain products directly related to personal consumption, such as watches, clocks, electronic components for digital products and automobiles, high-end jewelry, apparel and fashion accessories, and household goods, etc. Consequently, consolidated business results are strongly affected by trends in domestic and overseas economies, especially trends in personal consumption. In particular, watches and clocks are being sold in at least 130 countries and regions around the world. They are constantly exposed to potential impacts of whatever nature, while the risks are well distributed. In addition, the novel coronavirus has spread worldwide since its emergence in the fourth quarter of the fiscal year ended March 31, 2020. If the current situation continues going forward, it is likely to have a severe impact on economic and personal-consumption trends in Japan and overseas, affecting the Group's business operations, financial position, and business results.
(2) High dependence on procurement from specific supplier	Due to the high dependence on procurement from specific watch supplier, business results of the Watches Business may be significantly affected by changes in terms of transactions with this supplier. In addition, the novel coronavirus has spread worldwide since its emergence in the fourth quarter of the fiscal year ended March 31, 2020. If the current situation continues going forward, business activities are expected to be suspended at some of the suppliers and others of the Watches Business and the Electronic Devices Business, affecting the Group's business operations, financial position, and business results.
(3) Market environment of the Electronic Devices Business	Business results of the Electronic Devices Business are affected by demand trends of electronic devices, etc., in Japan and overseas. In this business field, the speed of development of new technologies and their mass production is high, and the price competition is also intense. Therefore, the possibility that delays in response to changes in these market environments may have a significant impact on business results is getting stronger. The Group will be engaged in business activities "one step ahead of the times," while being focused on research and development activities under the technological philosophy of "Craftsmanship, Miniaturization and Efficiency."
(4) Country risks on manufacturing bases overseas	The Watches business, the Electronic Devices Business and the Clocks Business have manufacturing bases in Singapore, Malaysia, Thailand and China. Changes in social situations due to politics and economics, etc., in these areas may have a significant impact on manufacturing activities of these businesses. However, respective production lines are in operation largely in multiple regions including Japan, in an effort to mitigate the impact associated with various risks. In addition, the novel coronavirus has spread worldwide since its emergence in the fourth quarter of the fiscal year ended March 31, 2020. If the current situation continues going forward, it is likely to have a severe impact on the Group's business operations, financial position, and business results.
(5) Dependence on sales to major customers	For some of the Electronic Devices Business, the dependence on sales to major customers tends to be high, and a decrease in the volume of orders from these customers may have an impact on business results of this business. To avoid excessive dependence on one major customer, we are striving to expand the Electronic Business itself as a whole.
(6) Increase in price of resources	If resources such as crude oil and other raw materials surge due to changes in the supply and demand environment, manufacturing costs may rise that causes an impact on business results. Inventory levels of certain materials are set higher, as necessary, in order to avoid the impact of short-term fluctuations, in consideration of market prices.
(7) Quality issues and production liability	Products manufactured and sold by the Group do not cause any accidents that have effects on human bodies under normal use. However, due to changes in the social environment, such as stricter legal regulations on product accidents, or changes in the business environments, there may be an increase in costs related to quality issues and product liability, such as product recalls and compensation liability. Since quality issues concerning our products are likely to involve risks of impairing brand image, they are regarded as one of the Group's most critical risks. We are committed to broad-based initiatives to prevent the occurrence of quality issues at all manufacturing bases, etc.
(8) Intellectual property rights	The Group has taken measures, such as obtaining patent rights and protecting confidential information, in order to protect important proprietary development technologies. However, there is a possibility that adequate protection may not be implemented depending on the region. Furthermore, even though such measures are taken, there is a possibility that the superiority of the Group's products may be impaired, if the Group cannot effectively eliminate third parties' products similar to its products. In addition, the Group has taken measures, such as patent investigation to prevent infringement of intellectual property rights of other companies in developing new products. However, there is no reasonable way to eliminate every single possibility that business results may be affected by a claim for an injunction or a claim for damages. As infringement of intellectual property rights is likely to impair our brand image regardless of whether we are the offending party or the offended party, investigations and other activities for the prevention of infringement in both directions are being carried out from broadened perspectives.
(9) Currency exchange rate fluctuations	Within the Group, the Watches Business and the Electronic Devices Business mainly engage in business development for overseas markets. Some of those are engaged in business development for overseas markets from domestic manufacturing bases, and fluctuations in exchange rates may affect product prices, etc. In addition, for the Systems Solutions Business and the Clocks Business that mainly engage in business development for domestic markets, foreign exchange fluctuations may affect procurement costs for parts that are procured from overseas manufacturing bases in foreign currencies. Furthermore, all items denominated in local currencies, such as profits or losses and assets, for overseas subsidiaries are translated into Japanese yen for preparation of consolidated financial statements. Therefore, the Japanese yen-translated value of local currencies may affect by the exchange rate at the time of conversion. In particular, fluctuations of Japanese yen against U.S. dollars and euro, etc. may affect business results and the financial position of the Group, including foreign currency translation adjustment under net assets of overseas subsidiaries.
(10) Interest rate fluctuations	Currently, the relationship between the Group and financial institutions is favorable, and the Group can procure funds necessary for business development including overseas without any problems. However, there is no guarantee that it will be possible to continue to procure funds sufficiently in the future. In addition, as the interest rate level in the market tends to be low, over 90% of interest rates of the existing long-term loans payable has already been fixed. Although there is no significant risk of interest rate fluctuations, interest rate trends for future procurement may affect business results of the Group.

(11) Market price fluctuations	The Group holds investment securities for business reaso factory sites. In the case where the market price of such in business results and financial position may be affected.		
(12) Environmental issues	The Watches Business, the Electronic Devices Business a various environmental laws and regulations that regulate e waste disposal, recycling, chemical substances contained regard environmental conservation activities as one of the with laws and regulations as well as setting stricter volunta damages and expenses for taking response measures, du occurrence of environmental problems in the future.		
(13) Information securities	The Group prevents information leaks through measures s concerning protection and management of personal inforr However, it cannot be guaranteed that there is no possibil such situation, there is a possibility this will affect business a substantial cost burden to respond to such situation. Ur impairing brand image. Thus, we are carrying out thoroug		
(14) Natural disasters	In the case where the Group's domestic and overseas ma and overseas, suffer damage or are regulated, due to natu infections, there is a possibility this would affect business procurement functions, etc. The Group has formulated ac operations of the Company as the first priority in the even has spread worldwide since its emergence in the fourth q continues going forward, it is likely to have a severe impact results.		
(15) Compliance violation	While we are providing full-scale education for compliance who are engaged in the Group's business operations, it is noncompliance with laws and regulations is highly likely to to promote educational activities for compliance with laws disseminating the importance of brand image.		

Group Risk Management Structure

In order to perform centralized management of risks that Group Risk Management Structure could greatly influence the Group's business, Seiko Holdings Board of Directors Corporation is engaged in the development and strengthening of the risk management structure for the entire Group as Strategic Conference for M well as responses to risks that must be addressed in a cross-organizational manner, led by the Risk Management Risk Managemen iko Holdings Corpo Committee at each Risk Manage Committee, with the president of the Company as chairperson. Committee In addition, each operating company independently promotes risk management, while the Company's Risk Management Committee supports the collection of risk information, the progress of risk measures and the promotion of risk management at each company. Furthermore, for the aim of smooth promotion of the group risk management in close cooperation and coordination among the Group, the Group Risk Management Committee, made up of the representative directors of each operating company, has been established that allows the representative directors of each operating company to verify and share information on the risks facing the Group. The Company has also established the Crisis Management Manual in preparation for when crises occur, and in normal times, has set out a system capable of responding to crises, such as prompt collection of the necessary information.

Initiatives to Address Significant Risks

The Group defines risks that could cause tremendous loss to the management of the Company and its consolidated subsidiaries, regardless of whether the risk is inherent in the Company or consolidated subsidiaries, as Significant Risks. The Risk Management Committee of the Company or consolidated subsidiaries selects the Significant Risks each fiscal year, formulates the annual risk response plans leaded by the departments responsible for the risks, and carries out prevention measures and countermeasures. In addition, Significant Risks that must be addressed in a cross-organizational manner are defined as Group Significant Risks, and the Company responds directly to such risks. Responses to Significant Risks and Group Significant Risks are monitored by the Company's Risk Management Committee, and information is shared with the Group Risk Management Committee. The Group Risk Management Liaison Committee comprising secretariats of the Risk Management Committees of each operating company supports the promotion of measures against the Significant Risks of each company through inter-Group collaboration and cooperation.

ons. The Group also owns idle real estate, including part of the former investment securities and real estate fluctuate significantly, the Group's

and the Clocks Business engage in business activities in accordance with energy conservation, air and water pollution, use of chemical substances. d in products and soil and groundwater pollution, etc. These businesses e management tasks and promote various activities, including complying tary goals. However, there are possibilities of bearing compensation for due to an increase in expenses for responding to enforced regulations or

such as establishment of internal regulations and employee education mation and confidential information obtained in business operations. ility of information leaks due to unforeseen circumstances. In the event of ss results of the Group due to a decline of the Group's social credibility and Inexpected leakage of information is a critical risk involving a greater risk of igh prevention measures.

anufacturing bases and facilities, or local economies in general in Japan tural disasters such as earthquakes or typhoons or epidemics such as viral results due to manufacturing disruption, stagnation of sales, logistics, ction plans that ensure the safety of those who are engaged in the business ent of natural disasters or epidemics. In addition, the novel coronavirus guarter of the fiscal year ended March 31, 2020. If the current situation act on the Group's business operations, financial position, and business

ce with laws and regulations in each country to all employees and others, is impossible to rule out the risks of legal violations of some nature. Since o expose the Group to the risks of impairing brand image, we will continue vs and regulations in all the group companies, while remaining committed to

