

Please see our website for more detailed information about Advantest.

● For Our Investors



Integrated Annual Report



Sustainability Databook



Environment



- Climate Change Mitigation
- Green Products
- Environment Data



Society



- Development of Human Resources & Fair Evaluation and Promotion
- Protection and Respect for Human Rights



Governance



- Risk Management
- Compliance



ADVANTEST

ADVANTEST CORPORATION

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<https://www.advantest.com/>

Integrated Annual Report 2020



ADVANTEST

The Advantest Way

Since our founding in 1954, Advantest has developed and supplied the leading-edge measurement technologies that customers need, contributing to safety, security, and comfort worldwide through electronics quality assurance.

In 2019, the 65th anniversary of our founding, we codified our mission, vision, and core values in the form of "The Advantest Way". The corporate culture articulated in The Advantest Way is the force that drives Advantest's business growth.



Mission : Why do we exist

Enabling Leading-Edge Technologies

We will continuously improve ourselves so that we can offer products and services that will satisfy our customers worldwide, and contribute to the development of our society through the development of the most advanced technologies.

Vision : What we want to be

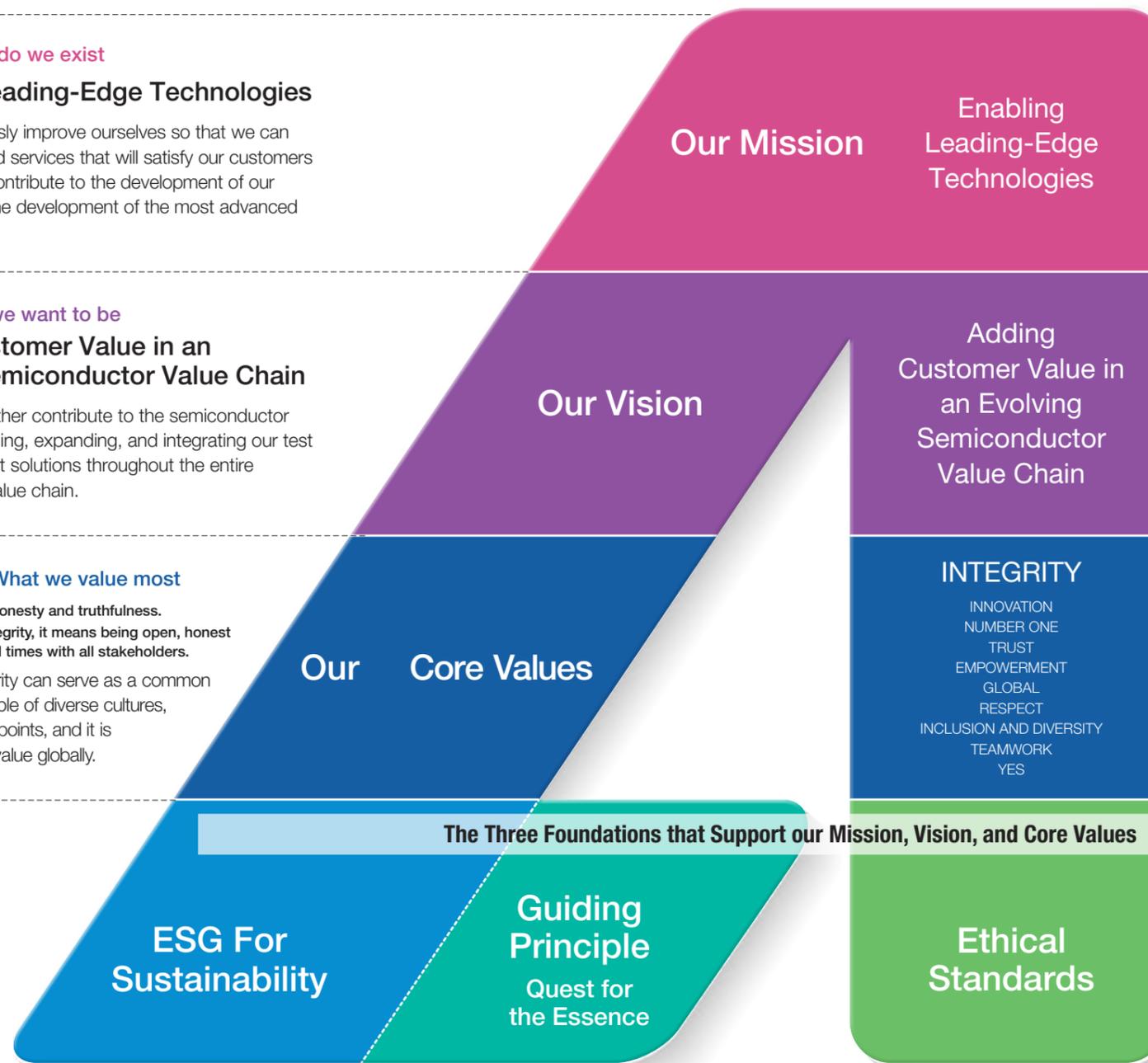
Adding Customer Value in an Evolving Semiconductor Value Chain

Advantest will further contribute to the semiconductor industry by enriching, expanding, and integrating our test and measurement solutions throughout the entire semiconductor value chain.

Core Values : What we value most

- "Integrity" means honesty and truthfulness.
- When you have integrity, it means being open, honest and respectful at all times with all stakeholders.

The value of Integrity can serve as a common thread uniting people of diverse cultures, religions, and viewpoints, and it is Advantest's core value globally.



Core Values [INTEGRITY]

<p>I</p> <p>INNOVATION is our Lifeblood</p> <ul style="list-style-type: none"> • We challenge the status quo. • We embrace technologies and entrepreneurship to create superior customer value. 	<p>N</p> <p>NUMBER ONE is our Aspiration</p> <ul style="list-style-type: none"> • We earn our leadership position in our business fields every day. • We establish an impeccable standard of excellence. 	<p>T</p> <p>TRUST is our Foundation</p> <ul style="list-style-type: none"> • We are a trusted, collaborative partner. • We have confidence in each other's capabilities and intentions. 	<p>E</p> <p>EMPOWERMENT is our Motivation</p> <ul style="list-style-type: none"> • We are empowered to make decisions with an owner's mentality. • We own Advantest's success. 	<p>G</p> <p>GLOBAL is our Reach</p> <ul style="list-style-type: none"> • We embrace a world of constant change. • We are always ready. Anytime. Anywhere. 	<p>R</p> <p>RESPECT is our Heart</p> <ul style="list-style-type: none"> • We respect different cultures, customs, and laws. • We never compromise on our ethical standards. 	<p>I</p> <p>INCLUSION AND DIVERSITY is our Commitment</p> <ul style="list-style-type: none"> • We are proud of and appreciate the range of different backgrounds that our talents represent. • We believe that strength can come from differences as well as similarities. 	<p>T</p> <p>TEAMWORK is our Approach</p> <ul style="list-style-type: none"> • We work smart and best utilizing our talents across teams and regions to do extraordinary work. • We inspire each other, encourage openness, and recognize team results. 	<p>Y</p> <p>YES is our Attitude</p> <ul style="list-style-type: none"> • We deliver on results promised to each other. • We recognize that impossible is an opinion, and with imagination, we can change the world.
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Disclaimer Regarding Forward-Looking Statements

This report contains statements about Advantest's current plans, estimates, strategies and outlook. Anything that is not historical fact is a prediction of future performance based on the best judgment of management, derived from the information available at the time this booklet was published. The semiconductor test system market is constantly subject to fluctuations that affect Advantest's core business. In addition, important factors that can affect actual business performance include economic trends, rapid exchange rate fluctuations, intensifying competition, and natural disasters. Due to these risks and uncertainties, our future performance may differ materially from what is described in this publication. Therefore, it should not be assumed that the goals set forth herein will necessarily be achieved.

Scope of This Report This report covers FY2019 (April 1, 2019 - March 31, 2020). However, it also mentions dates before and after this period as necessary. The data aggregation range is identical with the scope of Advantest's consolidated financial statements, unless otherwise stated.

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About Advantest

Advantest is a provider of test and measurement solutions focusing on electronic measurement technology. Our core product line is semiconductor test equipment. These systems measure and test semiconductors with high accuracy and efficiency to ensure that they operate properly and meet performance and reliability requirements.

In their diverse roles in products used throughout the world, and especially in the processing and storage of large volumes of data, semiconductors are now a form of social infrastructure. Advantest plays a key part in the creation of a sustainable future for humanity by assuring their quality and reliability.

Tested by ADVANTEST



Medical Equipments



Data Centers



Greenhouse Gas emission reduction



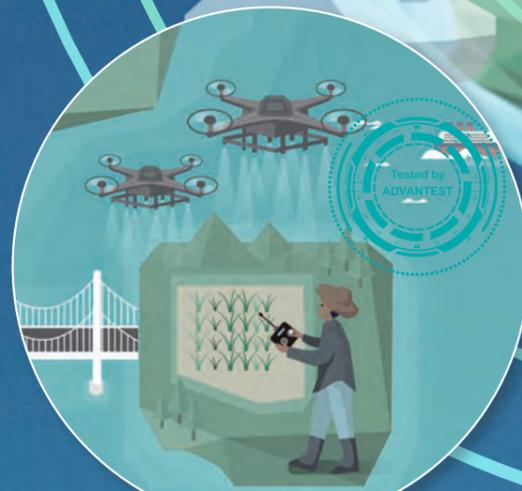
Automotives



VR & Game consoles



Base-station



Smart Agriculture



Smartphones



Robotics

Advantest's History

Measuring the Future

Advantest's 66-Year History

Since Advantest's founding, we have paved the way for successive waves of innovation by providing leading-edge measurement technology. We will continue to support technological innovation and semiconductor production volume growth through test, contributing to the sustainable development of the world we all share.

- 1954 Takeda Riken Industries founded with four employees.
- 1957 TR-124B Electronic Counter for digitally measuring frequency became a hit product.
- 1963 Launched the Digital Multimeter, the first Japanese-made digital voltmeter.
- 1972 Launched the first Japanese-made semiconductor test systems, the T-320/20 and T-320/30.
- 1979 Launched the VLSI test system with a test frequency of 100MHz, boasting the highest performance in the world.

- 1982 Established a local subsidiary in the United States. Facilities were later established elsewhere around the world.
- 1985 The company's name was changed to Advantest Corporation. Obtained the No. 1 share in the semiconductor test equipment market, according to VLSIresearch.
- 1993 Launched the T6691, a VLSI test system featuring an industry-best test speed of 500MHz/1GHz
- 1995 250MHz S-DRAM memory test system T5581 launched; become a best-selling product.



Our founding team. Founder Ikuo Takeda is second from left in the front row.



Our first product, the Micro Micro Ammeter.



The T3340 LSI test system being delivered to a US customer in 1982



T3380 VLSI test system.



A blockbuster product of the 1990s, the T5581 memory test system

- 2003 Acquired Japan Engineering Co., Ltd.
- 2008 Acquired Credence Systems GmbH.
- 2011 Acquired major semiconductor test equipment provider Verigy Ltd. and started selling the V93000 Smart Scale test system



T2000 open architecture test system.



Press conference announcing Advantest's acquisition of major semiconductor testing equipment provider Verigy in 2011.

- 2018 New mid- to long-term management policy announced.
- 2019 Acquired the system level test business of Astronics, Inc.
- 2020 Acquired US company Essai, Inc. and announced a partnership with US company PDF Solutions Inc.



Advantest Developer Conference VOICE (2018).



System level test system.



Sales of the Company



Advantest Enters the Semiconductor Test Equipment Market by [Measuring the Future]

Under founder Ikuo Takeda, who began his career at the Electrical Testing Laboratory of Japan's Ministry of Communications, the company released a string of hit products. We continued to grow in step with the Japanese electronics industry, and calibrated our R&D investments to the coming era of semiconductors by applying our measurement technology to the development of test equipment. Overcoming a management crisis in the early 1970s, we succeeded in developing world-class semiconductor test systems combining high-speed, highly accurate measurement capability with mass-production performance that can measure up to thousands of semiconductors simultaneously.

Advantest Grows by [Measuring the Future] of the Semiconductor Industry

In the last decades of the 20th century, semiconductor demand expanded enormously with the popularization of personal computers and the Internet. Advantest's semiconductor test systems, combining state-of-the-art measurement technology with support for mass production, helped to enable semiconductor evolution and production growth, which in turn led to further demand for our products. In 1985, we gained the leading market share in the world semiconductor test equipment market for the first time, marking the central importance of our test system business to the company.

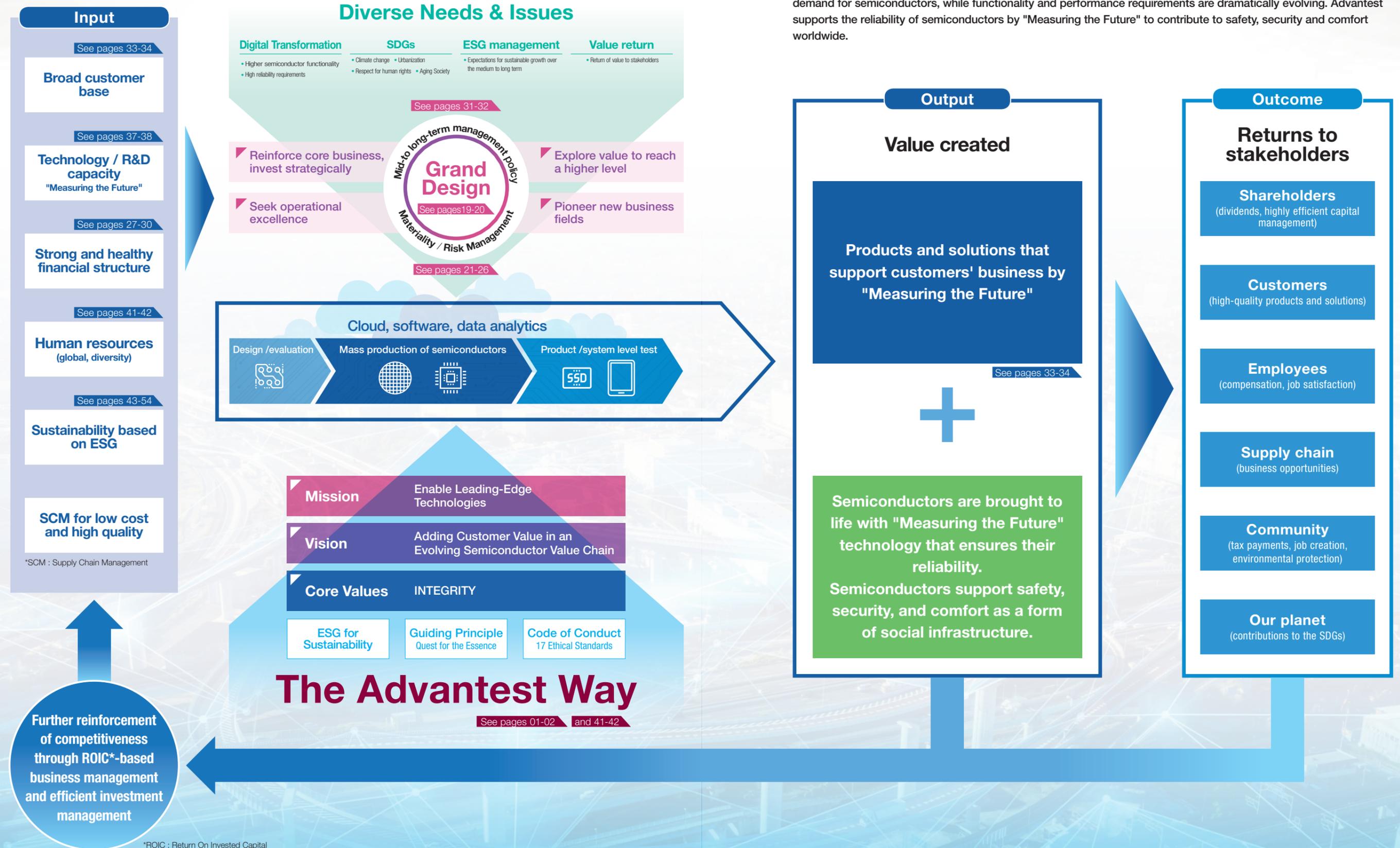
Advantest Overcomes Intense Competition by [Measuring the Future] Better

With the bursting of the dot-com bubble and through 2008 financial crisis, the main semiconductor demand driver shifted from PCs to smaller, more affordable smartphones. In response, the semiconductor test equipment market demanded higher efficiency and lower costs, kicking off an era of intense competition when loser companies were weeded out. Advantest emerged stronger than ever, thanks to our industry-leading measurement technology, the cost advantages we offer for mass production, and our aggressive M&A policy.

As the Market Enters a New Growth Phase, Advantest Continues to [Measuring the Future] of Semiconductor Evolution

Semiconductors now play a central role not only in smartphones but also in automobiles, data servers, and various other devices that support our safety, security, and comfort. As devices gain in functionality, complexity, and capacity, reliability demands also continue to grow. Semiconductor test items and test times are increasing, underlining the importance of leading-edge test technology. To capture this opportunity, we formulated a new mid- to long-term management policy in 2018. By adding new value in the evolving semiconductor value chain, including system-level test and cloud-based services, Advantest aims to become a company that will last for a hundred years and more, while proudly upholding our founders' focus on unique technology and dedication to meeting customer needs.

The Value Creation Process and Advantest's Business Model



As our lives become ever more digitized through the IoT as well as the shift to online, value creation is increasingly driven by data rather than physical objects, a change that can be described as "the digital transformation" (DX). The explosive increase in data volumes, and the diversifying roles that applied data plays in society, are accelerating demand for semiconductors, while functionality and performance requirements are dramatically evolving. Advantest supports the reliability of semiconductors by "Measuring the Future" to contribute to safety, security and comfort worldwide.

CEO Message



Achieving the Goals of Our Grand Design One Steady Step at a Time

Representative Director, President and CEO

The unprecedented global difficulties triggered by COVID-19, which broke out during Advantest's fiscal year 2019, including the economic and political impact of the pandemic, as well as the changes forced upon us individually and collectively, have made a deep impression on me. The restrictions imposed by our response to the virus will likely continue for some time around the world, but it is my sincere hope that we will soon be able to put the pandemic behind us and resume safe and healthy lives.

The unforeseen scale and speed of COVID-19's global spread has prompted rapid changes in our daily lives, unavoidably accelerating the digitalization of social life. My longstanding belief that semiconductors are the foundation of social infrastructure in the modern world is being confirmed day by day, in Japan and beyond, as the crucial role of these devices rapidly expands to arenas such as education, remote work, and electronic payments.

The mission of the Advantest Group is to deliver safety, security, and comfort for people around the world by guaranteeing the reliability of the semiconductors that enable their daily lifestyles. From FY2020, our value proposition will be put to the test more stringently than ever. As a company that specializes in test, we are confident that we can continue to meet the ever higher expectations placed on our technology.

FY2019 Results

Net sales	Operating income	Operating margin
275.9 billion yen	58.7 billion yen	21.3 %
Net income attributable to owners of the parent	Return on Equity (ROE)	Earnings per Share (EPS)
53.5 billion yen	24.9 %	270 yen

Numerical KPI Targets for FY2018–FY2020 Mid-Term Management Plan (three-year average)

	Net sales	Operating margin	ROE	EPS
Base scenario	250.0 billion yen	17%	18%	170 yen
Conservative case	230.0 billion yen	15%	15%	135 yen
FY2018 results	282.5 billion yen	22.9%	35.3%	302 yen
FY2019 results	275.9 billion yen	21.3%	24.9%	270 yen

A Look Back at the FY2019 Market Environment & Advantest's Results

For two consecutive years we have achieved record high orders, hitting our targets under our current mid-term management plan (FY ending March 2019 – FY ending March 2021). The success of the measures we have steadily promoted under this plan is starting to show up in our business results. Meanwhile, our investments in R&D and M&A will power the company's growth in the medium to long term. We intend to continue making these strategic investments even if upfront costs temporarily suppress profits.

Market Environment

Historically prey to cyclical downturns every two years on average, the semiconductor test market has been supported since about 2015 by continuous demand growth fueled by the "digital transformation" now taking place in society. Advantest also saw steady growth during this period. However, in 2019, factors such as the prolonged trade friction between the United State and China, and the ripple effects of their competition for technical hegemony, depressed demand for end products and capital investment across a wide range of areas including electronics, automobiles, and industrial equipment. Manufacturers have adjusted production and reviewed their capex plans. On the other hand, the rising demand around the world for full-scale commercialization of 5G communications is stimulating need for higher performance and enhanced reliability assurance for high-end SoC (System on Chip) semi-conductors, such as devices for smartphones and HPC (high performance computing) that are manufactured on advanced process nodes, which in turn supported strong test demand throughout 2019. Memory and automotive semiconductor device inventory adjustments also entered a recovery phase in the second half of FY2019, creating high expectations for growth in FY2020. Although demand will inevitably rise and fall periodically in the future, the overall outlook for semiconductor test demand continues to be a growth scenario in the medium to long term. What we did not see coming was the impact of COVID-19 on the global economy. This will be discussed later.

Performance Relative to Our Mid-Term Management Plan & Notable Steps Towards Achievement of Advantest's "Grand Design"

As the market for high-end testers with high performance and high unit prices expands, Advantest's steadily expanding market share enabled us to end FY2019 on a high note by reaching all our targets under our medium-term management plan (base scenario).



One objective of our “Grand Design” medium- to long-term management policy which we have already made strides towards achieving is the expansion of our business domains to adjacent markets. As a part of the vision of “adding customer value in an evolving semiconductor value chain” set forth in our Grand Design, we aim to build greater resistance to cyclicity into our profit structure. In line with one of the four strategies we outlined to achieve this vision—“Reinforce Core Businesses, Invest Strategically”—we have substantially reinforced our system level test (SLT)* business. In February 2019, we acquired the SLT business of Astronics, an American company, and in January 2020, Essai Inc. joined the Advantest Group. SLT is utilized for testing products and system-level processes that are located downstream in the semiconductor value chain from the chip test process which has been Advantest’s core business so far. Adding a richer range of SLT solutions to our existing ATE product portfolio has expanded the range of solutions we can provide to customers. At the same time, the addition of Essai’s high-precision IC sockets and thermal control units enables us to differentiate our solutions from the competition. We expect that our SLT business, a relatively high proportion of which is recurring business, will expand in the next fiscal year and beyond, contributing to the stabilization of our earnings.

Operating income declined in FY2019 due to R&D investments and an increase in SG&A expenses due to increased employment of engineers and other personnel. We will continue to secure our investment quotas for human resources and M&A.

*SLT is a test process that incorporates semiconductors into modules and products such as smartphones, servers, and automotive electronic devices that require high functionality and reliability due to the increasing functionality and complexity of semiconductors, and further increases the reliability of semiconductors.

Medium-Term Megatrends: Risks & Opportunities

Semiconductors, which are now a key element of social infrastructure, will be used in even more diverse roles in the future. Because of the need to ensure their reliability, semiconductor test demand will grow overall, despite cyclical ups and downs. Thus, the market outlook and growth strategy set forth in our Grand Design remain unchanged. On the other hand, recent events have given us a strong sense of crisis. We will respond more flexibly to environmental changes that are different from anything we have seen the last two years, such as the impact on the global economy of the COVID-19 pandemic, and the supply chain instability and operation issues that have diffused through the industry as a result of intensifying conflict between the United States and China.

Headwinds: COVID-19 & US-China Conflict

In terms of demand, the spread of COVID-19 is driving demand for WFH (Work From Home)-related data centers, while at the same time reducing demand for end products such as automotive equipment, industrial machinery, and consumer semiconductors. The Advantest Group’s operations may also be affected, if restrictions on movement around the world or urban lockdowns are prolonged, by procurement and product supply difficulties, as well as a reduced ability to provide in-person customer support by engineers. Also, the intensifying conflict between the United States and China is likely to have no small impact on highly specialized semiconductor supply chains. For example, the tightening of US regulations on Chinese companies will affect the investment stances of the OSAT (Outsourced

Semiconductor Assembly and Test) customers who use Advantest’s testers for smartphone SoCs. If the decoupling of the US and China economies progresses, some semiconductor-related manufacturers may choose to duplicate parts of their supply chains as a form of risk hedging, but the future is uncertain.

* For more on the impact of COVID-19 and Advantest’s risk management. [See pages 25-26](#)

Tailwinds: Demand Growth in High-End Semiconductor Test

On the other hand, the progress of the digital transformation represented by 5G commercialization will promote further semiconductor performance and reliability improvements. This trend is expected to strengthen even if demand slows temporarily. In response to this trend, wafer-level and package-level test are beginning to be reinforced by system/module-level test to enhance the reliability of high-end semiconductors and automotive semiconductors.

4 Strategies: Specific Measures

Thus, we enter fiscal 2020, the final year of our mid-term management plan, amidst instability. In this fiscal year, we will continue to develop our strategies for each of our businesses, work to expand and enhance our solutions across the semiconductor value chain, maintain and expand our market share, and aim to achieve the goals of our Grand Design. To this end, we will continue to grow our core business, expand our solutions by M&A and other means, and make necessary investments in R&D.



Reinforce Core Businesses, Invest Strategically: Focus on High-Growth Sectors

We are steadily implementing measures to reinforce the foundations of our business in sectors within our core business identified as having a particularly high growth potential: 5G millimeter-wave devices, high-frequency (RF) devices, high-end memory, and others. We will continue to work to maintain and expand our market share by boosting engagement with our customers so as to hone our ability to develop and provide the solutions customers need, when they need them. We have also globally reinforced our human resources over the last two years by hiring development and support engineers for our high-end SoC tester business. With a global support network that encompasses 17 countries and regions, now further reinforced at the local level, we are able to minimize the impact of COVID-19 on impact on customers, even if the pandemic should be prolonged.

Pioneer New Business Fields: Expansion into Cloud Data Analytics

We have begun developing new businesses to prepare the way for Advantest's next growth surge. As a foundation for this, in July 2020, we entered into a business alliance with PDF Solutions (PDFS) in the United States, including a capital investment in PDFS. This expands our business in the data analytics field, one of the target areas mentioned in our Grand Design. By incorporating PDFS's database and data analysis technology into our hardware-based business structure, we can utilize the data generated from customer workflows to provide feedback on processes from semiconductor design to manufacturing, chip test, and system level test. We aim to build a cloud platform with cross-departmental participation that grows new revenue streams over the medium to long term. Advantest relishes the challenge of building a new business by creating new customer value.

Seek Operational Excellence: A Slimmer Cost Structure for Investment Efficacy

As part of the efforts directed at achievement of our mid-term management plan's goals over the past two years, we have steadily improved profitability. Our goal of generating free cash flow of ¥85 billion to ¥100 billion during the cumulative period of the mid-term management plan was achieved ahead of schedule. Now that we are in a strong position, I have determined to free up management resources for medium- to long-term growth investments by reviewing budgets and recruitment plans and improving operational efficiency in order to implement a leaner management structure. In particular, the impact of COVID-19 has significantly reduced personnel transfers between overseas locations, and has changed our operational style, for instance through the partial shift of customer support to online and the implementation of telework for many employees. In response to these changes, the cost and workforce plans that we made six months ago have been re-examined.

At the same time, we will invest strategically in the realization of our Grand Design, and continue to review our business and product portfolios with a view to improving capital efficiency. As a part of the background to the partnership with PDFS announced in July, we also decided to sell our probe card business. These decisions exemplify Advantest's stance of responsiveness to change without fear.

For more on Advantest's capital policy, see Financial Strategy & Capital Policy on [See pages.27-30](#)

Becoming a "100-Year Company" With a Crucial Place in Society

Since I became president of Advantest in 2017, I have often said that I want us to become a "100-year company." Now that we have passed the two-thirds mark, the requirements for Advantest's sustainable growth going forward include not only good results in the short term, but also strengthening and promoting ESG management. The very existence of Advantest is premised on a healthy global environment. To preserve the environment and create a sustainable society into 2054 and beyond, it is essential to consider the entire supply chain. In this era when the future often seems uncertain, the Advantest Way—including our management philosophy, vision, core values and ethical guidelines—plays the role of runway lights for the Advantest Group, guiding us as we journey towards our centennial.

Management Philosophy: Enabling Leading-Edge Technologies

Our management philosophy of "enabling leading-edge technologies" leads us to aspire to make things that do not yet exist and take on challenges that no one else has attempted. Around 1954, when the company was founded, the transistor age was only just dawning, and in the late 1980s when we began to be a global company, the IoT and AI were still science fiction. There is no doubt that new



concepts and technologies will emerge in the next 33 years, and I believe that our support for these leading-edge technologies will continue to be the cornerstone of Advantest's business.

Human Resources Are Management Resources That Grow

Our management philosophy encourages each and every person who works at Advantest to fully demonstrate their diverse capabilities, to stimulate each other's creativity, and at times to take up the challenge of responding to new needs that have never previously existed. Rather than making excuses for why "I can't do it," an Advantest employee seeks to unlock his or her full potential, accept different opinions and ideas, and work with a diverse group of colleagues. This mindset, shared across our entire global team, is summarized by "INTEGRITY," an acronym standing for the nine core values we aspire to embody. Unlike devices, people are educated, gain experience, and learn teamwork, and they grow throughout their careers. To help them flourish, we in management are responsible for creating and maintaining a corporate culture in which employees can work and fully develop their abilities through an optimal personnel system, training opportunities, and workstyle reforms. We further believe that in order for our employees to continue to grow, we must constantly assess them, using our corporate culture, employee engagement metrics, and various other indicators.

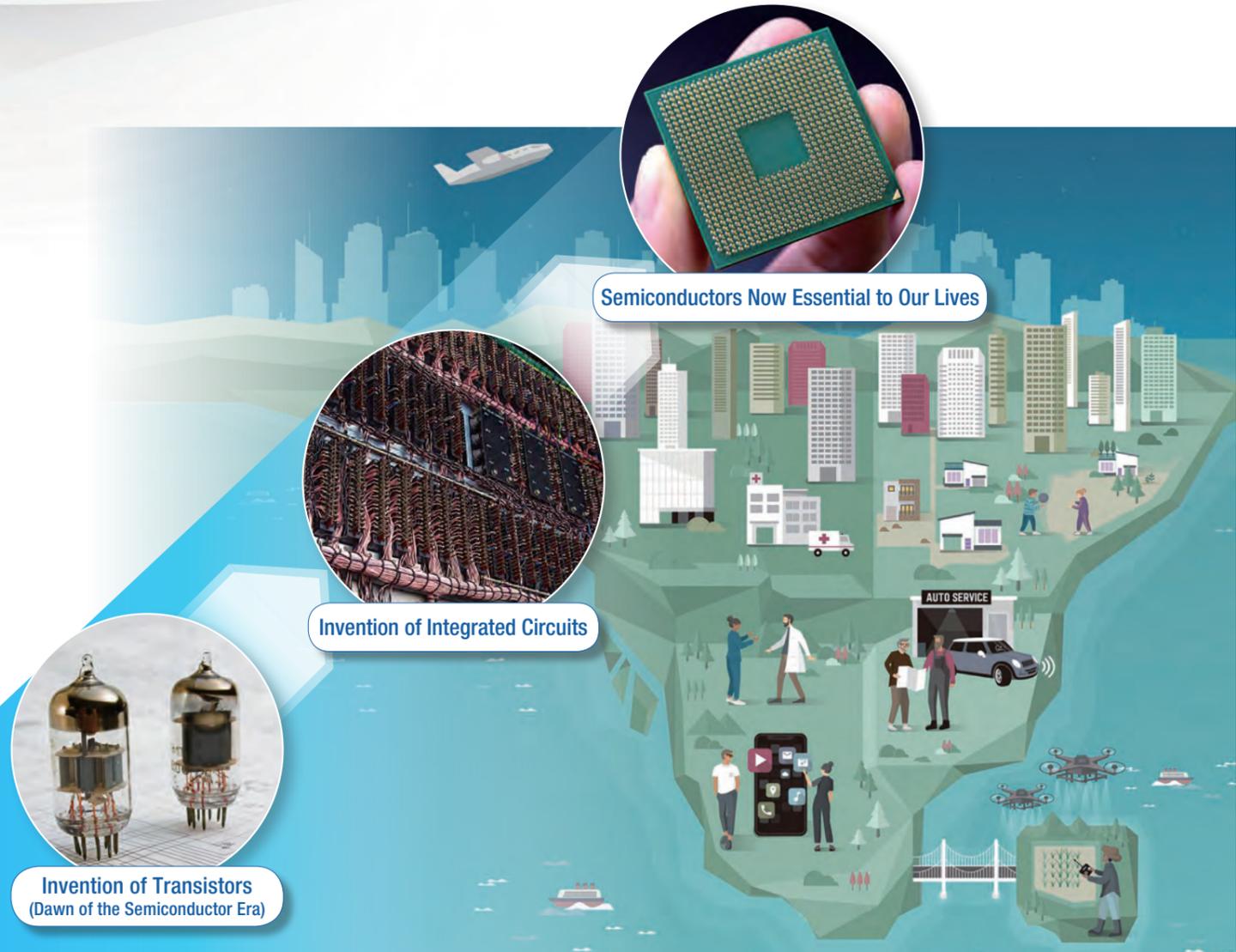
ESG Management Promotion for Sustainable Development

I believe that as we continue our journey towards our 100th anniversary, we need to practice ESG management that enables us to share the value of the Advantest Group with all stakeholders, including customers, business partners, local communities, and employees. What value can Advantest offer by providing the solutions that society needs? From this perspective, ensuring the reliability of semiconductors enables us to contribute to society by making people's lives safer, more secure, and more comfortable. Going forward, we will redouble our efforts to secure human rights and improve workstyles, contribute to local communities and the global environment, and help our customers to reduce their environmental impact throughout the value chain. In addition, the Advantest Way includes a code of conduct that sets out 17 ethical guidelines which must be observed by all employees of the Advantest Group. Legally or ethically questionable behavior overshadows even the greatest achievements. Advantest is dedicated to maintaining impeccable ethical standards, and I am resolved to continuously improve the compliance awareness of the Group as we journey onwards.

Final Thoughts

Fiscal 2019 was a memorable year for us in another way: we achieved first place in the annual semiconductor manufacturing equipment customer satisfaction survey conducted by VLSIresearch, not only in testers, but in the entire semiconductor manufacturing equipment sector. I would like to express my sincere gratitude to each and every employee of the Advantest Group, all of our business partners, and our customers, for contributing to this achievement. I would also like to thank the communities where we do business every day, and the investors who make it possible. Advantest aims to reach its 100th anniversary as a company with a crucial place in society. With that vision in mind, each and every one of us, starting with myself, is sincerely motivated every day by the desire never to take for granted the trust that has been placed in us.

Our Market and Strategy



Semiconductor Industry Growth supports to Solutions for Social Issues

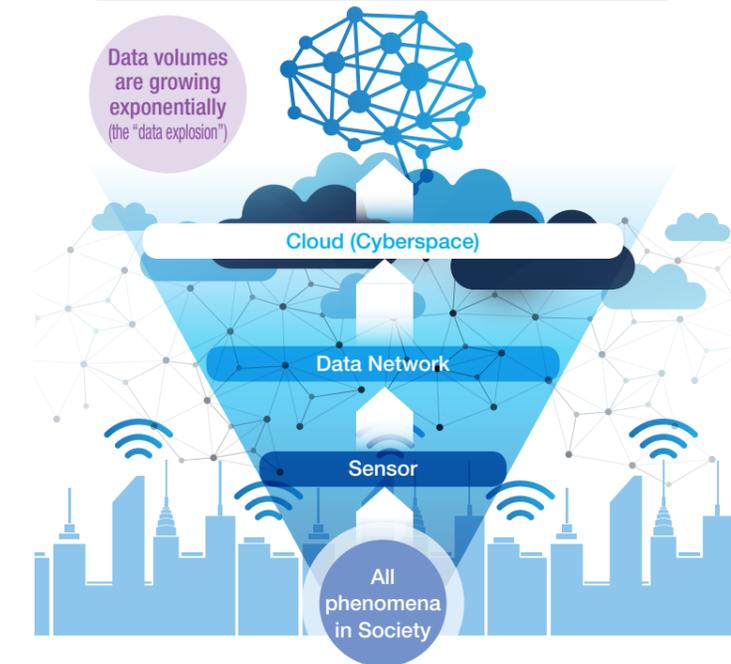
Today, whilst population growth and urbanization are advancing, we face energy, water, and food shortages, as well as environmental problems. In addition, while society is becoming “smarter” and more globalized, security concerns are coming to the forefront. The digital revolution promises to solve these various issues with technology.

Big data is the cornerstone of the digital revolution. Everything around us is being digitized, and the data network that connects more and more human activities, ranging from daily life to industry, is becoming wider and deeper every day. As a result, the amount of data generated daily in the world continues to grow exponentially. This “data explosion” is launching the semiconductor market into a new growth phase.

Digital processing of data such as sensor inputs, calculations and communications, and storage are all performed by semiconductors. Therefore, as a necessary precondition for the progress of the digital revolution, the use of semiconductors and sensors will increase across all applications in the future, and the performance of core semiconductors such as SoC (System on Chip) devices, which communicate and process data, and memory devices, which store data, is expected to continue to improve.

Against this background, the total value of the semiconductor market, which has been in the USD 400 billion range (about JPY 40 trillion at an exchange rate of 1 USD

Social issues solved by AI and data analysis



= JPY 100) for the past three years, will reach the USD 500 billion level in a few years, and is predicted to continue to grow.

Semiconductors, the Agents of Electronics Evolution

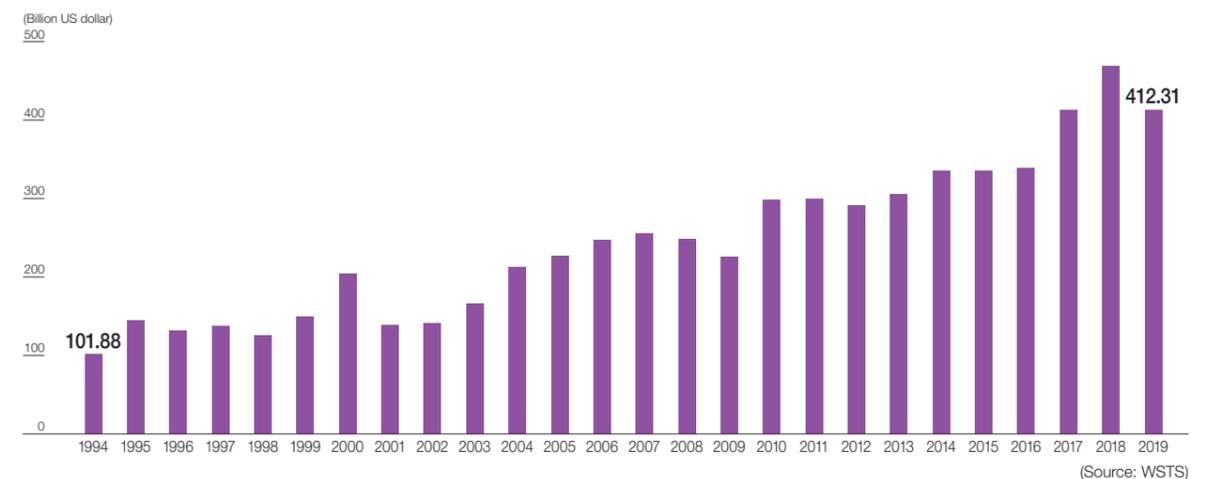
A “semiconductor” is technically a substance with an electrical conductivity value that is intermediate between a “conductor” with good electrical conductivity, such as germanium or silicon, and an “insulator” with high resistivity. In 1947, at Bell Labs in the United States, transistors, which could not only switch electrical currents but also amplify them, were invented using semiconductors. This marked the beginning of the semiconductor industry.

The invention of integrated circuits in 1959 set the industry on a course of growth. IC technology achieves miniaturization and high performance of circuits by integrating semiconductor elements, such as transistors, onto a single semiconductor substrate. Since the invention of ICs, integration and mass production metrics have consistently

advanced thanks to the evolution of the optical technology called photolithography, enabling IC applications and production volumes to expand while design and manufacturing technology have improved. At the same time, the term “semiconductor”, which was originally used to refer to materials, has become common parlance for electronic circuits using semiconductors, such as ICs.

Now, more than half a century after the invention of ICs, vast numbers of diverse semiconductors are used in a wide range of applications such as computers, smartphones, domestic appliances, automobiles and industrial equipment, and communication infrastructure. They have become indispensable to our lives.

World Semiconductor Market (1994 - 2019)



The Tester Market is Correlated to the Direction of Semiconductor Market Evolution

In this environment, business opportunities for our core semiconductor tester business will mainly be linked to the following four trends in the semiconductor market.

- Semiconductor performance improvements and transition to next-generation standards (technology buys)
- Expansion of semiconductor production (capacity buys)
- Further reinforcement of semiconductor reliability to meet social infrastructure requirements (quality buys)
- Expansion of the semiconductor demand base due to the digital revolution (new automotive and IoT applications)

More than 60 years have passed since the invention of transistors, yet semiconductor design and manufacturing technology innovation continues at a blistering pace. For example, in order to support the evolution of smartphones, innovations that increase the number of integrated transistors at an annual growth rate of about 20% to 40% are steadily improving the performance of the semiconductor devices called application processors, which are key components of smartphones. Technological innovations that enable cheaper mass production of semiconductors are also being

promoted. These advances have further stimulated demand for semiconductors, and as a result, semiconductor production and performance have continued to grow and improve.

In the semiconductor tester market, similarly to the semiconductor market, the driving forces behind market growth to date have been “technology buys”, impelled by lengthening test times due to the improvement of semiconductor performance and the growing complexity of devices, and “capacity buys” necessitated by the growth of semiconductor production volumes.

Amidst the promotion of the digital revolution, the improvement of data centers and AI capabilities via further miniaturization of semiconductors, the development of semiconductors for 5G communication using millimeter waves, and the quest for lower power consumption with an awareness of reducing environmental burdens, etc., constantly promote semiconductor technological innovation. As a result, not only higher-performance semiconductor devices, but also the unprecedented rise of test demand for complex system semiconductors that feature highly integrated heterogeneous chips (i.e. both logic and memory) is expected in future. In response to these trends in the semiconductor market, Advantest expects that “technology buys” of semiconductor testers will continue to be robust in the future. The increase in the pace of “capacity buys” due to the

expansion of semiconductor applications, and the increase in “quality buy” demand due to increasing demand for reinforced semiconductor reliability, are also expected to drive future market expansion.

Putting these factors together, we expect the semiconductor tester market to grow in the medium to long term, despite fluctuations in the short term.

The Quest to Provide Greater Customer Value

The only way to determine whether a semiconductor with a resistance value intermediate between “conductor” and “insulator” is good or bad is by conducting an electrical test. Basically, all semiconductors must be electrically tested using a semiconductor tester. And in order to measure the performance of semiconductors more precisely, it is indispensable to provide testers with measurement technology sufficiently accurate to anticipate the future evolution of semiconductor performance. Advantest currently holds a high market share in the test processes for mass production of high-speed devices such as DRAM, computing devices, and communication processors, where the technical capabilities of test vendors are held to the most stringent criteria.

This is due to our customer base, the broadest in the industry. For each type of semiconductor, we regularly hold technical discussions with leading customers in the field, collect knowledge about test trends several years in advance, and use this knowledge in our product development. Constant refinement of our solutions through the cycle of applying our technology to customer needs has brought us where we are today.

We also believe that the value we provide to our customers in the semiconductor tester business is not limited to sales of superior semiconductor test equipment. As semiconductor designs and structures become more complex

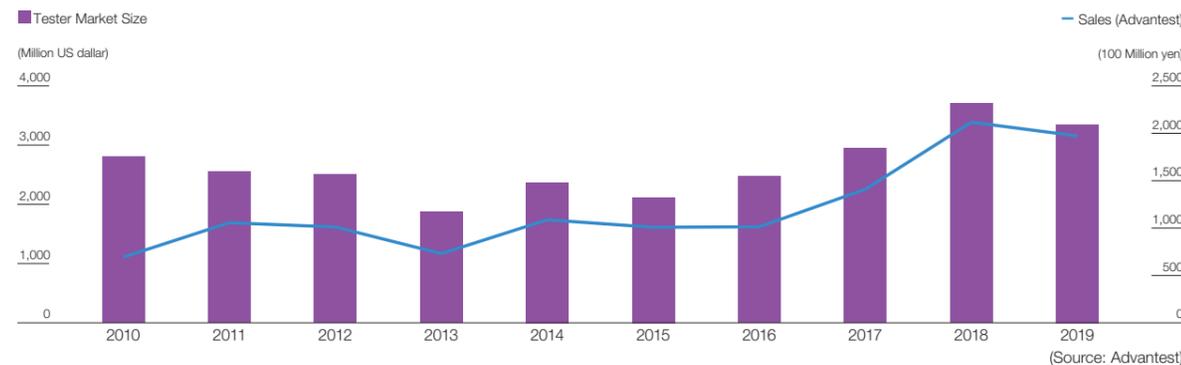
year by year with the introduction of new technologies, finding the right test method for the newest semiconductors is always a process of exploring new frontiers. We consult with our customers on the optimum test method and environment, including not only the test itself but also peripheral devices, to find out what methods should be used to accurately diagnose the performance of newly developed semiconductors, with the ultimate goal of achieving the test quality and test cost level required by our customers. Success at this mission embodies our management philosophy of “enabling leading-edge technology.”

Appropriate consulting with customers requires a business structure that can grasp and meet not only customers’ actual needs, but also their potential needs. Building close partnerships is crucial. Thus, we not only have the widest customer base in the industry, but we are also making efforts to raise the level of support for each customer through active investment in human resources every year. We have already obtained a higher customer satisfaction rating* than almost any other provider of semiconductor manufacturing equipment, but even so, we are forging deeper partnerships with customers and developing of leading-edge technologies. This strengthens our ability to seize future growth opportunities and live out our management philosophy, as one of our vital growth strategy for the future. [See page 78](#)

Market Share



Tester Market and Sales (2010 - 2019)



Reinforcement of Advantest’s Growth Foundation and Mitigation of Demand Fluctuation Risks

As mentioned above, we expect the semiconductor tester market to grow over the medium to long term. However, since semiconductor testers are basically capital goods installed on semiconductor mass production lines, annual demand fluctuations tend to be greater than for semiconductors, which are consumer goods. Specifically, the structure of the tester market is such that changes in business trends and technological investments by major semiconductor manufacturers who lead the industry in terms of technology and business scale have a strong influence on market value and market share each year. Furthermore, we deliver semiconductor testers within an average of

three months after receiving an order. This is a relatively short lead time for semiconductor-related equipment, putting Advantest in a position to be more agile than other equipment providers in response to changes in demand for end-products.

By implementing the growth strategy set forth in our “Grand Design” mid- to long-term management policy, we aim to expand our profits in the growing semiconductor tester market while mitigating the effects of performance fluctuation factors caused by the market structure described above.

Grand Design

Overview

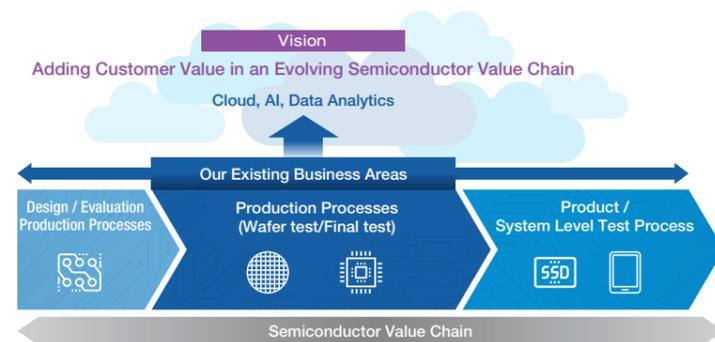
The Grand Design that Advantest announced in April 2018 lays out the next decade of Advantest's growth strategies and commitments, based on megatrends in our market and our daily lives.



With the speeding up of networks and the development of sensors and other devices, a "data explosion" is transposing more and more of daily reality into the realm of data. Semiconductors are performing key tasks in this realm, including data sensing, communication, calculation, and storage, which means that they require further sophistication and integration of functions, larger capacities, and higher quality and reliability. Against this background, semiconductor test processes are becoming more sophisticated and test times are lengthening.

Test demand will continue to grow, albeit cyclically, in terms of both quality and quantity. To grasp this opportunity and increase Advantest's corporate value, we will seek to grow our share of the market for semiconductor mass production test, which is our core business, and also expand our business in adjacent markets such as design / evaluation and system level test processes. In addition, we will strive for greater management efficiency by strengthening our corporate governance, implementing management based on ROIC (return on invested capital), investing in human resources, and carrying out workstyle reforms.

Vision



Grand Design: Six Commitments

- 1 Be the No.1 provider of test & measurement solutions
- 2 Be a Partner with leading-edge customers
- 3 Develop leading-edge technologies
- 4 Attract and retain the best talent in the industry
- 5 Be a Learning organization
- 6 Improve financial KPI and increase corporate value

So far, Advantest's business development has centered on semiconductor volume production test. The increasing sophistication and complexity of semiconductors also creates new opportunities to apply our measurement technologies and know-how to the design / evaluation processes upstream of volume production, and the system level test processes downstream from it. We will also seek to develop businesses that create new customer value through analysis of the vast amounts of data that exist within the semiconductor value chain, including related markets.

Strategies

Reinforce Core Businesses, Invest Strategically

- Strengthen engagement with leading-edge customers
- Create new value propositions for our test cells, such as factory automation



Seek Operational Excellence

- Optimize production system to respond to fluctuations in demand
- Develop employee skills and promote of teamwork across departments and regions
- Monitor business using ROIC (return on invested capital)



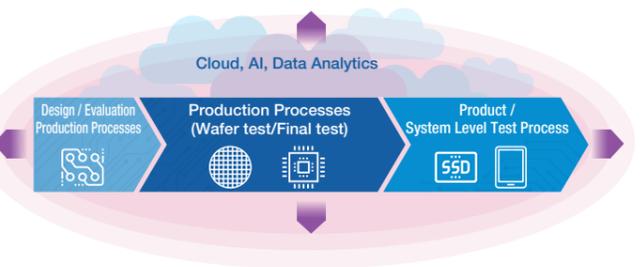
Explore Value to Reach a Higher Level

- Develop solutions throughout the semiconductor value chain
- Utilize AI and data analysis, expand service business



Pioneer New Business Fields

- Business research team will explore next-generation technology and business
- Promote M&A and business alliances to expand business domains and acquire technology
- Develop new-concept products that transcend the semiconductor arena



Sales Scenarios and Cost Structure

Advantest will increase our share of the tester market, and implement measures to develop new businesses - including via M&A and alliances - in areas adjacent to our core business.

Conservative Case		Base Scenario	
Tester market growth rate = 0%		Tester market growth rate = 4%	
• The same pace as the semiconductor market growth			
FY2027 (Forecast)	Billion yen	FY2027 (Forecast)	Billion yen
Tester Market	380.0	Tester Market	580.0
Advantest Share	46%	Advantest Share	46%
Existing Business	240.0	Existing Business	340.0
New Business	60.0	New Business	60.0
Sales	300.0	Sales	400.0

	FY2017 (actual)	Cost Structure in Conservative Case
Net sales	207.2B yen	300.0B yen
Gross profit margin	49%	46%
SG&A ratio to sales	40%	32%
R&D as a % of total net sales	16%	13%
Operating Income Margin	11%	22%

"Tested by Advantest" Contributes to Our Sustainable Future

The role of semiconductors installed in various products we use daily, and the value of test as a guarantor of their quality and reliability, are becoming more and more important for the sustainable development of our planet. Through measurement technology, Advantest contributes to safety, security, and comfort worldwide, and to our shared, sustainable future.



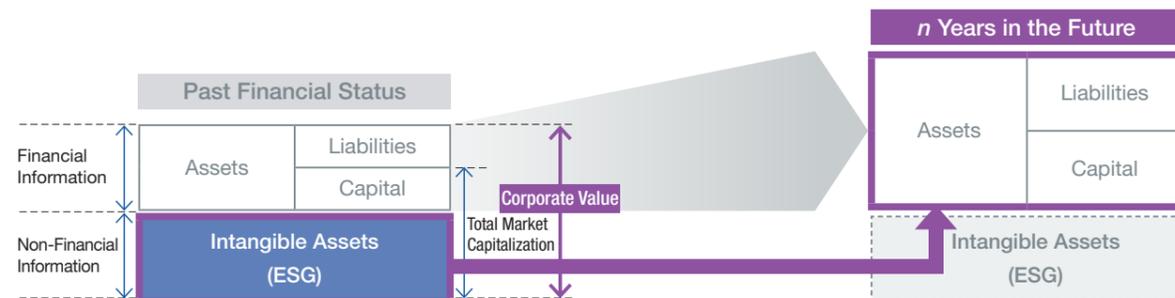
Materiality

Sustainability through ESG promotion is one of the management guidelines set forth in The Advantest Way, our management philosophy. The ESG (Environmental, Social and Governance) criteria defined by the Sustainable Development Goals of the UN align with Advantest's mission to deliver safety, security, and comfort through our core business of semiconductor test. Materiality is our compass for the promotion of ESG management based on these criteria, keeping our business sound and strong, and making a sustainable social and environmental contribution to the world where we operate.

ESG Management Positioning



Corporate value consists of two elements: tangible asset value, which can be expressed in terms of business performance as financial information, and intangible asset value, which cannot be expressed as financial information. The latter consists of corporate philosophy and code of conduct, medium-to-long-term strategies, investments related to environment (E), society (S), and governance (G), various other activities, and internal systems, which all serve to maximize the intangible asset value that can be expressed as non-financial information. We consider this to be the realm of ESG management. As shown in the figure below, we believe that ESG management should not be "hidden" behind financial information. Rather, it is a source of value that appears in business performance over the medium to long term.



Note: The above graphs were created by Advantest with reference to "Jishani atta ESG senryaku no susumekata kangaekata" by Takaharu Fukuoka (2019, Chuokeizai-sha, Inc.)

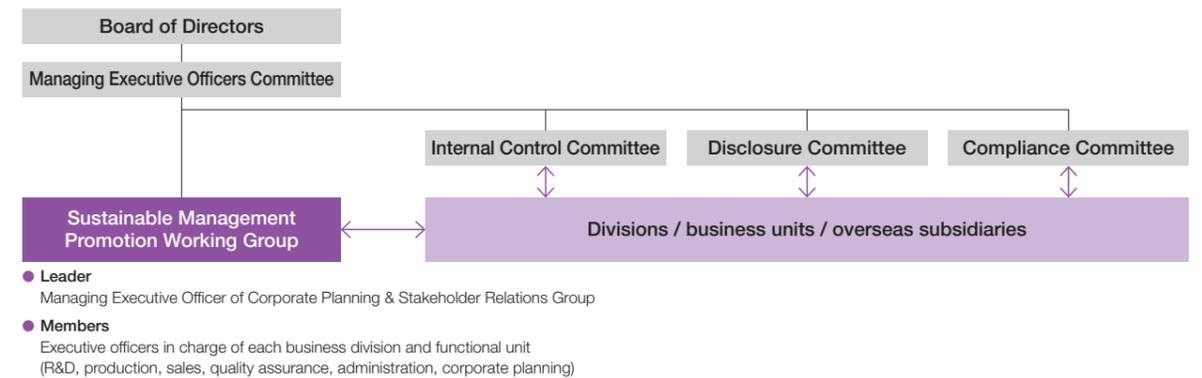
Our Approach to Materiality

From FY2019 through FY2020, we revised and renewed our approach to materiality. In addition to our existing CSR priority issues, we integrated management issues corresponding to the Six Commitments set forth in our Grand Design into 20 items. We also defined 23 Sustainability Objectives as practical guidance for each division and business unit to use in implementing these items.



Materiality Promotion Structure

In August 2020 we established the Sustainable Management Promotion Working Group. Whilst breaking down the policies and management plans decided on by the Executive Committee and other executive organs into key measures and strategies for each division and business unit, and supporting the incorporation of measures and objectives related to ESG and the SDGs, this Working Group is responsible for addressing the risks associated with these activities, disclosing related information, and implementing the PDCA cycle in cooperation with related committees.



Materiality

Based on the "Six Commitments" set forth in our "Grand Design" mid- to long-term management policy, we have set materiality as a priority strategy and theme. In addition, the relationship between materiality and the SDGs has been clarified in order to better define individual strategy executions based on materiality, and identify activities that lead to the resolution and/or mitigation of issues.

	Category	Commitment	Priority Strategies & Themes	Social Contribution (SDGs)
Materiality	Customer Value Creation	Be a partner with leading-edge customers	<ol style="list-style-type: none"> Enhance engagement with leading-edge customers Deploy capabilities to customer workflow solutions 	
	Product Competitiveness	Develop leading-edge technologies Be the No. 1 provider of test and measurement solutions	<ol style="list-style-type: none"> Focused investment in core businesses Continue proactive R&D investment ARTeam to explore next-generation technology and businesses Promote M&A and Make/Buy/Partner operations to expand business domains and acquire technology Pursue subscription business models Quality management (quality optimization and improvement) Optimize production system to respond better to demand fluctuations 	
	Human Resources	Attract and retain the best talent in the industry Be a learning organization	<ol style="list-style-type: none"> Reinforce local SAE, R&D, and marketing personnel Maximize the abilities of employees Provide and promote employee learning and skill development opportunities Encourage and promote teamwork across departments and regions 	
	Management Foundations	Improve financial KPIs and increase corporate value	<ol style="list-style-type: none"> Achieve mid- to long-term management plan targets Maintain a sound financial base Establish a business monitoring process using ROIC Strengthen governance and compliance Contribute to our sustainable future Environmental management Protection and respect for Human Rights 	

Sustainability Objectives

We have set sustainability objectives to make it easier for individual headquarters and business divisions to prioritize their activities. The Sustainable Management Promotion Working Group supports their decision-making and helps them set KPIs based on these sustainability objectives.

■ Director / Senior Executive Officer ■ Director / Managing Executive Officer ■ Managing Executive Officer

Category	Priority Strategies & Themes	Sustainability Objectives	Officer Responsible	KPI	2019 Results	2020 Objectives	Additions / Changes	Social Contribution (SDGs)	
Customer Value Creation	<ul style="list-style-type: none"> Enhance engagement with leading-edge customers Deploy capabilities to customer workflow solutions 	Customer health & safety	■ Sasaki	Number of violations of voluntary safety standards	0	0	—		
		Customer privacy	■ Fujita	Number of information security-related complaints	0	0	—		
Product Competitiveness	<ul style="list-style-type: none"> Focused investment in core businesses Continue proactive R&D investment ARTeam to explore next-generation technology and businesses Promote M&A and Make/Buy/Partner operations to expand business domains and acquire technology Pursue subscription business models Quality management (quality optimization and improvement) Optimize production system to respond better to demand fluctuations 	Product Environmental Contributions	■ Tsukui	GHG emission reduction (Scope 3) through product use	—	(TBD)	New addition		
		Product & service environmental friendliness		Percentage of products that meet voluntary standards for green products	100%	100%	Expanded to whole world		
		Hazardous substance elimination	■ Tsukakoshi	Ratio of suppliers surveyed for use of hazardous substances	100%	100%	Expanded to whole world		
		Product quality	■ Sasaki	Reduction of waste through quality improvement	Reduced by more than 3/4ths compared to FY2018	-50% compared to FY2008	New addition		
		Compliance (products & services)	■ Tsukui	Number of compliance violations related to products & services	0	0	—		
		Intellectual property protection	■ Fujita	Percentage of employees participating in intellectual property e-Learning sessions	100%	100%	—		
Family-friendly employment	Percentage of employees returning to work after maternity / paternity leave	100%		100%	—				
Human Resources	<ul style="list-style-type: none"> Work-life balance Health & safety Reinforce local SAE, R&D, and marketing personnel Increase and leverage diversity 	Occupational safety and health	■ Fujita	Number of workplace accidents (frequency rate)	0.2	0	—		
		Training & education opportunities		Average annual training time per employee	11.5 hours	15 hours	Numerical target set		
		Diversity and equality of opportunity		Ratio of female managers	—	8%	New addition		
		Financial performance		Sales, operating income, ROE, EPS	Sales: ¥275.9B Operating profit margin: 21.3% ROE: 24.9% EPS: ¥270	Three years average (2018-2020), Base Scenario	Sales: ¥250.0B Operating profit margin: 17% ROE: 18% EPS: ¥170		—
Management Foundations	<ul style="list-style-type: none"> Achieve mid-term management plan targets Maintain a sound financial base 	Anti-corruption	■ Mihashi	Number of confirmed fraudulent activities	1	0	—		
		Compliance with antitrust laws		Related legal actions Number of cases	0	0	—		
		Environmental compliance		Environmental compliance Number of violations	0	0	—		
		Compliance (Society)		With regard to society Compliance Violations	3	0	—		
	<ul style="list-style-type: none"> Protection and respect for human rights Contribution to our sustainable future 	Supply chain management (Impact on environment, human rights, labor practices and society)	■ Tsukakoshi	New supplier evaluations	100%	100%	Review evaluation items related to environment/human rights/labor practices/social impacts and apply them in new supplier evaluations. When choosing new suppliers, ensure understanding and confirmation of our procurement policy.	Action plan formulated	
		Conflict minerals elimination		In order to eliminate conflict minerals, we ask our business partners to ensure the transparency of their suppliers of materials, parts, etc., and we work with our business partners to investigate conflict mineral information (smelter information), in collaboration with industry groups. We are continuing our efforts to use less risky materials.	<ul style="list-style-type: none"> Survey of targeted suppliers: implementation and response collection Continued participation in JEITA's responsible mineral procurement study group 	<ul style="list-style-type: none"> Survey of targeted suppliers: implementation and response collection Continued participation in JEITA's responsible mineral procurement study group 	Action plan formulated		
		Nondiscrimination	■ Fujita	Number of cases resolved via our helpline	4	All cases resolved	—		
		<ul style="list-style-type: none"> Environmental management Contribution to our sustainable future 	Climate change mitigation	■ Mihashi	Sustainably sourced energy ratio	28%	2050:100% (Scope 2)	New addition	
Atmospheric emissions reduction	GHG emissions (Scope 1+2)		33,385t-CO ₂ (-10.7%)		2030:30% reduction (in comparison with FY2018)	—			
Reduction of water use and reduction of waste	Waste recycling rate		87%		Recycling rate >90%	—			

Risk Management

Advantest promotes strategic and continuous risk management vis-à-vis the diversifying global risks that touch our business. We have also reviewed and reorganized our risk management system to clarify the relationship between important management issues (materialities) and risks, and to clarify responsibilities related to risk management.

Our Basic Risk Management Philosophy

Regarding the 20 important management topics and priority issues defined as materialities (see p. 22), we have formulated measures to address them at the level of individual divisions, business units, and overseas regional headquarters. We consider that factors hindering the implementation of these measures are risks. To avoid or mitigate those risks, we have adopted a risk management structure to manage the establishment of systems and the implementation of appropriate measures.

Risk Management Structure

The Sustainable Management Promotion Working Group, a company-wide committee, incorporates the policies and management plans determined and approved by the Executive Committee (and the Board of Directors) into priority measures for each division and business unit, and, in cooperation with six of our overseas locations, also identifies risks, formulates countermeasures, and reports to the Internal Control Committee. In principle, the Internal Control Committee meets twice a year to analyze the status of identified risks and factors contributing to any incidents that have occurred, and to take future countermeasures including prevention of recurrence.



Key Risks and Counter-measures

In fiscal 2019, over 400 risks were identified by divisions, business units, and overseas locations. The 25 major ones are listed below.

Key Risks	Priority Measures	Person in Charge	
		Materiality Addressed	
1 Significant demand fluctuations in the semiconductor industry	We will strive to expand our business into markets adjacent to semiconductor mass manufacturing, outsource production, and reinforce our recurring business.	Mihashi	6 7 9
2 Impact of global economic and political trends on global business development	We will punctually collect risk information from our overseas locations, strengthen our relationships with customers and suppliers, and make our procurement routes and production bases more flexible.	Tsukakoshi	1 6 13
3 Expansion of the COVID-19 pandemic	Under the direct control of the president, the Risk Management Group will: (1) ensure the safety and health of employees, (2) provide online support for customers, (3) track production, sales, inventory, and distribution status at the global level, (4) support BCP in the event of an employee becoming infected, (5) share resources among group companies, and (6) manage funds.	Fujita	18 20
4 Market share losses due to failure to deliver new products in a timely manner	By strengthening relationships with leading customers, we will accurately anticipate new technological innovations and the creation of new products and new markets, thus identifying business opportunities in advance.	Tsukui	1 4 5
5 Absence of a succession plan for the CEO and other top executives may threaten management stability and sustainability.	The Nomination and Remuneration Committee will carry out: (1) identification of job requirements, (2) selection of candidates, (3) training of candidates, (4) evaluation of candidates, and (5) final decisions on candidates.	Yoshida	17
6 Loss of opportunities due to dependence on a small number of suppliers	We are standardizing parts and designs to build a system that does not rely excessively on any one particular supplier.	Tsukakoshi	8 9
7 Intense competition may impact market share	We will strive to maintain product competitiveness by providing unique functionality and high-value-added solutions.	Tsukui	1 3 4 10

* See page.22 for description of each Materiality Number

■ Representative Director ■ Director / Senior Executive Officer ■ Director / Managing Executive Officer ■ Managing Executive Officer

Key Risks	Priority Measures	Person in Charge	
		Materiality Addressed	
8 Potential failure to execute our strategy and achieve our mid- to long-term management goals	The Board of Directors, the Executive Committee and the Internal Control Committee conduct risk analysis to continuously identify scenarios for various changes and their impacts, and strive to achieve our targets.	Mihashi	14 16 17
9 Heavy dependence on sales to top customers	We aim to win a wide range of customers by developing new markets and new customers, including by entering new business fields.	Sakamoto	5 6 7
10 Price pressure on Advantest products	We will reduce the risk of price pressure by providing original technology and high value-added solutions, and will seek to improve profit margins by reducing production costs.	Sakamoto	3 4 7 9
11 Exchange rate fluctuations may impact profitability	We are working to reduce the impact of exchange rate fluctuations by adjusting the balance of currencies we hold, using foreign exchange contracts, and managing our balance sheet to offset foreign currency-denominated assets and liabilities.	Fujita	14 15
12 Recoverability of new product development costs	We will improve the recoverability of costs by formulating product roadmaps that meet customer needs through technology exchange meetings, improving development efficiency through the promotion of product platformization, and pre-evaluating investment effects by utilizing the ROIC metric.	Tsukui	4 5 16
13 Consolidation of product markets may limit sales opportunities	By developing products that support a variety of applications, we will strengthen our partnerships with customers and secure sales opportunities. At the same time, we will launch new businesses and expand our business domains through M&A.	Sakamoto	1 2 5 6
14 Large impairment losses on goodwill and intangible assets	In addition to making investment decisions with due attention to capital costs and investment recoverability, we also aim to realize synergies as soon as possible after M&A by executing a PMI (Post Merger Integration) plan.	Fujita	15 16
15 Major damage to our own and suppliers' facilities may impact our business	We have formulated a BCP plan, and are working to prevent any disruption to business operations by diversifying our production bases and external suppliers, and by using cloud data storage.	Fujita	9 15
16 Recoverability of capital investment	In addition to fully considering recoverability based on the cost of capital when making investment decisions, we will monitor business growth rates after investment and make effective use of assets.	Fujita	15 16
17 Damage to Advantest's credibility or brand power may impact financial condition and/or business performance	In order to provide highly reliable products, we strive to implement design reviews at the design stage and cross-checks by the quality control division. In addition, the Compliance Committee implements initiatives to educate employees on legal compliance.	Sasaki	12 17
18 Stricter chemical substance regulations may incur countermeasure costs	We monitor trends in environmental regulations related to chemical substances, and are studying alternative technologies that do not use such substances.	Yamashita	8 17 18 19
19 Potential inability to raise funds when needed	We have established a solid financial position that can withstand sudden demand fluctuations, and we also maintain friendly relationships with multiple financial institutions so that we can immediately borrow money and set up commitment lines if needed.	Fujita	15
20 Infringements on the intellectual property rights of a third party may incur substantial costs	We seek to confirm that no intellectual property rights of other companies are infringed during product development and before product shipment.	Fujita	17
21 Infringement of Advantest's intellectual property rights by a third party may affect market share and performance	We take appropriate legal measures to protect our rights and will continue to monitor and exercise our intellectual property rights.	Fujita	17
22 Potential lack of highly specialized human resources	We are working to stabilize our human resources by formulating a mid- to long-term hiring plan, implementing global personnel rotation, improving our working environment, and making efforts to improve employee engagement.	Fujita	10 11 12
23 Digital transformation of IT core systems and processes may negatively impact business performance	We are confirming the continuity of our IT systems, and considering their replacement with new technology, and are also promoting organizational innovation by globally deploying the concept of "Digital Workplace."	Fujita	15
24 Damage to IT systems may affect business and social credibility and incur costs	In addition to strengthening detection of cyber-attacks through constant system monitoring, we have renewed processes to build an immediate incident response structure, and also implement regular information security education for employees.	Fujita	12 17 20
25 Potential damage to credibility and brand power due to product defects	The quality control division implements checks to ensure reliability.	Sasaki	8

* See page.22 for description of each Materiality Number

Financial Strategy & Capital Policy



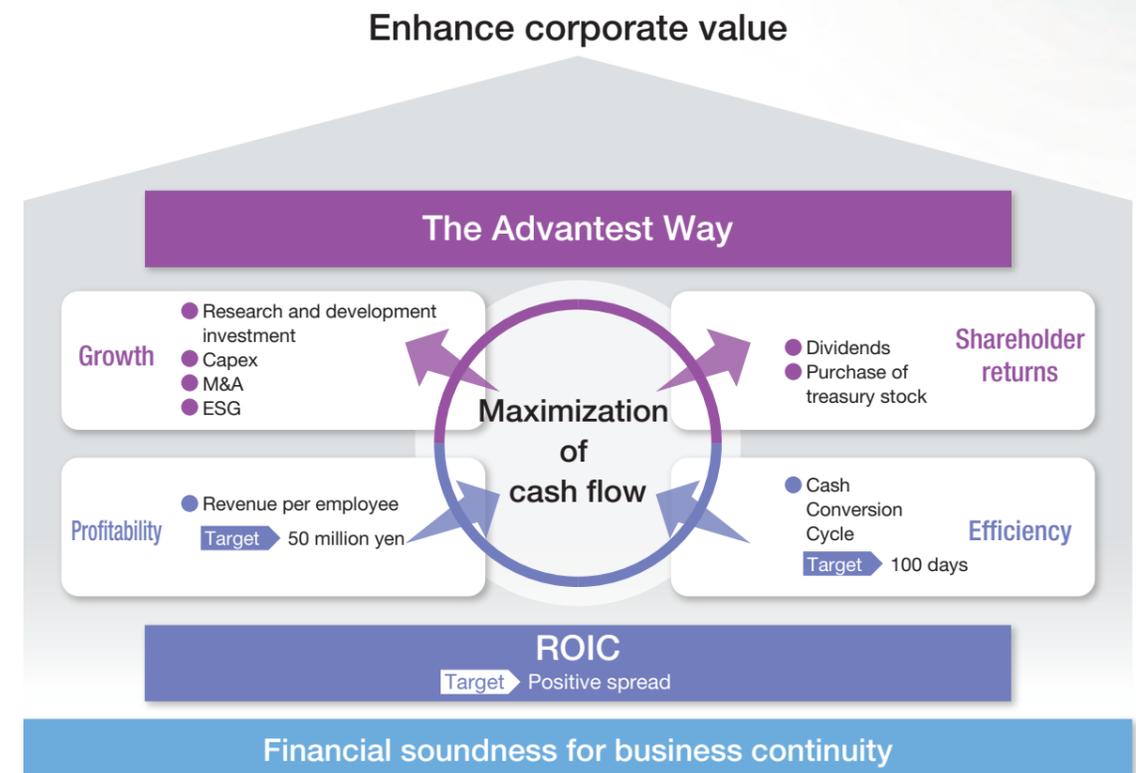
Approach to Basic Financial Policy

Our financial model is, first and foremost, to build a stable financial foundation, and from there, to utilize the concept of return on invested capital (ROIC) to maximize cash earnings for growth investments and shareholder returns. In addition, our accounting system supports this model by utilizing a pooling system that collects funds at headquarters, using a system that assigns a system code to each Group company around the world, and expanding the accounting organization globally by function. This enables speedy utilization of funds, information collection, and effective decision making. Apart from these accounting aspects, the value created by strategies for securing and reinforcing management assets and intangible assets, such as investment in human capital and the creation of internal and external organizations, is increasing in importance. Leveraging not only the capabilities of the

accounting department, but also the broad experience of staff in Human Resources, General Affairs, and other departments, we place emphasis on these non-financial elements of corporate value, and consider diverse ways of thought, reflecting the importance we place on our intangible assets such as people and intellectual property, while perpetually seeking the best approach to improve the corporate value of Advantest, and implementing strategies that meet the needs of the moment, including ESG management.

COVID-19 Financial Response

At the beginning of 2020, we were in a position to estimate that we might exceed fiscal 2018's record high sales in fiscal 2020, but the worldwide spread of the COVID-19 pandemic changed the economic situation so drastically that by spring it had become difficult to issue even a



six-month forecast. Every day we seem to hear that another company is seeking to raise money, and Advantest has also conducted various risk simulations in light of our past experience, including an examination of financing under the worst-case scenario and our commitment lines, but so far we have not needed to take any urgent financing measures, nor have we had to review our policy on growth investments targeting future business expansion such as R&D investment, capital investment, and additional hiring. Of course, it is necessary to take measures in response to the short-term economic downturn we are now experiencing, but in terms of our financial status, our ability to continue growth investments from a long-term perspective, in accordance with the outlook set forth in our "Grand Design" that the semiconductor industry will grow despite short-term fluctuations, has been strongly supported by the sound financial structure that enabled us to obtain an "A" credit rating. This financial model was based on the financial model shaped, above all, by our experience of past silicon cycles, when we made a point of continuing business as usual even during downturns. In this era, when in addition to COVID-19 and US-China conflict, natural disasters once considered to be rare occur with depressing frequency, I believe sustainable management

requires a higher than normal level of working capital. Growth investment is still needed to achieve the goals of our Grand Design, especially in terms of securing human resources by increasing our headcount, so we must pay attention to changes in our sales-per-employee ratio while preserving a balance between the increase in fixed costs and our profit margin. In the future, I will strive to further improve the functionality of our financial model.

Current Financial Quantitative Challenges

As a milestone towards our mid- to long-term goals, we have set a profit and loss model with sales at the ¥300 billion level. In fiscal 2018 and fiscal 2019, our gross profit margins were 54.5% and 56.7%, respectively, exceeding the model's target of 54%, but SG&A expenses (including other income/expenses) were 31.6% and 35.4% of sales, respectively, with an especially significant increase seen in fiscal 2019. We recorded temporary depreciation expenses as part of our M&A accounting, and other factors included expenses related to M&A and securing human resources and aggressive capital investment for growth. However, due to the characteristics of our business, investments in human capital including the hiring of

engineers who support our relationships with customers, and investments in R&D aiming to enhance our broad product lineup, are the source of our competitiveness, and are essential to achieve the ¥400 billion sales target of our Grand Design. It is also necessary to proactively invest in IT with an eye to the digital transformation, which is expected to hit a tipping point in 2025. We will build a muscular cost structure in line with our target model by evaluating cost-effectiveness to ensure that our investments stay on target, the returns on our growth investments are in line with our original expectations. We are not just continuing to spend money in traditional ways without considering returns, as well as structuring our budgets on a complete zero basis, without reference to past performance.

Effects of ROIC Introduction & Further Embedding the ROIC Metric in Operations

At the same time as we announced our mid-term management plan in April 2018, we introduced a ROIC evaluation system for our business. This requires positive equity spreads not only at the corporate level, but also at the level of individual business divisions, and forces us to pay more attention to the profits and losses of individual businesses than before. I feel that we have taken a step forward within the company from the perspective of effective

utilization of assets. For example, awareness of potential excess inventory has taken root very strongly in each division, and employees have come up with new methods of visualization and discussion to improve cost-effectiveness. In this industry, where boom follows bust in quick succession, it is not easy to determine the most appropriate level of inventory assets, but we are working to minimize inventory risk by, among other things, using computer simulations. From the time of planning for fiscal 2020, we set a KPI for profit efficiency based on the personnel and profits and losses of each business division, and are seeking to further improve efficiency by incorporating a resource-based management perspective that encourages people to consider the appropriateness and utilization of human assets. In the future, I would also like to improve on our past tendency to conduct such evaluations of businesses on the basis of single-year figures. We will also incorporate items such as profit carryover and loss, as well as placing a little more emphasis on our balance sheet perspective, which includes an awareness of asset efficiency, while planning to embed measures that allow actions to be taken on businesses that do not have positive equity spreads and on products that are factors in this by making evaluations for a given period a little more visible. In addition, by evaluating the cash conversion cycle (CCC) for each business division, rather than simply focusing on asset reduction/efficiency, I hope to

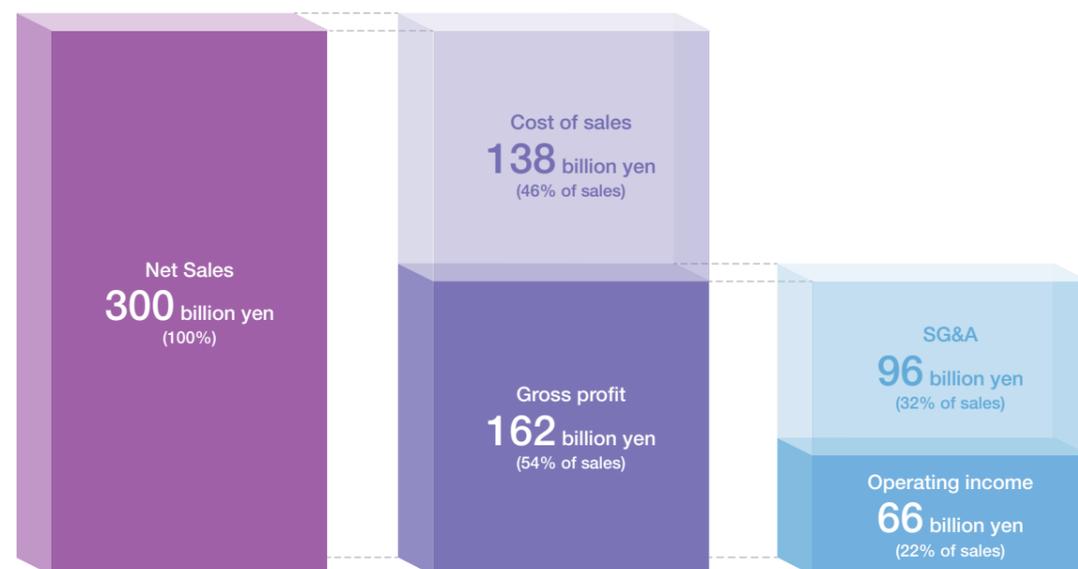
help achieve our company-wide CCC target values, and as a result of this, improve the effectiveness of our financial model, which will in turn improve the company's cash flow and lead to further growth and higher shareholder returns. From the perspective of CCC, the future growth of the company and achievement of our Grand Design goals is strongly influenced by how well we can reallocate cash with a low return rate to businesses with higher returns and growth, while keeping safety in mind, by reducing required levels of working capital. As a result of these policies, in July we decided to sell our probe card business, which had been operating mainly in the United States. Hitherto, Advantest has repeatedly acquired businesses and companies through M&A, but we have rarely taken on the role of seller. In addition to evaluating our numbers using ROIC, we will review our business portfolio to ensure that each component supports our overall business from a medium- to long-term perspective, and further improve business efficiency to improve corporate value.

partly supported by expectations for the semiconductor sector overall, our total shareholder return (TSR) is far above the TOPIX average. Guided by our belief that our industry environment is still in the midst of a growth phase, we will consider shareholder returns in balance with our investment goals, based on the fact that a ROE continuously exceeding cost of capital in the medium to long term leads to improvement in shareholder value. Regarding dividends, we will maintain a payout ratio of 30%, linked to half-year consolidated business results, similarly to employee bonuses. Regarding share repurchase, in July we voluntarily repurchased our own stock for the first time in 13 years, taking into consideration the possibility that we will exceed the targets of our mid-term management plan. This was not done in the expectation of a short-term bounce in our stock price. It was based on our view that future profit might weigh down our ROE as a result of excess capital accumulation. We will continue to improve shareholder value from a medium- to long-term perspective.

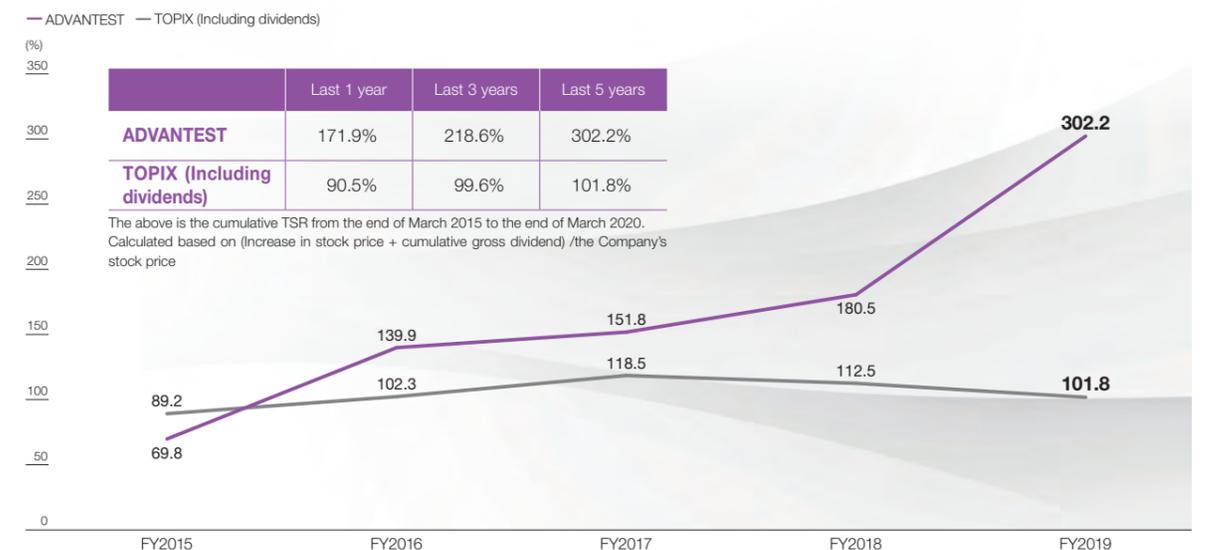
My Approach to Shareholder Value Improvement & Returns

In the past two years, fiscal 2018 and fiscal 2019, Advantest has achieved high returns on equity (ROE) of 35.3% and 24.9%, respectively, significantly exceeding the 18% target of our mid-term management plan. While this is

P/L model on a level of 300 billion yen in sales for achieving mid/long-term targets



Total shareholder return (TSR)



Mid-Term Management Plan and Results

To achieve the goals of the “Grand Design” mid- to long-term management policy we announced in April 2018, we started by establishing a mid-term management plan that set issues and targets for the first three years of the Grand Design (FY2018-2020). How did we do in the first two years of the mid-term management plan?

KPI of the Mid-Term Management Plan (three years average)

	Conservative Scenario	Base Scenario
Sales	230.0B yen	250.0B yen
Operating Profit Margin	15%	17%
ROE	15%	18%
EPS	¥135	¥170

Advantest's Strengths

- Industry's No. 1 product portfolio
- Industry's No. 1 customer base
- Comprehensive solution capabilities including test peripherals, and global support capabilities

Mid-Term Management Plan 2018-19 Results

	2018 - 19 average	vs. Objectives (Base Scenario)
Sales	279.2B yen	+11.7%
Operating Profit Margin	22%	+5points
ROE	30%	+12points
EPS	¥286	+¥116

Mid-Term Management Plan (Progress)
2018 - 19 (2-Year Average)

Mid- to Long-Term Measures and Results

- Expanding business to adjacent markets**
SLT business and Data analytics via M&A and partnership
- Strategic changes in internal organization**
Global integration of tester R&D
Launch of ARTeam
- Production reforms**
Promotion of Design for Supply Chain
- ROIC-based business evaluation and portfolio review**
Probe card business sale
- Human resource development and resource enhancement**
Strategic reinforcement of SE / AE. 200 engineers hired per year
- Updating of corporate philosophy and code of conduct**
The Advantest Way
- Shareholder returns**
Maintain a half-yearly 30% payout ratio
Repurchase of treasury stock

*ARTeam: Applied Research & venture Team

Vision
Adding Customer Value in an Evolving Semiconductor Value Chain

Six Commitments

- 1 Be the No. 1 provider of test and measurement solutions
- 2 Be a partner with leading-edge customers
- 3 Develop leading-edge technology
- 4 Attract and retain the best talent in the industry
- 5 Be a learning organization
- 6 Improve financial KPI and increase corporate value

Four strategies

- 1 Reinforce core businesses, invest strategically
- 2 Seek operational excellence
- 3 Explore value to reach a higher level
- 4 Pioneer new business fields

Sales (base scenario) Unit: Billion yen

Tester market:	580
Advantest's market share:	46%
Sales (existing businesses):	340
Sales (new businesses):	60
Sales (total):	400

2027
(year to achieve goals of Grand Design)

Our Scenarios (Premises of the Mid-Term Management Plan)

Advantest believes that the demand for semiconductor manufacturing equipment inevitably fluctuates each year. Therefore, our targets are three-year averages. First of all, regarding our tester market growth rate assumptions, we prepared two scenarios: a “conservative scenario” with annual growth of 0% and a “base scenario” with annual growth of 4%. The latter scenario is used in our Grand Design. According to our research, the market contracted in CY2018 to about ¥400 billion, and in CY2019 it shrunk to about ¥370 billion due to memory inventory adjustments. In addition, the market in CY2020 is expected to be flat year-on-year at approximately ¥370-380 billion, due to the impact of the COVID-19 pandemic and trade friction between the United States and China. Despite our market environment has fluctuated up and down, Advantest's results for the past two years have exceeded the “base scenario” by a significant margin.

Two Years in which Advantest's Strengths Were Exercised to the Fullest

In FY2018, strong demand for testers continued for the full year in response to rising demand from the AI, data center, and smartphone sectors for higher semiconductor performance and enhanced reliability assurance. In FY2019, there was a phase of inventory adjustment centered on memory devices, but SoC-related demand more than compensated, enabling Advantest to set a new record for annual orders for the second consecutive year. We recognize that the following three strengths we have cultivated over the years have supported our successes in this market environment:

- Industry's No. 1 product portfolio
- Industry's No. 1 customer base
- Comprehensive solution capabilities including test peripherals, and global support capabilities

These advantages enabled our two-year average results to significantly exceed the “base scenario” for all four KPIs set forth in our mid-term management plan. It is difficult to forecast the market environment in CY2020, the final year of the plan, but our full-year forecast as of July 2020 indicates that it is possible for us to achieve the targets of our mid-term management plan.

Mid- to Long-Term Measures

Despite large and continuing short-term demand fluctuations, we believe that demand for semiconductor test will continue to grow in the medium to long term, as in the scenario set forth in our Grand Design. In order to capture these future business opportunities and achieve the goals set in the Grand Design for 2027, we have developed various mid- to long-term measures over the last two years, including business expansion into adjacent markets via M&A and

business alliances, consolidation and shuttering of unprofitable businesses based on ROIC evaluation, global integration of R&D operations, launch of the “ARTeam” that conceptualizes new businesses based on the utilization of AI and data analytics, product development centered on DfSC (Design For Supply Chain), and construction of a production system that is resistant to fluctuations in demand and supports effective BCP. (See the figure P.31.)

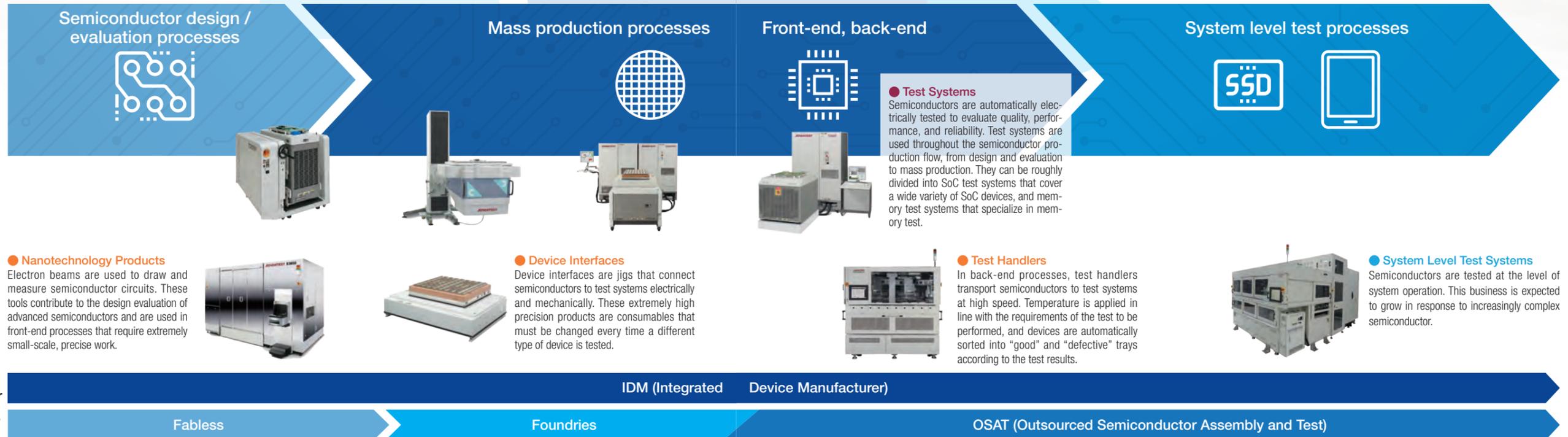
We see our mid-term management plan as focused on achieving the long-term goals of our Grand Design, and as such it is shaped by the issues and priority measures necessary to achieve those goals. In other words, it is the role of the mid-term management plan to lay the groundwork for winning business in future. We consider that the first two years of the plan have developed strong traction towards that objective.

Business Portfolio

Cloud, software, data analytics



Field Service
Engineers all over the world support the installation, maintenance and repair of customer systems to improve utilization ratios and throughput.



Target Devices of our Test Business

Tester	Main Target Devices	Device functions / applications	Test business growth factors	FY2018~FY2019 results
SoC Test Systems	Mobile ICs	Control smartphones, reception and transmission of radio waves at communication base stations, etc.	Spread of 5G, Improved performance of smartphones, expansion of base stations, etc.	◎ Continuing strong demand due to widespread adoption of 5G and improved performance of smartphone processors
	ICs for high performance computing	Carry out high-speed calculations on computers and data servers	Popularization of AI and deep learning will increase data traffic	○ In addition to expanding applications for AI and deep learning, data center investment will recover in FY2019
	Power Semiconductor	Rectification and amplification of current, switching, etc. Installed in all electronic devices	Power saving needs Automotive electrification	○→△ Automobile demand has a knock-on impact on the automotive semiconductor business
	CMOS Image Sensors	Convert camera images to electronic data.	Increasingly installed in smartphones and automobiles	○ This business will grow due to innovations such as compound eyes for smartphones
	Display Driver ICs	Control images on displays	Popularization of new technologies such as touch displays and slim bezel	◎→× Although slim bezel continued to drive demand through FY2018, there was a pause in FY2019
Memory Test Systems	Memory (DRAM, Non-volatile memory)	Store data and read it when in use. many electronic devices	Increased data traffic New data servers High functionality of smart phone	△→○ Inventory adjustments ended in the first half of 2019, and this market returned to positive from the second half of 2019.

Business Segment Commentary and 2019 Overview

Semiconductor & Component Test Systems

Advantest's core products: test systems

FY2019 results
Sales of 197.2 billion yen (6.9% decrease from the previous year Accounted for 71.5% of total sales)

- 5G and high-performance computing-related demand remains strong
- Memory decreased in the first half, but recovered from the second half

SoC business / memory business: Sales for the past 3 years

Year	SoC	Memory
2017	87.9	53.0
2018	148.6	63.1
2019	155.0	42.2

Mechatronics

Test peripherals and nanotechnology-based semiconductor front-end process equipment.

FY2019 results
Sales of 36.3 billion yen (7.5% decrease from the previous year Accounted for 13.2% of total sales)

- The slump in memory testers affected test peripherals, which are highly correlated with our tester business
- Nanotechnology product demand is currently sluggish due to lumpiness in customer investment schedules

Total Sales: 275.9 billion yen
(fiscal year ending March 2020)

Service, Support & Others

In addition to services and support for test systems, this segment includes new businesses that transcend the boundaries of conventional semiconductor test.

FY2019 results
Sales of 42.5 billion yen (34.9% increase from the previous year Accounted for 15.3% of total sales)

- The system level test business acquired from US company Astronics in February 2019 is performing well
- Advantest's SSD test business and Essai, Inc., which was acquired in January 2020, also contributed to sales growth

Consolidated Financial and Non-Financial Highlights

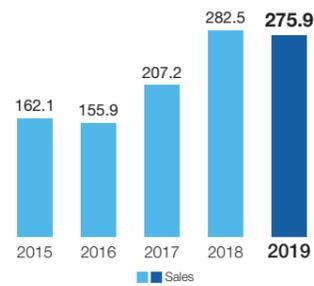
For each fiscal year beginning on April 1st

Financial Highlights

Sales

(Billion yen)

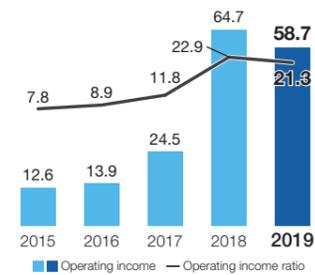
Achieved the target of our mid-term plan, even though sales did not reach the record high of the previous year



Operating income / Operating income ratio

(Billion yen / %)

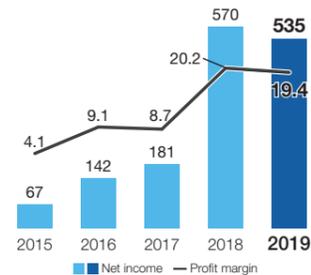
Maintained an operating margin of over 20%



Net income / Profit margin

(100 million yen / %)

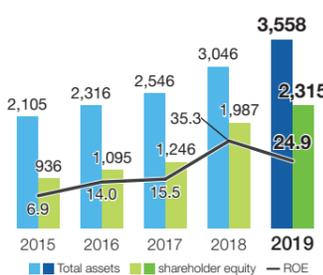
Net income exceeded 50 billion yen for the second consecutive year



Total assets / shareholder equity / ROE

(100 million yen / 100 million yen / %)

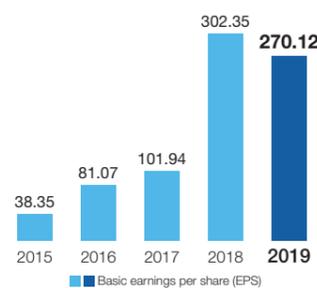
Achieved a high ROE despite a significant increase in shareholder equity



Basic earnings per share (EPS)

(Yen)

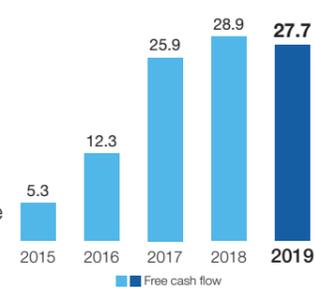
Despite a year-on-year decline, EPS is trending solidly upward in the medium term



Free cash flow

(Billion yen)

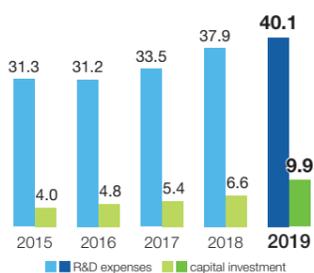
Even though M&A investment increased by about 20 billion yen year-on-year, free cash flow was as good as the previous year



R&D expenses / capital expenditures

(Billion yen / billion yen)

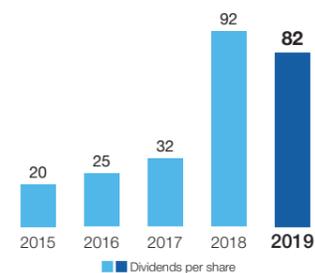
Even if sales decline, Advantest aggressively invested in future growth



Dividends per share

(Yen)

Dividends shrank due to profit decrease, in accordance with our performance-linked dividend policy

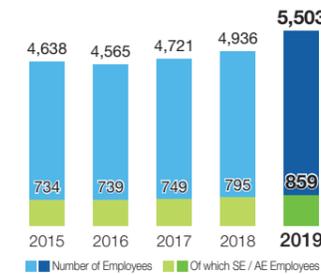


Non-financial highlights

Number of employees* / Number of SE / AE employees

(Number / %)

We continuously hire diverse human resources with the aim of increasing corporate value. We are working to secure and grow our workforce of highly skilled engineers who support the total solutions we provide to our customers.

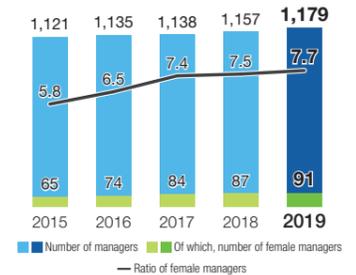


* Including temporary employees

Number of managers / Ratio of female managers

(Number / %)

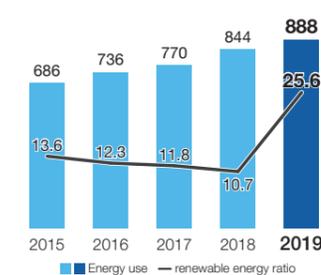
Advantest values diverse perspectives and promotes a corporate culture that allows any individual to play an active role, regardless of race, gender, age, nationality, etc.



Energy usage / renewable energy ratio

(TJ / %)

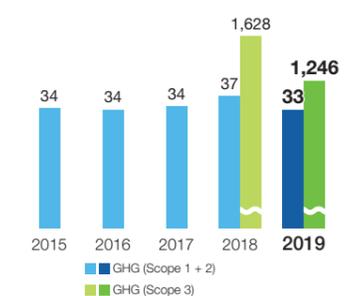
We actively work to reduce greenhouse gas emissions by efficiently using energy and introducing renewable energy sources.



GHG (Scope 1 + 2, and Scope 3) CO₂ emissions

(kt-CO₂)

We are quantifying greenhouse gases indirectly emitted in our value chain and promoting greenhouse gas emission reduction activities for climate change mitigation and adaptation.

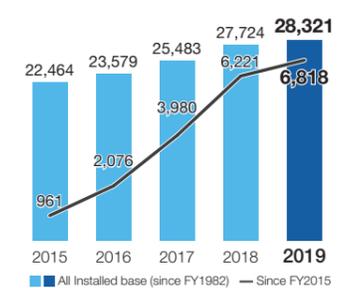


* The CO₂ emission factors have been revised and recalculated in the past.

Installed Base of Major Semiconductor Test Product (Cumulative)

(Unit)

Our strength in the semiconductor tester market rests on our customer base, the best and broadest in the industry. The top 20 semiconductor manufacturers in the world by sales all use Advantest's flagship products. Currently, our installed base numbers more than 28,000 test systems and handlers, and of these, 6,818 units have been installed in the five years since FY2015 alone, representing an unmatched rate of growth.



Promotion of Diverse Human Resources

The Advantest Group jointly seeks globalization and localization. By unifying our qualification system and personnel evaluation system globally, and by establishing a single global standard for bonuses as an incentive for profit sharing, as well as a compensation system linked to global performance, we encourage employees to consider the profitability of the entire company rather than just their own country or region. In terms of localization, 10 out of 24 executive officers (42%, as of end of June, 2020) of are foreign nationals who implement management practices based on local culture and customs at our key overseas locations.



Koichi Tsukui
Managing Executive Officer
Leader, ATE Business Group

Special Feature on Strategy 1 R&D Priority Strategies

Redefining Semiconductor Test Technology for Measuring the Future

Our management philosophy of supporting leading-edge technology is both a source of pride for the R&D division and a great responsibility. The value of Advantest's semiconductor test springs from the fusion of our ultra-precise measurement technology, which we continue to refine to this day, with a future-oriented vision of technology that enables highly efficient semiconductor test focused on customer value improvement. We live in an era when semiconductors are indispensable to our safety, security and comfort throughout the world. Guaranteeing their reliability is Advantest's mission to "enable leading-edge technology." In the dynamically changing semiconductor market, the key to realizing our mission, today, tomorrow, and in years to come, is to grasp business opportunities as quickly as possible by collaborating closely with leading customers, and incorporate our future-oriented measurement technology into the development of the solutions that customers require.

Semiconductor Complexity From the Perspective of Test

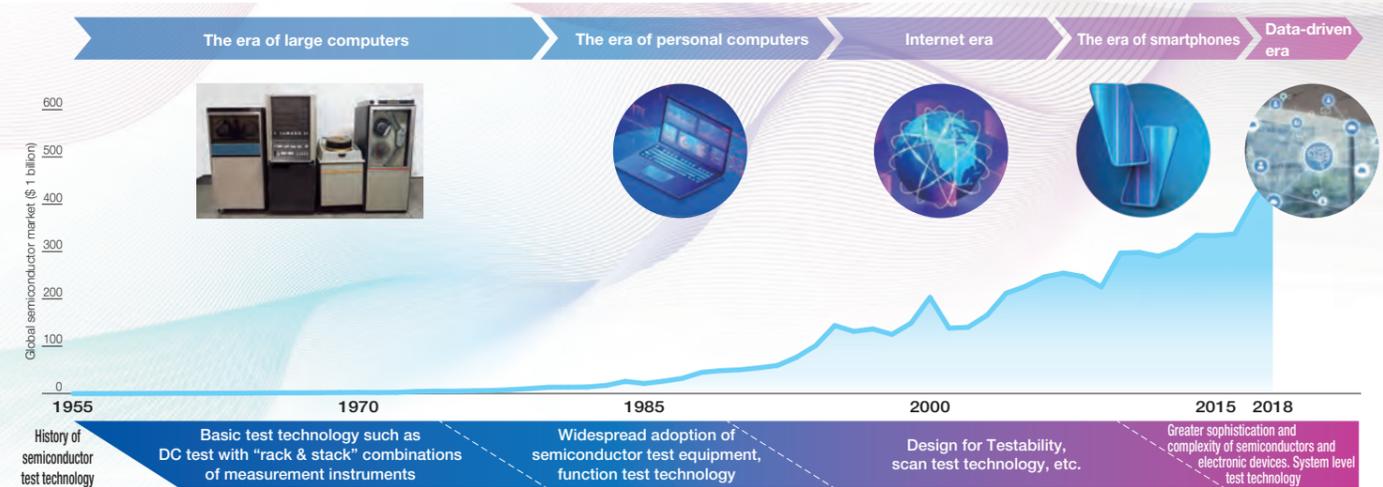
Accelerated by the evolution of semiconductor design and manufacturing technology, the digital transformation, including the rapid commercialization of 5G and AI, has given rise to a major inflection point in the semiconductor industry. The ongoing miniaturization of semiconductor processes has driven gains in semiconductor cost-effectiveness, complexity, functionality, and performance. For example, devices with more than 10 billion transistors, 3D devices with more than 100 layers, and heterogeneous devices integrating more than 10 different types of functions are now being developed. Furthermore, the relationship between hardware and software has been strengthened, so that a device operates as if it were a system. Supply chains now also involve the collaboration of multiple teams responsible for design, wafer manufacturing, package assembly, IP, and more. The digitization of

society is driving heightened expectations for semiconductors at an accelerating pace, which means that customers must now achieve Time to Market, Time to Volume, and Time to Quality in shorter times than ever before. This has become a major issue for them, leading to requirements to test more items in the same amount of time, and an increase in test difficulty. In addition, there are now more test requirements that cannot be covered by conventional test methods. It is essential to strengthen test technology to ensure reliability by utilizing new methods such as system level test.

Test Solutions for Comprehensive End-to-End Coverage

To solve these issues and add customer value, Advantest is expanding our business domains from our current core business of semiconductor mass production test to design/evaluation processes and new system level test

Test technology transitions brought about by past inflection points



(Source: SIA, WSTS)

processes. By providing comprehensive test solutions that offer end-to-end coverage, along with device handling, temperature control, and device contact, we can deliver flexible automated processes that address the entire workflow. We also aim to provide more intelligent integrated solutions, including big data analysis, by utilizing data generated from the semiconductor manufacturing process, which is said to exceed two terabytes a day at leading-edge factories. Collaboration with leading customers is indispensable to quickly grasp inflection points such as we face now, and to develop optimal responses to them. Our customers' challenges are our compass and guide to future changes in terms of their potential for technological disruption and their impact on the market supply chain. Thus, one of our key development strategies is to build collaborative relationships with leading customers and incorporate their needs into detailed roadmaps and development plans, leading to the commercialization of successful products.

Our Key R&D Themes for FY2019 - FY2020

- Next-generation scalable test system platform development (V93000 EXA Scale)
- Development of testers for 5G millimeter wave and high-end SoC devices
- Development of a high-end memory tester
- Development of software architecture that enables big data analysis and high throughput
- Development of a test cell platform for comprehensive quality improvements such as factory automation

Solutions launched as new products:

- New T2000 module for automotive SoC test with greatly improved parallel test performance
- H5620 high-speed burn-in tester for memory test (announced)
- V93000 Wave Scale RF8 market launch for Wi-Fi 6E and 5G-NR devices
- TS9001 TDR system high-precision wiring failure analysis solution using terahertz technology (announced)

A Global R&D Division

Our core business is Semiconductor Test (ATE : Automated Test Equipment), and we are proud that in 2019, we once again claimed the No. 1 market share of the ATE market. We are equally proud of the industry-leading product portfolio and customer base that supported this achievement. We are accelerating the integration of the V93000 development team with the T2000 and memory tester development teams to facilitate global development projects and personnel rotation. Our ST (System level Test) business division, established in FY2019 to develop and provide SSD test systems, also includes the system level test business we acquired from Astronics, and Essai, which we acquired in January 2020. Essai has strong capabilities in final test and system level test sockets, and thermal control units for temperature control.

Capturing Change and Opportunities in Adjacent Markets

Our ARTeam (Applied Research & venture Team) was established as an organizational structure that transcends the R&D division to sensitively capture opportunities for business expansion into adjacent markets and coming inflection points. In addition, the above-mentioned acquisition of Astronics' system level test business, the acquisition of Essai, and the partnership with PDF Solutions announced in July also target business expansion into adjacent markets. In the future, we will continue to explore opportunities to further align Advantest's business portfolio with evolving customer needs, including collaborations with partners, universities, and research institutes.

Special Feature on Strategy 2
Advantest's Manufacturing Strengths

DFX is the Key to Manufacturing for Achievement of Our Grand Design

Our Grand Design sets a sales estimate of ¥400 billion, approximately 1.5 times our record high set in fiscal 2018 (¥282.5 billion). Expanding production capacity to meet this demand does not necessarily mean only expanding our own factories and production staff. Particularly in the semiconductor test market, where sudden demand fluctuations are normal, capital investment and hiring based on the production requirements expected at times of peak demand will directly lead to higher fixed costs and a higher break-even point. It is important to balance Advantest's unique manufacturing strengths with the use of highly efficient outsourcing. The key to achieving this balance is DFX (Design for X).



Soichi Tsukakoshi
Senior Executive Officer
Executive Vice President, Production Group

Mid- to Long-Term Basic Policies of the Production Division

Historically, the semiconductor industry was shaped by the four-year cycle of demand fluctuations driven by Silicon Cycle, which led to booms and busts every two years, but in 2015 Silicon Cycle broke down, and demand began to grow steadily. In particular, the rapid increase in demand that we experienced in fiscal 2018--the so-called "supercycle"--gave us numerous pointers towards reshaping our production system to better utilize both in-house production and outsourcing.

To support the business scale (sales of ¥400 billion) envisioned by our Grand Design, we are reorganizing our production structure through various measures such as a profit improvement strategy based on AVA2.0^{*1}, global expansion of our production base through the utilization of

EMS^{*2} partnerships, cost reduction throughout our supply chain, and a constant focus on high-quality manufacturing. I have proclaimed that in the future, the production division will work with the R&D division to promote DFX, which enables production and procurement outside the Gunma Factory (our main domestic factory). In addition, I have set forth a mid- to long-term policy for the production division that incorporates priority issues including the above-mentioned measures.

^{*1}: Advantest Value Added 2.0: a business management/evaluation tool based on ROIC (return on invested capital)
^{*2}: Electronics Manufacturing Services: companies that offer contract manufacturing services for electronic devices

Design for Supply Chain: A Recipe for Strength

The Gunma Factory's great strength is our highly experienced production team, whose seamless teamwork has enabled us to handle fluctuations in demand by slowing or speeding up production. Despite being few in number, these elite production workers have been able to provide flexible production support, which is also the key to controlling manufacturing costs. However, if annual sales climb over ¥250 billion, greater volume production requirements will make it necessary to construct a production system that is not exclusively in-house, but is combined with an outsourced model. Outsourcing can be roughly classified into two different models, a partial outsourcing model in which only bottleneck processes that constrain production are outsourced, and a full turnkey model in which everything from material procurement to production is outsourced to a single partner. In the face of volatile demand, bottleneck processes tend to be outsourced first, but the disadvantages of this model are that supply chains tend to be lumpy and complex, and it is difficult to scale up when increased demand requires increased production. In addition, if production growth trend forecasts are mistaken, the amount of lumpiness in the supply chains can increase, and management costs will rise. On the other hand, for small-volume products with low repeatability and products that use specialized parts, when there is no need to chase economies of scale, there can be advantages to partial outsourcing that is highly specialized and can respond with great flexibility to changes.

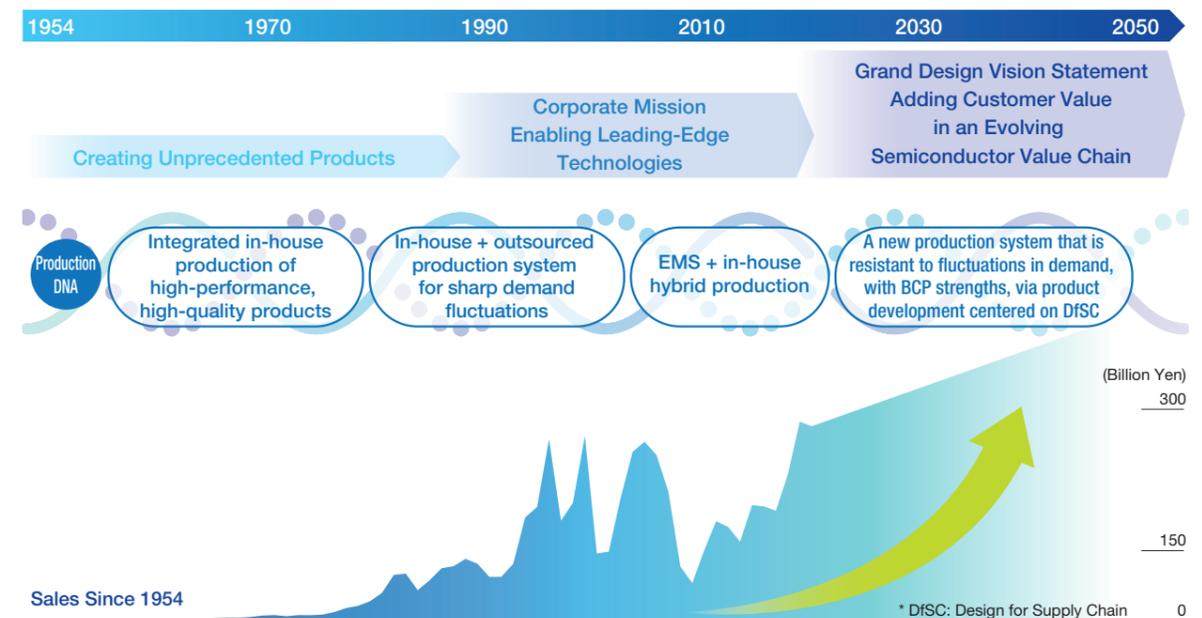
However, the main objective of the full turnkey model is to seek economies of scale through volume production, so major EMS manufacturers will also be considered as

outsourcing partners. We have already implemented this model for some of our products, but many more of the products now made at the Gunma Factory will be outsourced to EMS subcontractors in the future.

In the full turnkey model, uniqueness and oddities in terms of design, parts, construction methods, quality standards, etc. become supply chain risks, leading to reduced supply capacity and lost opportunities. The key to achieving the goals of our Grand Design is a combination of in-house production, a partial outsourcing model, and a full turnkey model, maximizing the strengths of each. Various forms of "Design for X" are required for that purpose, but the "secret sauce" is Design for Supply Chain.

Response to New Risks

Every year for the past few years, a severe disaster has occurred somewhere in the world. Every time supplies of materials are cut off, and some customers are inconvenienced. In addition, in 2020, new threats such as the global economic slowdown due to the spread of COVID-19, the transformation of the global supply chain caused by U.S.-China trade friction, and the two countries' competition for technical hegemony, have appeared as external factors we must take into account. Rather than just considering our own safety, we must overcome these new crises while helping and accommodating our customers and business partners. Therefore, I believe that all stakeholders in the supply chain must cooperate in creating a system of Design for Risks.





Special Feature on Strategy 3 HR Strategy

Human resources drive sustainable development

Advantest believes employees drive our sustainable development and growth. Based on this believe we implemented The Advantest Way which represents the values shared by Advantest employees worldwide, and nourishes our corporate culture.

Keith Hardwick
Managing Executive Officer
Global HR Executive Vice President

Our Grand Design and the Advantest Way

Three of the Six Commitments in our Grand Design (see p.19-20), “Partner with leading-edge customers,” “Attract and retain the best talent in the industry,” and “Learning organization” are the driving forces in our human resources strategy. We have a mission to continuously improve ourselves so that we can offer products and services that will satisfy our customers worldwide through the development of the most advanced technologies.

However, developing advanced technology means constantly pushing the envelope in our increasingly complex business environment. This complexity was highlighted in the fourth quarter of our fiscal year with the global pandemic. Advantest and its employees responded to this complex situation by establishing innovative ways to constantly communicate, learn and evolve together with our customers and partners. This is just one example of our employees demonstrating our “learning organization” capabilities by adapting to the new environment of restricted travel remote work. One key to achieving this was the Advantest Way, especially the Core Values represented

by the acronym “INTEGRITY.” In order to improve our organization and ultimately provide higher-quality products and services to our customers, our employees share and live these Core Values, with a particular focus on Trust, Respect and Teamwork, creating an environment where we constantly learn from each other.

With this in mind we are now holding company-wide workshops to ensure full employee buy-in to live our values daily. As of the end of March 2020, about 70% of employees worldwide had participated in a workshop. Executives and managers act as facilitators, helping them not only to hear the voices of employees, but also participate in two-way learning processes. Although the COVID-19 crisis interrupted face-to-face workshop schedules, we will continue with online workshop sessions until all Advantest employees have completed the workshop.

Strategic Development of Resources and the Advantest Way

In recent years, sales to China, Taiwan, and South Korea have come to account for 70-80% of total sales. To strengthen customer support in these regions, we are



The Advantest Way workshop



- Innovation** INNOVATION is our Lifeblood
- Number One** NUMBER ONE is our Aspiration
- Trust** TRUST is our Foundation
- Empowerment** EMPOWERMENT is our Motivation
- Global** GLOBAL is our Reach
- Respect** RESPECT is our Heart
- Inclusion and Diversity** INCLUSION AND DIVERSITY is our Commitment
- Teamwork** TEAMWORK is our Approach
- Yes** YES is our Attitude

focusing on new recruitment and placement of software and application engineers in these regions.

That said, product development is centered on Japan, United States, and Germany. On the customer side, equipment may be developed, and purchased in different countries, emphasizing the need for a global sales force that communicates seamlessly with all counterparts. It is not uncommon for development staff, sales staff, and shipping destination and post-installation support staff to be located in different regions. INTEGRITY helps us build a framework for global support by relying on Teamwork and Inclusion & Diversity.

Maintaining this ability to provide comprehensive support to our customers through global cooperation is one of our top priorities, as expressed in our commitment to “Partner with leading-edge customers.” In addition, performance-based bonuses and stock-based compensation, which are calculated based on the performance of the entire group, not on business division or country / region performance, contribute to global teamwork.

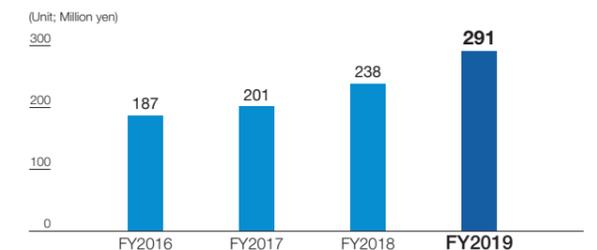
Investment in Management Resources for Growth

Advantest’s business is chiefly supported by employees and their work, experience, and wisdom. While equipment deteriorates over time, but human experience and wisdom do not deteriorate, but only grow with time. Therefore, we not only hire excellent human resources, but we also invest in their training and development as stated in our commitment to “Attract and retain the best talent in the industry.”

Since the announcement of our Grand Design, we have expanded our human resources development program to help all employees take the initiative to hone their basic abilities and enhance their individual strengths. In this way,

we aim to be a learning organization that continues to funnel new knowledge into products and services. Since excellent leadership is indispensable for achieving sustainable growth in an era where more complex and difficult decision-making is required, we also focus on developing human resources who can take responsibility for top and core functions globally. Each Group company additionally develops training programs to enhance individual abilities and specialties according to the needs of each country and region. Since FY2018, our investment in employee education has also increased significantly.

Employee Education Costs (Consolidated)



For example, in Japan, we have held software engineering forums six times a year for 20 years, where employees learn from instructors inside and outside the company, focusing on topics such as Agile Development, Deep Learning, CI(Continuous Integration). In October 2019, we launched Advantest Engineering Friday, a community which has created multiple sub-groups that meet regularly on Friday afternoon to study their specialties. In China, we regularly hold a Training Day where in-house lecturers offer themed talks, and are evaluated under a commendation system that helps to create a culture of mutual learning.

Sustainability: Addressing Three Important Social Issues

Advantest collaborates with our customers and suppliers to contribute to a safe, secure, comfortable, and sustainable future by solving social issues through our business and considering the environment and society as we conduct our business operations.

The Advantest Way

Sustainability through ESG Promotion means all employees share an awareness of the importance of our relationship with society and the environment. This is the basis for the sustainability activities of the Advantest Group.



Three Important Social Issues

Based on dialogue with stakeholders, we have selected three of the social issues emphasized by CSR evaluation organizations and international sustainability guidelines to drive our contribution to the SDGs (Sustainable Development Goals).

1. Climate Change Initiatives

In recent years, abnormal weather and environmental variability, thought to be caused by climate change, have become a prominent topic. Thus, responding to climate change is necessary to achieve a sustainable society.

2. Protection and Respect for Human Rights

Amidst growing international concern for human rights, it has become a social requirement to respect the human rights of all stakeholders involved in our business activities, including employees and business partners, and to ensure proper labor practices.

3. Supply Chain Collaboration

With the globalization of business, companies are required to take ownership of human rights, labor, and environmental impacts throughout the supply chain. In order to achieve responsible supply chain management, it is important to tackle social issues in collaboration with suppliers, based on fair, impartial and transparent business relationships.

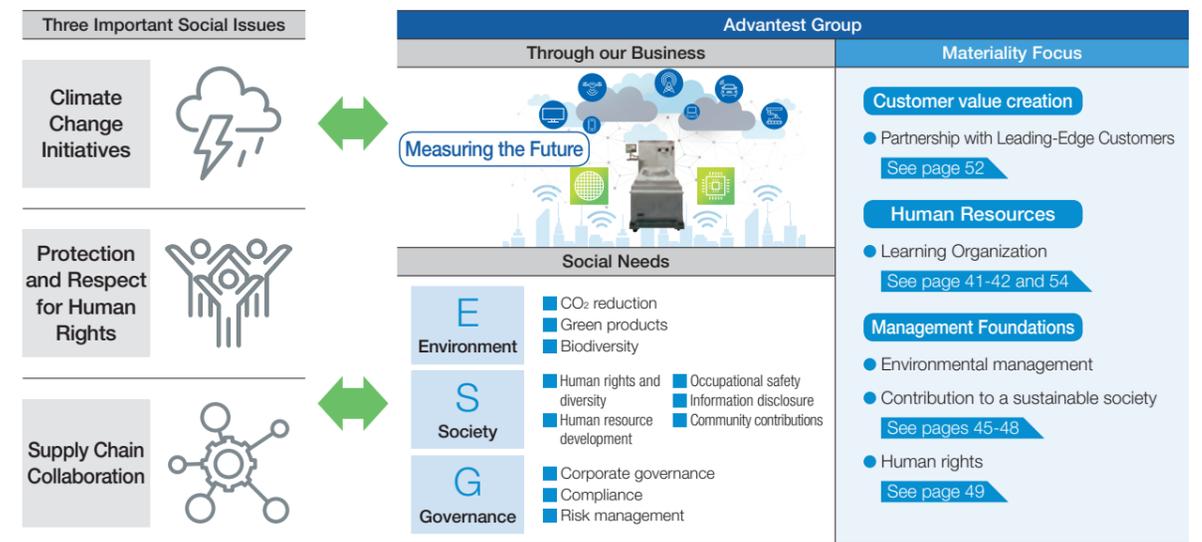


For details, see "Sustainability Data Book".

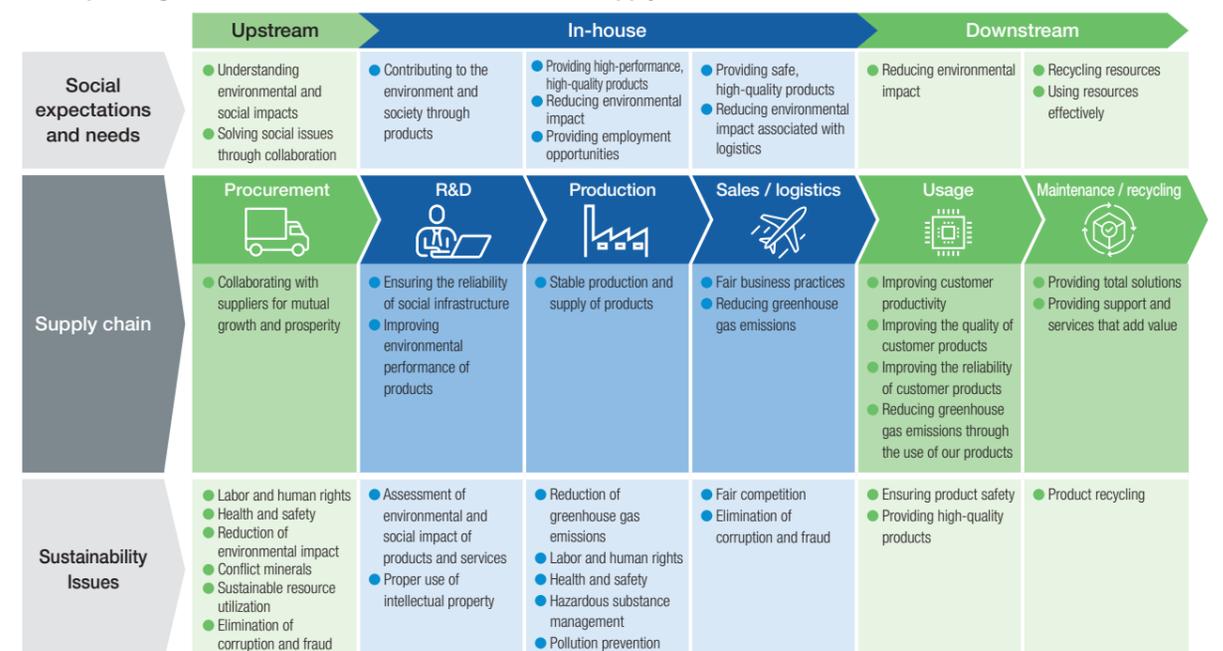


Sustainability Overview

In response to social needs and the importance of solving social issues through our business, Advantest focuses on the environment (E), society (S), and governance (G), aiming to develop together with society. In addition, understanding the importance of responding to climate change and taking initiatives to protect and respect human rights, we collaborate with everyone in our supply chain to achieve the vision of a safe, secure, comfortable, and sustainable future.



Responding to social issues in collaboration with our supply chain



Important Social Issue 1

Climate Change Initiatives

For details, see "Sustainability Data Book".



Advantest engages in environmental conservation activities such as the development of green (environmentally friendly) products, reduction of environmental impacts, and biodiversity conservation based on our environmental policy. In particular, regarding the prevention of global warming, we proactively promote the reduction of CO₂ emissions through our business activities and of greenhouse gases emissions through our supply chain. Going forward, we will set long-term goals and policies from the perspective of biodiversity and make even greater efforts to achieve a sustainable future for our common home.

Advantest Group Environmental Policy

- 1 **Promoting Environmental Management**
By maintaining our environmental management system, we promote global environmental conservation efforts that balance business activities and environmental efficiency.
- 2 **Reduction of Customers' Environmental Impact**
We promote energy conservation, improved recyclability, and the elimination of hazardous substances, giving consideration to the life cycle of our products from materials procurement to disposal of products.
- 3 **Business Process Innovation**
We continually improve our business processes to hone our environmental performance through environmentally friendly manufacturing.
- 4 **Environmental Protection and Sustainable Use of Resources**
By being alert to the environmental impact of our business activities, we strive to protect the environment through measures ranging from climate change prevention to the conservation of biodiversity, as well as sustainable use of resources such as energy and water.
- 5 **Compliance with Environmental Laws and Regulations / Pollution Prevention**
Upholding all environmental laws and regulations and voluntary standards, we protect nature and shield our neighbors from environmental pollution and health hazards caused by chemical substances, waste and other contaminants.

Revised April 1, 2017

Major Environmental Conservation Initiatives

- 1993 ● Advantest Global Environmental Conservation Committee established
- 1994 ● Published "Advantest Environmental Action Plan"
- 1998 ● Established Global Environment Office, and started full-scale environmental conservation activities
- 1998 ● Formulated "Advantest Environmental Policy"
● Obtained ISO14001 certification for the Gunma Factory
- 2001 ● Opened Japan's largest biotope at the Gunma R&D Center
● Obtained ISO14001 certification for all domestic facilities
- 2004 ● Conducted rainforest conservation activities in Borneo to commemorate the 50th anniversary of Advantest's founding (2004-2016)
- 2008 ● 40% reduction in power consumption achieved by our first green product, the T5503
- 2009 ● ISO14001 certification achieved by facilities in the United States, Germany, Singapore, China, South Korea, Taiwan, and Malaysia, completing our certification worldwide
- 2012 ● Achieved 100% renewable energy sourcing at US offices
- 2019 ● Achieved 100% renewable energy sourcing at German offices
- 2020 ● Started introducing renewable energy at R&D and production locations in Japan
● Announced support for TCFD recommendations and joined RE100

(1) Announced support for TCFD recommendations, planning to obtain SBT certification

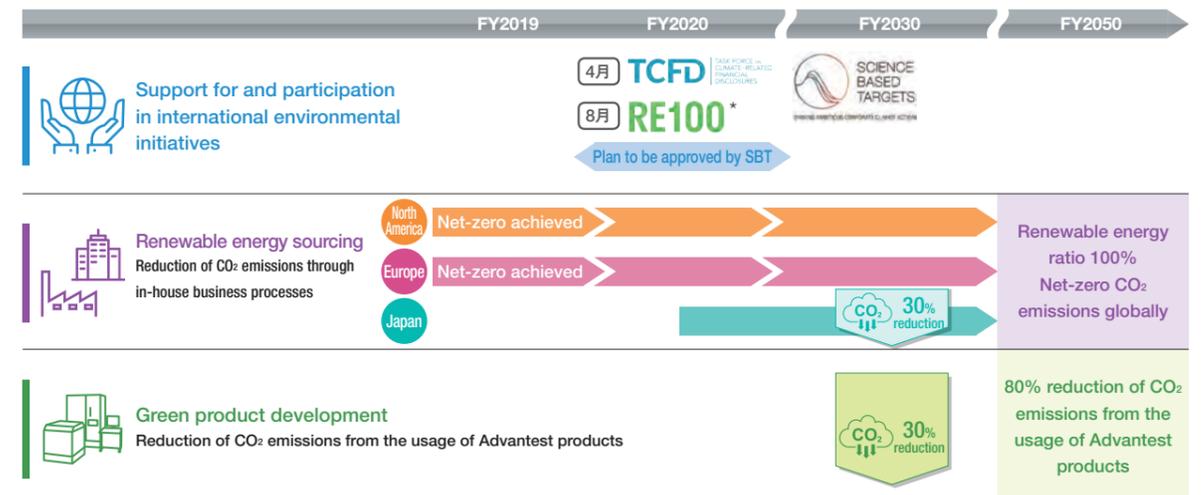


Advantest considers climate change response to be a key management issue. We are working to reduce CO₂ emissions not only in-house but across the entire scope of our business activities, including our value chain. In April 2020,

we disclosed relevant information in alignment with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures). We are also preparing to obtain SBT* (Science Based Targets) certification.

* The SBT initiative is an international partnership that helps companies determine how much they must cut emissions to prevent the worst impacts of climate change, based on scientific evidence.

Climate Change Initiatives Roadmap Targeting 2050



* RE100 (Renewable Energy 100%): A global initiative bringing together the world's most influential businesses committed to 100% renewable electricity.

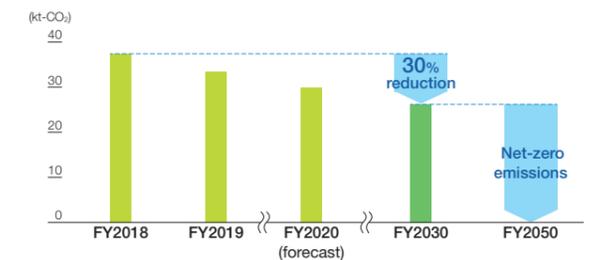
(2) Global utilization of renewable energy



In terms of mid- to long-term CO₂ emission reduction targets for business activities, we aim for a 30% reduction in FY2030 (compared to FY2018) and a goal of "net-zero CO₂ emissions" by 2050. In August 2020, we joined the international initiative RE100, which aims for business activities to use 100% renewable energy, and are promoting CO₂ reduction globally by introducing renewable energy. We have already achieved 100% renewable energy sourcing in the United States (2012) and Germany (2019), and in April 2020, we started introducing renewable energy at our Japanese R&D bases in Gunma and Saitama Prefectures. We plan to achieve RE100 at the Gunma Factory by 2030.

From 2030, we will aim to achieve the target of net-zero CO₂ emissions in 2050 by further accelerating the introduction of renewable energy sourcing in Japan and Asia as appropriate given conditions in each region.

CO₂ (Scope 1 + 2) Emissions Reduction Objectives



FY2030 30% Reduction Reduction objectives vs. FY2018 actual emissions

Measure	Reduction (t-CO ₂ / year)
Promotion of energy-saving measures (improved air conditioning efficiency, LED lighting, shortened production times, etc.)	2,100
Increase of renewable energy utilization ratio	9,700
Utilization of credits such as power certificates	500
Total reduction	12,300

For details, see "Sustainability Data Book".



(3) Reduction of CO₂ Emissions Through Green Product Development

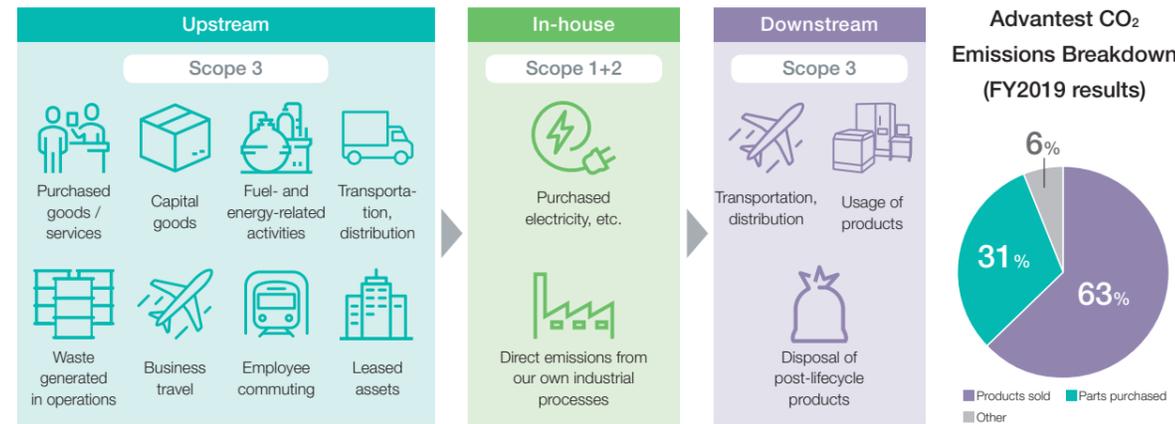


Greenhouse gases (GHG) emitted through the use of our products account for approximately 63% of total emissions from our value chain (parts procurement, manufacturing, in-use and disposal). Therefore, we are prioritizing the development of green (environmentally friendly) products.

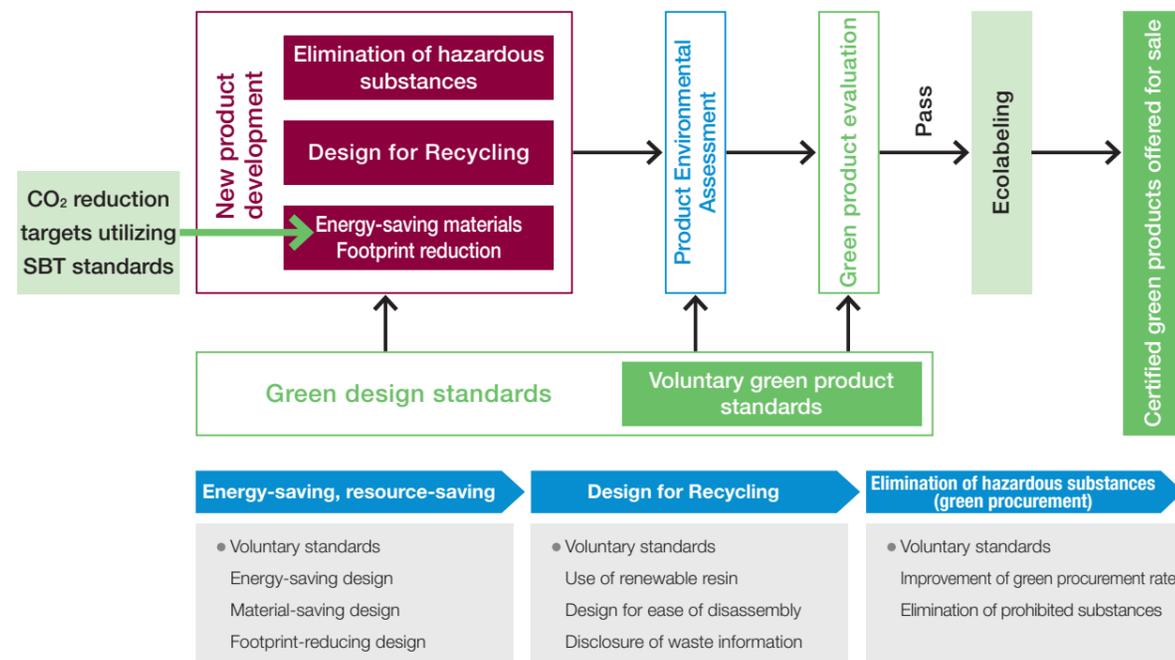
Hitherto, we have assumed a +2°C scenario for global warming, and have considered reducing CO₂ emissions 30% by 2030 and 51% by 2050. We have now reset our

targets to a 30% reduction by 2030 and an 80% reduction by 2050, based on the October 2019 revision of the SBT standards, which now call for a temperature rise of "well below" 2°C (in comparison to the pre-industrial era). To reduce after-market emissions from our products, which account for 63% of GHG (Scope3) emissions across our entire supply chain, the product development division is playing a central role in developing green products.

CO₂ Emissions in Advantest's Supply Chain



Advantest's Green Product Certification Process



TOPICS



Customers Demand Environmental Performance. New Goals Based on SBT Boost It.

Hirokatsu Nijima
Memory Test Business Unit
Section Manager



As Moore's Law implies, the semiconductor manufacturing process continually evolves, and the number of circuits integrated onto a single chip is increasing year by year.

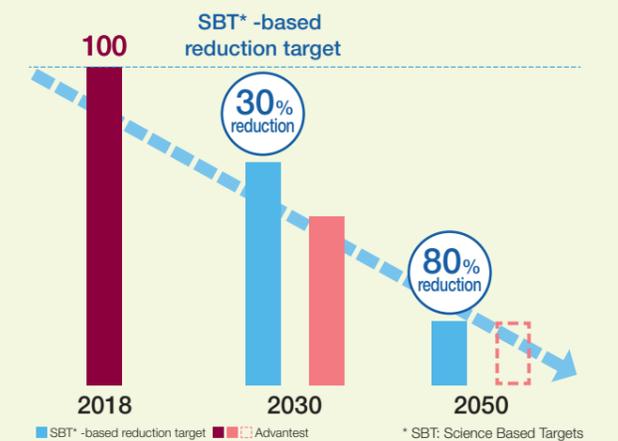
In addition, semiconductors are indispensable for the evolution of 5G and other information technologies, and the production volume of these devices is increasing. Great numbers of semiconductors are also being used in automobiles and medical equipment, where test-guaranteed reliability is even more essential. As a result, the number of tests conducted is increasing exponentially, and customers are seeking greater test efficiency (increasing test speed and parallel test capability) for each new generation of semiconductors.

CO₂ reduction and contribution to the SDGs are now essential aspects of business. Advantest believes that improving the performance of our testers to meet the technical requirements of our customers can also contribute to the reduction of CO₂ emissions. We use "power consumption per test" as our basic unit to evaluate power performance, and aim to increase test frequency without increasing power. We are working to reduce power consumption per test, and thus CO₂ emissions per test, by increasing the test frequency multiplied by pin count, or the test frequency multiplied by parallel measurement count, without increasing power consumption.

For example, if we quadruple the "test frequency x pin count" while less than doubling power consumption, we halve CO₂ emissions per test.

Hitherto, our technology and development roadmap referred mainly to customer trends and the now-defunct International Technology Roadmap for Semiconductors (ITRS). We are now introducing a new SBT-based CO₂ emissions reduction target, which informs our long-term technical targets for 2030. We are continuing to formulate our 2050 targets.

Average CO₂ emissions per test reduction targets



Protection and Respect for Human Rights

(1) Creating a Workplace where Human Rights are Respected



Advantest believes that human rights are an important factor to consider in the global expansion of our business. We support international human rights norms such as the Universal Declaration of Human Rights, and respect basic human rights in light of the laws and regulations of each country and region where we operate.

In addition, we have signed the United Nations Global Compact, a global initiative advocated by the United Nations, and support its 10 principles by promoting initiatives in the four fields of human rights, labor, the environment, and anti-corruption.

The Advantest Way includes a Code of Conduct that lays out our policy on human rights protection. It prohibits discrimination based on race, gender, age, nationality, religion, social origin, physical disability, illness, or sexual orientation. We have also formulated a human rights and discrimination manual and a harassment prevention guide to promote protection and respect for human rights, which guides us in developing the spirit of the United Nations Global Compact in our workplaces worldwide.



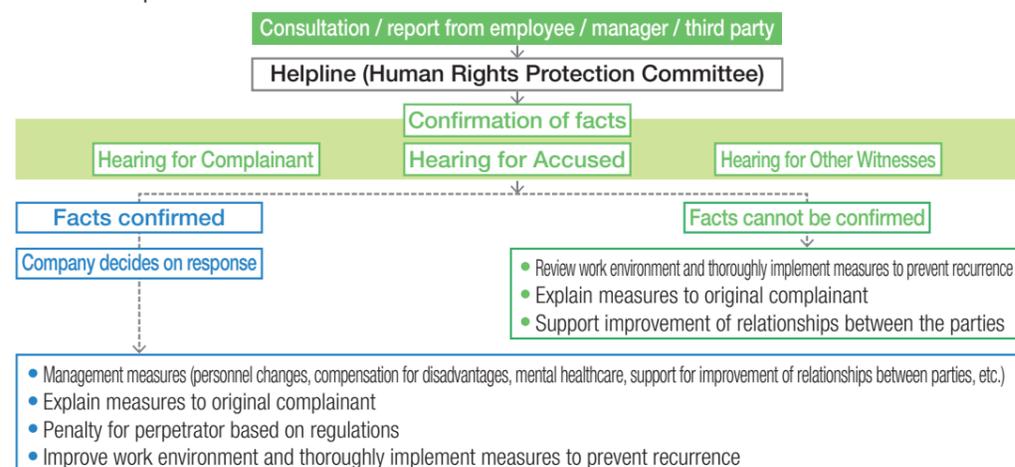
(2) Human Rights Issues Helpline



Advantest has set up a corporate ethics helpline for human rights problems or consultations that are difficult to solve in the workplace, enabling employees to report issues and consult directly with the Corporate Ethics Office. The Corporate Ethics Office plays a central role in handling reports and consultations, and keeps the names of individuals strictly confidential to avoid possible unfavorable treatment or retaliation. From fiscal 2019, we also set up a channel for reports to an external law firm to make helpline consultations and reports even easier. These helplines can also be used outside Japan.

In Japan, we have set up a Human Rights Protection Committee which works together with our labor union to resolve consultations on human rights issues. In fiscal 2019, we received two harassment-related consultations, both of which have been resolved. The Human Rights Protection Committee takes appropriate measures after giving due consideration to the privacy of the individuals involved, and seeks prompt solutions. In this way, we strive to create workplaces where all employees respect each others' human rights and can work with peace of mind.

Consultations and Reports Resolution Workflow



Occupational Health and Safety Management



For details, see "Sustainability Data Book".



The Advantest Group recognizes that health and safety management is one of the most important aspects of business activities. We actively and continuously conduct health and safety activities based on the Advantest Group Occupational Health and Safety Basic Policy.

In FY2019, we maintained the health and safety of our employees along the following two axes:



(1) Health Management Promotion

Having decided to introduce health management to maintain and improve the health of our employees, we declared our Health and Productivity Management (HPM) Policy in September 2019. Under this policy, the company, our health insurance union, and our labor union work together to encourage employees to get health checkups, improve the implementation rate of specific health guidance, and operate a health portal website. As a result, Advantest was certified as a "Health Management Excellent Corporation 2020 (Large Corporation Category)" under the Japanese Ministry of Economy, Trade and Industry's Health Management Excellent Corporation Certification System.



Health and Productivity Management (HPM) Policy

In order to realize Advantest's mission, we will strive to create a workplace where every employee can work in good health, both physically and mentally. We will contribute as a good corporate citizen to the creation of a sustainable future.

Initiatives to maintain and improve employee health	<ul style="list-style-type: none"> Health literacy improvement: 100% health checkup rate, prevention of serious illnesses, health guidance (exercise, diet, smoking cessation, etc.), etc. 	<ul style="list-style-type: none"> Health support reinforcement: Health portal website launched (health checkup data, useful health information, walking challenge, etc.)
Initiatives for corporate growth	<ul style="list-style-type: none"> Employee engagement reinforcement: Engagement survey, action plan implementation (communication training, etc.) 	<ul style="list-style-type: none"> Work-life balance enhancement: Overtime restriction, encouragement of paid leave, paternity leave promotion, etc.
Initiatives for the achievement of the SDGs	<ul style="list-style-type: none"> Initiatives to maintain and improve the health of employees' families: Family health checkup rate improvement, health guidance, etc. 	<ul style="list-style-type: none"> Creation of a motivational workplace: Smoking cessation in business establishments, improvement of work environment, etc.

(2) COVID-19 Safety Measures



From the end of February 2020, the Crisis Management Headquarters took the lead in taking all possible measures to prevent infection based on the policy response of the government in each country where we operate. In Japan, we started telework on a trial basis in September 2017 in response to expected commuting difficulties associated with the Olympics, Paralympics, pandemics, and natural disasters, and established rules so that telework could be implemented in any department. We have also globally introduced online meetings, and successfully transitioned our expenses accounting to a paperless system. Thus in April 2020, we were fully prepared to implement our telework system, and were able to smoothly shift to telework when the Japanese government declared a state of emergency over COVID-19.

As we got used to working from home, we relaxed some rules (such as prohibitions on taking materials to home or printing things out at home) to maintain employee productivity at as high a level as possible. This flexibility proves that our telework system could also be implemented in other situations such as natural disasters, which are now increasing in frequency.

<p><Some of Our Safety Measures></p> <ul style="list-style-type: none"> Promoted telework to help employees whose children were at home due to school and daycare closures, etc., or allowed them to work flexibly Helped expectant mothers to use the telework system Reduced the number of chairs in employee cafeterias by two-thirds and changed the layout so that people cannot eat facing each other 	<ul style="list-style-type: none"> Conducted thorough disinfection of shared spaces such as cafeterias, shops, and commuter buses Secured connectivity for employees working from home by introducing cloud-based remote access Notified employees of security precautions regarding telework and gave them appropriate training
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Important Social Issue 3

Collaboration with Our Supply Chain

Supply Chain Management

Basic Policy

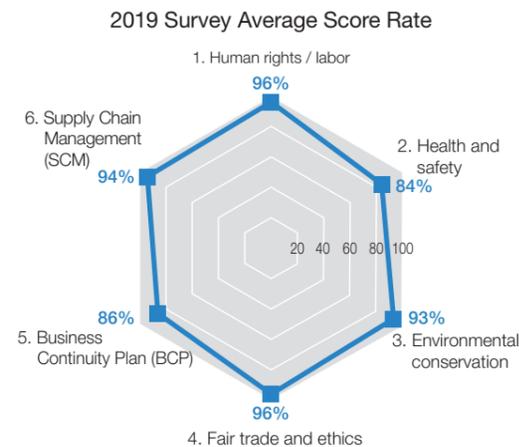
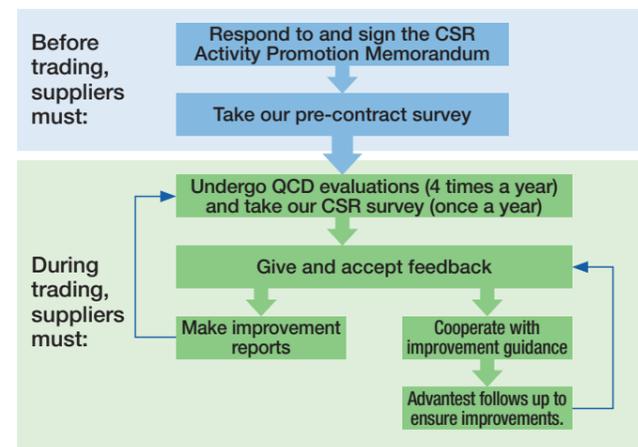
To fulfill our social responsibilities throughout our supply chain, Advantest publishes our Procurement Policy and Supply Chain CSR Promotion Guidebook on our website, and stipulates compliance with relevant laws and social norms as well as support for initiatives related to human rights, labor, and environmental conservation. In addition, we require suppliers to sign our "Basic Transaction Contract," which includes provisions related to ESG (Environment, Society, and Governance).

(1) CSR Procurement and Product Quality Improvement



In addition to conducting quarterly QCD* evaluations for suppliers, we also conduct an annual CSR questionnaire for the important suppliers who account for 80% of our transaction value. The questionnaire is adaptable to changing conditions, with the content being reviewed every year based on the Supply Chain CSR Promotion Guidebook and analysis of our priority issues and survey results through the previous year. We also create summaries of results for each supplier and work for mutual improvement through feedback.

* QCD: Quality, Cost, and Delivery



(2) Fair Transactions (CSR Procurement) Promotion Structure

Advantest has set up a department to guide the procurement division in promoting and managing fair transactions. Transaction status is audited by the audit department once a year, and generally unproblematic. We are careful not to deviate from sound business practices. In addition, an external organization conducts an internal control audit once a year, and confirmed that no problems occurred in FY2019. Furthermore, with the cooperation of our suppliers, we conduct CSR questionnaires and conflict minerals surveys, and provide feedback on the results to further enhance the fairness of our transactions.

Customer Engagement

TOPICS

Reinforcement of Advantest's Customer Support Capabilities



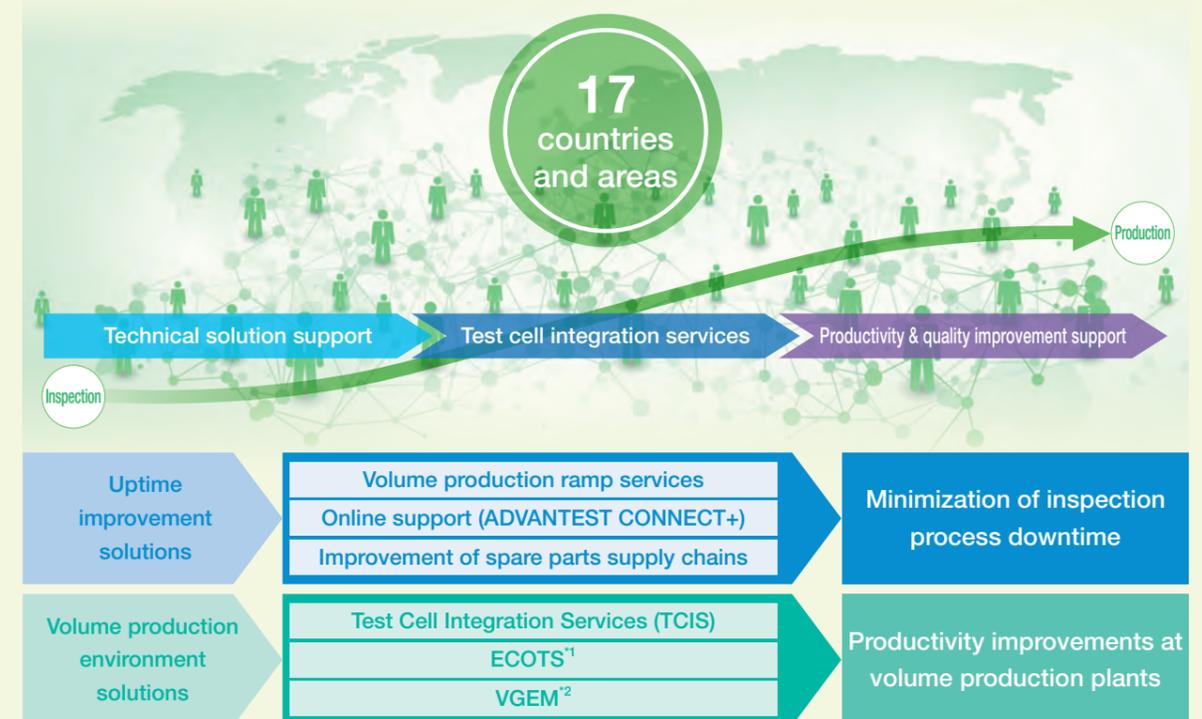
Advantest regards the ideal form of the materiality category of customer value creation as "Be a partner with leading-edge customers." The following two points are our priority strategies and themes for this category.

- Reinforce engagement with leading-edge customers
- Develop customer workflow solutions

As part of this, we introduce our field support activities that give top priority to customer value and are also environmentally friendly.

Advantest is committed to providing support that contributes to the efficiency of our customers' businesses and continuously supports their growth. In order to maximize equipment utilization rates, we carry out a wide range of activities such as quick repairs, test cell integration services for factory automation, and AI-driven efficiency improvements. Our technical solution support, test cell integration services, and productivity and quality improvement support all help us to further deepen our engagement with our customers and contribute to building foundations for technological innovation at energy-saving semiconductor fabs.

Field Support Activities



* 1: ECOTS: Easy and Convenient Operation Tools (an interface that allows users to build semiconductor test environments quickly and easily)
 * 2: VGEM: Virtual GEM (an interface solution that integrates customer automation systems with our test systems)

Human Resources Initiatives



For details, see
“Sustainability Data Book”.



Advantest considers employees a vital corporate resource. We support their diverse lifestyles and individual growth, and strive to help them grow together with the company. In September 2000, we established our Basic Philosophy of Human Resources, and continue to work on fairness and employee engagement, while actively supporting human resources development. We also support the 10 principles of the United Nations Global Compact, the Universal Declaration of Human Rights, and the Guiding Principles for Business and Human Rights, and aim to be an organization that emphasizes diversity while giving due consideration to the principles of human rights and labor.



Basic Philosophy of Human Resources

Advantest considers that employees are irreplaceable management resources (human capital), and has formulated the following philosophy as a basis for our measures related to human resources.

1. Focus on results

By encouraging people to take on challenges, we promote a personnel system in which employees who have overcome difficulties and achieved innovative results are evaluated and rewarded appropriately.

2. Fairness and engagement

We perpetually strive to make all our measures and systems objectively fair, with the goal of obtaining maximum employee engagement and achieving optimal results.

3. Active support for human resources development

We work tirelessly to improve ourselves, and actively support employees who wish to acquire advanced specialized knowledge and broaden their education.

(1) Diversity Management

The active participation of each and every employee is indispensable for the sustainable growth of the company. Advantest has set “Inclusion and Diversity” as one of its core values, and is actively working to form a corporate culture that fosters an environment where everyone can work comfortably, and where each Advantest employee can maximize their individual potential, abilities, and motivation. In recognition of these efforts, in 2019 Advantest Europe GmbH (AEG) was selected as one of the 100 greatest places to work in Germany by the international Great Place To Work® Institute.



(2) Global Hiring for a Global Workforce

Advantest emphasizes a global perspective in our system for hiring, training, and allocating human resources, aiming to give excellent employees fair access to opportunities regardless of nationality and promoting employees across national borders. Through exchanges, we are enhancing the development of global human resources and the globalization of our organization.

10 out of 24 executive officers of the Advantest Group are foreign nationals (as of March 2020), and the Advantest Corporation (Japan) employs people from nine different countries.



(3) Workplaces That Foster Innovation

Advantest believes it is important for employees to share their know-how and skills, and we aim to create work environments where people can converse freely. In fiscal 2019, we significantly renovated our in-house gathering areas such as the cafes and cafeterias at our R&D centers and factories in Japan. In planning the renovations, we visited the offices of overseas subsidiaries to exchange opinions, and as a result set up not only refreshment lounges but also casual meeting spaces and active spaces where employees can stretch. Bright open spaces with natural lighting are widely used to foster innovation, improve communication, and promote physical and spiritual refreshment.



TOPICS

Learning Organization ① Advantest Engineering Friday



Advantest regards the ideal form of the materiality category of human resources as “Learning Organization.” The following two points are our priority strategies and themes for this category.

- 1 Provision and promotion of learning opportunities and skill development opportunities for employees
- 2 Encouragement and promotion of teamwork across departments and regions

In fiscal 2019, we held workshops on The Advantest Way globally to create conditions for better communication with all stakeholders and more effective coworking. Among other human resources initiatives, Advantest Engineering Friday (AEF) was inaugurated in October



2019 as a venue for the software division to continuously share their thoughts and opinions. Young people and veterans meet regularly on Friday afternoons for mutual study, creating their own community in parallel with our organization. AEF is also actively used as a venue to support awareness through one-on-one dialogue, and several small subcommittees have been created. It is accelerating the learning cycle of each participant, and improving our organizational flexibility.

Learning Organization ② Online AI Courses



In February 2020, we built a trial environment for employees to take MOOCs (Massive Open Online Courses) on topics related to AI. Through Coursera, 42 students took deep learning and machine learning courses offered by well-known universities and organizations such as Stanford University, and 37 of them received diplomas. Programming skills and English proficiency were also required to solve

problems, so students worked together to help each other, which has helped to improve our engineers' abilities. In the future, we will not only encourage more new employees and other employees to take these courses, but will also build environments that help them to use what they have learned in their work.

Software technology and development methods are literally changing day by day. What really brought that home to me was when I attended an external seminar and heard that “Japanese software development is 10 years behind.” It is now common knowledge that thanks to the advance of IT technology, information can be exchanged instantly, and yesterday's state-of-the-art technology will be replaced by something else today. On the other hand, how long does it take us to provide new software to our customers? ... I couldn't stand to think about it!

Around that time, a chat with a manager led to the creation of Advantest Engineering Friday (AEF). AEF is an organizational effort to support ongoing employee growth. It is difficult to educate people, so we



Michihiro Seino
T2000 Business Unit
Section Manager

created an environment where people can educate themselves. Sessions can be held on multiple themes, and participants are free to join any session. They can also communicate across departments. The aim is for them to be able to talk to someone when they come up with something, find companions to try it out with, and share their anxieties and thoughts freely.

Board of Directors

Yoshiaki Yoshida
Representative Director, President and CEO

Date of Appointment 2013
Date of birth February 8, 1958
Nationality Japanese
Shares Held as of March 2020 48,056



    14/14  14/14

Mr. Yoshiaki Yoshida served as the representative director of a subsidiary of Advantest, Executive Vice President of the Corporate Planning Group, Executive Vice President of the Corporate Relations Group, and Executive Vice President of the Nanotechnology Business Group, before being appointed Representative Director, President and CEO of the company in January 2017. Given his wide range of management knowledge and experience, Advantest believes that he is a suitable person to realize sustainable enhancement of corporate value as a director of the company.

Osamu Karatsu
Outside Director

Date of Appointment 2012
Date of birth April 25, 1947
Nationality Japanese
Shares Held as of March 2020 3,056



    14/14

Mr. Osamu Karatsu has a wealth of knowledge and experience as a semiconductor expert, in addition to management experience at domestic and overseas research and development institutions. The insights on the industry which he brings to the management of the Advantest group contribute to the sustainable enhancement of corporate value of Advantest and the effectiveness of the Board of Directors. Thus, Advantest believes that he is a suitable outside director.

Koichi Tsukui Newly Elected
Director, Managing Executive Officer

Date of Appointment 2020
Date of birth December 11, 1964
Nationality Japanese
Shares Held as of March 2020 1,853



Mr. Koichi Tsukui has worked in various R&D divisions and in sales for many years, including assignments in Germany, and has a wide range of knowledge and experience regarding the businesses and management of the Group. Therefore, Advantest believes he is suitable as a director of the Advantest Group.

Douglas Lefever Newly Elected
Director, Managing Executive Officer

Date of Appointment 2020
Date of birth December 10, 1970
Nationality American
Shares Held as of March 2020 0



Mr. Douglas Lefever plays a key role in promoting Advantest's business development in Silicon Valley and other parts of the United States. He has broad knowledge and experience regarding the businesses and management of the Group. His perspective enhances the diversity of the Board of Directors and can be expected to make it more effective. Thus, Advantest believes he is a suitable person as a director to realize sustainable enhancement of the corporate value of the Advantest Group.

Toshimitsu Urabe
Outside Director

Date of Appointment 2019
Date of birth October 2, 1954
Nationality Japanese
Shares Held as of March 2020 142



  11/11  10/10

Mr. Toshimitsu Urabe has extensive management experience at a leading Japanese general trading company, particularly overseas experience in the United States and Asia, experience in business investment decisions, and extensive experience in personnel management. The insights which he brings to the global management of the Advantest group contribute to the sustainable enhancement of corporate value of Advantest and the effectiveness of the Board of Directors. Thus, Advantest believes that he is a suitable outside director.

Nicholas Benes
Outside Director

Date of Appointment 2019
Date of birth April 16, 1956
Nationality American
Shares Held as of March 2020 2,000



   11/11

Mr. Nicholas Benes has extensive knowledge and experience in corporate governance and experience in investment banking, including M&A. The insights on corporate governance and the perspective of shareholders which he brings to the global management of the Advantest group contribute to the sustainable enhancement of corporate value of Advantest and the effectiveness of the Board of Directors. Thus, Advantest believes that he is a suitable outside director.

Yuichi Kurita
Director, Standing Audit & Supervisory Committee Member

Date of Appointment 2015
Date of birth July 28, 1949
Nationality Japanese
Shares Held as of March 2020 11,482



   14/14  13/13

Mr. Yuichi Kurita has many years of experience in finance and corporate planning, and has extensive knowledge and experience in finance and accounting. In addition, he has served as a director and is an audit and supervisory board member of the Advantest Group, in which position he is currently striving to improve auditing/supervision and governance. In view of his achievements, Advantest believes that he is a suitable person to enhance supervisory and oversight functions as a director who is a member of the Audit and Supervisory Committee.

Kouichi Nanba
Outside Director, Standing Audit & Supervisory Committee Member

Date of Appointment 2019
Date of birth September 1, 1949
Nationality Japanese
Shares Held as of March 2020 142



 11/11  10/10  10/10

Mr. Kouichi Nanba has a wealth of experience in law and compliance and a high degree of specialized knowledge, after serving as a judge mainly in charge of civil cases for many years, and engaging in the practice of corporate legal affairs as a lawyer. Advantest believes that he is a suitable person as an outside director who is a member of the Audit and Supervisory Committee of the Company, as his insights into the auditing and supervision of the Advantest Group contribute to the improvement of auditing and supervisory functions.

Soichi Tsukakoshi
Director, Senior Executive Officer

Date of Appointment 2017
Date of birth February 1, 1960
Nationality Japanese
Shares Held as of March 2020 4,935



  14/14

Mr. Soichi Tsukakoshi has worked in sales and marketing, was Senior Vice President of the Sales Group, and currently serves as Executive Vice President of the Production Group. He has a wealth of knowledge and experience concerning sales and marketing as well as production. We have determined that he is a suitable person to realize sustainable enhancement of corporate value as a director of the Advantest Group by improving the efficiency of manufacturing and optimizing supply chains.

Atsushi Fujita
Director, Managing Executive Officer

Date of Appointment 2019
Date of birth November 15, 1959
Nationality Japanese
Shares Held as of March 2020 2,263



   11/11

Mr. Atsushi Fujita has been engaged in corporate administration, mainly finance and accounting, for many years, including assignments in the US and Germany, and he has gained a wealth of knowledge and experience concerning the Advantest Group's business and corporate management. Thus, Advantest believes that he is a suitable person to realize sustainable enhancement of corporate value as a director of the Advantest Group.

Sayaka Sumida Newly Elected
Outside Director, Standing Audit & Supervisory Committee Member

Date of Appointment 2020
Date of birth January 28, 1961
Nationality Japanese
Shares Held as of March 2020 0



Ms. Sayaka Sumida has worked for an accounting firm as a certified public accountant, has been engaged in accounting, auditing, and internal control operations for many years, and has extensive knowledge and experience of finance and accounting. Advantest believes she is a suitable person as an outside director who is a member of the Audit and Supervisory Committee of the Company, as her insights contribute to the effectiveness of the Board of Directors and the improvement of the functions of the Audit and Supervisory Committee.

Experience and skills	Applicable number of directors	Committee
Leadership	 3	 Board of Directors
Finance	 3	 Audit and Supervisory Committee
Knowledge of the semiconductor industry	 7	 Nomination and Compensation Committee
Research and development	 3	1/4 Attendance Rate ⁽¹⁾
Global Operation	 10	 Chairperson
Legal affairs, attorney at law	 2	

(1) 2019

Messages from Outside Directors

Advantest from Board of Director's perspective



Osamu Karatsu
Director

Provision of Appropriate External Resources for Initiatives and Expansion in New Business Fields

Advantest's business is measurement and test technologies that guarantee the functional performance of products and add value to them. The history of semiconductor products has been one of outstanding growth underpinned by the highly stable product quality and increased market value that can be obtained from high-performance test technology.

In recent decades, in particular, semiconductor technology has advanced dramatically in accordance with Moore's law, and semiconductors have made enormous gains in performance and complexity. To establish these advanced devices as marketable products, Advantest has played a crucial supporting role in the "backbone" of the electronic products industry by launching more and more advanced test systems with continually improving technology.

In recent years, these trends towards higher performance and greater complexity have transcended the boundaries of semiconductor devices. We now talk about product performance and quality in the context of assemblies and systems. In anticipation of this development, Advantest announced a new medium- to long-term management policy (Grand Design) in 2018, and has further advanced its implementation since then, while continuing to calibrate the direction of its future test business development against industry trends. Starting with the addition of SLT businesses acquired from Astronics and Essai to the Advantest Group, the company has been steadily laying the groundwork to expand its business foundation by evolving into a total test system company that can organically provide end-to-end test technologies, and continues to seek the most effective approach to feed test data back to improve design and production process management by utilizing big data analytics.

Many other companies have recently reported accidents such as malfunctions and fires after shipping due to combined compound failures at the final product level. The economic and brand damage resulting from such incidents can be fatal for companies. Advantest is committed to proactively detecting defects concealed by technological complications and providing value to minimize market accidents and associated rework costs, and aims to expand this commitment as part of the company's support for industrial productivity improvement.

Since initiatives and expansion in these new fields of business involve activities that may require experience and resources in addition to those accumulated by Advantest, I hope to make an active contribution by providing appropriate information and advice as an independent director.



Toshimitsu Urabe
Director

Two Challenges We Must Overcome to Achieve Advantest's Grand Design

With 95% of our sales overseas, we have 32 affiliated companies in 17 countries around the world, and the global market for semiconductor test equipment is divided between Advantest and US supplier Teradyne. In response to the globalization of our business, 2 out of 11 directors and 10 out of 24 executive officers are now of non-Japanese nationality, making our management team multinational compared to other Japanese companies. In 2018 we announced our "Grand Design," a long-term vision that aims to use advanced technology to contribute to the development of the world's semiconductor-related industries and achieve sustainable growth. This was a declaration of our determination to continue to diversify our profit sources and add new businesses by solidifying our advantage in the semiconductor test equipment realm and further expanding our business domains across the semiconductor value chain. I believe we face two challenges to achieving this ambitious vision.

The first is endless organizational evolution. In the future, as Advantest's domain of activity expands, the factors that must be taken into consideration for sustainable growth will increase. Efficient and well-balanced multi-disciplinary organizational management approaches such as separate business strategies for each business, cross-sectional resource/knowledge management for each function such as manufacturing, sales, and administration, and operations optimized for regional characteristics will increasingly be required. There is no "silver bullet" or perfect template, and these are issues that we will continue to work on while responding to environmental changes, but I am looking forward to seeing how our organization, which has already formed the ability to adapt to such developments, will continue to evolve in response to our long-term vision.

Our second challenge is unique shared values. As our business and our staff become globalized, it would be ideal if we could continue to take pride in our origins, so that employees of various nationalities could fully share a sense of belonging to a global enterprise that was born in Japan. For example, Advantest has a unique set of values backed by many years of experience, and it is possible for us all to share the awareness of being grounded in this history, which can be a unifying counterweight to ongoing innovation and creation in various fields and regions. It is natural for a company to adapt to global frameworks such as the SDGs, but I think that the shared values unique to our company are the ultimate foundation of our Grand Design. I hope that "The Advantest Way" will evolve in that direction.



Nicholas Benes
Director

Our Governance and Sustainability Management

After one year as a director, I believe our board is a dedicated team that draws upon a diverse mix of skills experience to effectively monitor and provide fresh perspectives. Management is comfortable being held accountable, is responsive to the independent directors, and is open to new agenda topics and requests for additional reporting. At the board meeting, there is much discussion and healthy debate about both near and long-term issues, and especially about how best to realize the full potential of our "grand design" strategy as the semiconductor value chain evolves. To deepen our thinking and understanding of key issues, every year the board also spends several days off-site for "deep dive" discussions. This year, as part of this we visited Advantest facilities in California.

During the last fiscal year, the board received training about recent developments in ESG-based investment from an expert. In this report, we are for the first time disclosing information following the SASB's standards for the semiconductor industry. Going forward, we plan to track these and other measures at the board level, so as to remind executives to take proactive leadership and concrete steps to improve them as part of daily management. We will also need to keep a lookout for other significant sustainability criteria and growth opportunities that are unique to our company's focus on test, and create a virtuous cycle in tandem with our strategy. This is already being done, but we must seek to do it more.

This year we will be considering ways to streamline our board practices so that we can allocate more time to the most important issues and long-term policies, while suffering no loss in the quality of monitoring. To the extent feasible given local differences, we will also seek to further improve and standardize our global practices for matters such as compensation, compliance, and reporting. We must evolve our organization as fast as the expanding size of our global footprint. Advantest is a company with immense potential, but to achieve it, we must fully benefit from efficient global teamwork, and avoid unnecessary risks and mishaps. In governance, there is always room for improvement.



Kouichi Nanba
Director
Standing Audit & Supervisory Committee

The Importance of Compliance & Advantest's Challenges

Recently, we have been flooded with documents written from left to right (rather than from top to bottom in Japanese style) and katakana terms (English words transliterated into Japanese, rather than translated). Among them you may have seen the word "compliance." Compliance refers to legal compliance, that is, the compliance of a company with rules and social norms. It can be said that the concept has already taken root in society. It seems as if it should be easy for companies to maintain compliance, but it is surprisingly difficult. I was a witness to scandals at three other companies last year. The causes of these, in my opinion, were lack of norm awareness in pursuit of profits, insufficient monitoring systems with respect to the division(s) that caused the scandals, and corporate cultures that had poor awareness of norms in the first place.

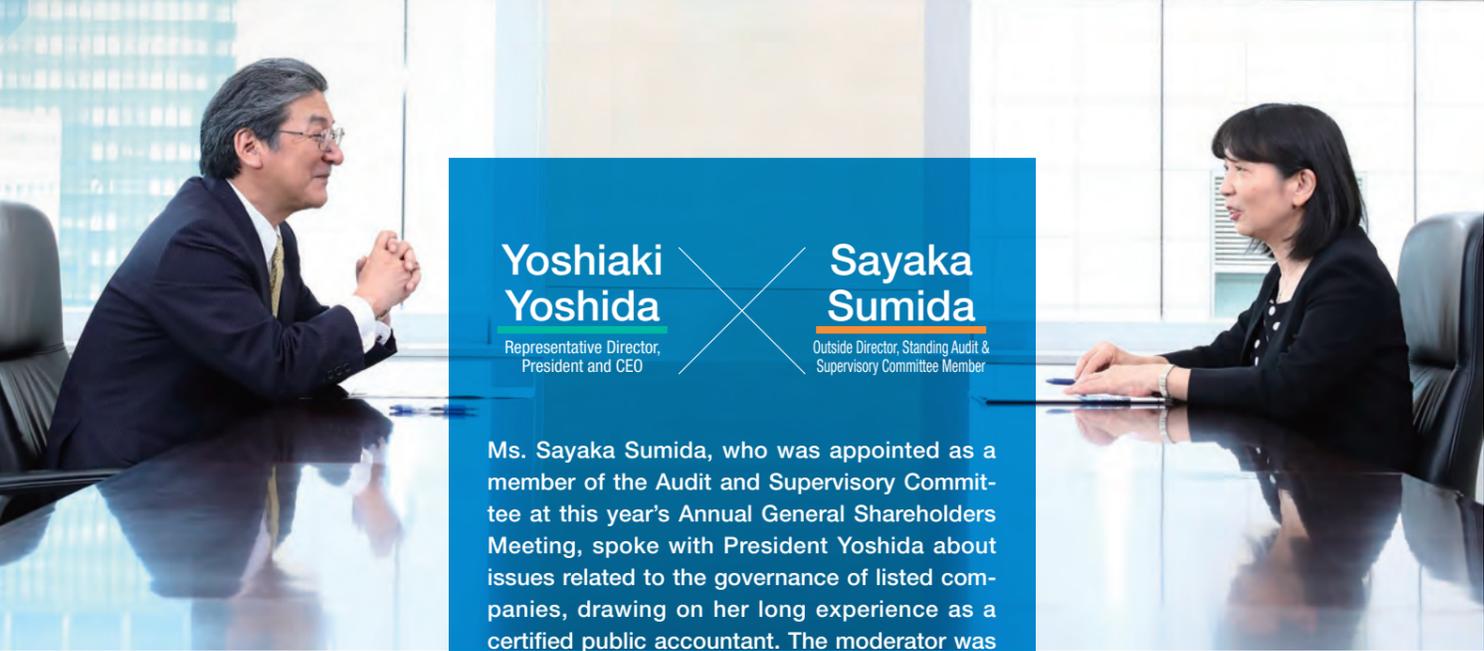
Once a breach of compliance causes negative publicity, the damage to the company can be enormous, and it can even develop to the point that the management base of the company is undermined. In that sense, compliance is extremely important for companies. Therefore, there seems to be no other way to prevent breaches from happening apart from making sure that the organization has open channels of communication rather than being divided into silos, and that the "left hand" always knows what the "right hand" is doing; strengthening monitoring systems; and promoting compliance education for employees.

By the way, as you know, our company has a vast business reach, covering Europe, the United States, China, Taiwan, and South Korea, and many foreigners are working with us. Advantest is a truly diverse company. The problem is that for such companies, I feel the biggest challenge is whether the compliance policy established at the head office can be spread to employees all over the world.

Small compliance violations may cause big problems. When an issue occurs, it is important not to overlook it and to hold discussions at the Audit and Supervisory Committee and the board of directors. I hope to do my part to ensure that Advantest maintains a flawless compliance record.

Thoughts about Corporate Governance

(Dialogue between CEO and Outside Director)



Yoshiaki Yoshida

Representative Director, President and CEO

Sayaka Sumida

Outside Director, Standing Audit & Supervisory Committee Member

Ms. Sayaka Sumida, who was appointed as a member of the Audit and Supervisory Committee at this year's Annual General Shareholders Meeting, spoke with President Yoshida about issues related to the governance of listed companies, drawing on her long experience as a certified public accountant. The moderator was Akira Ono (Executive Officer & General Manager of Human Resources Department).

Q First, President Yoshida, please tell us about the achievements of the Board of Directors and future challenges facing Advantest with respect to governance.

(President Yoshida) > In the three years since I became president in January 2017, we have formulated a medium- to long-term management policy, revised "The Advantest Way" to clarify our corporate philosophy and code of conduct, issued our first annual integrated report, abolished our consultant and advisor system, revised all our internal rules, revised our remuneration system to ensure

transparency, and enhanced our internal reporting system for compliance. Every board meeting means a minimum of 3 hours and a maximum of 5 hours of open and heated discussion. Future issues include the planning and execution of succession plans, the narrowing down of agenda items for the Board of Directors for deeper and more thorough discussions, and education in creating sophisticated materials for that purpose. In addition, as companies are now evaluated from the perspective of their ESG initiatives and contributions to the SDGs, I am also aware of the importance of enhancing disclosure of our non-financial policies and progress.

Q With regard to information disclosure, Director Sumida, what issues are on your mind?

(Director Sumida) > I have been working at an accounting firm for a long time as a certified public accountant, and during that time, I have seen the reality of various information disclosures related to the IR activities of many listed companies. We all believe that open disclosure is an indispensable element of corporate governance, but in Japan, there is generally a strong sense of "You first—no, you first!" and there is a limit to the voluntary improvements that will be enacted by individual companies, I've always been aware of the need for institutional reforms led



by the government. Traditional Japanese companies' disclosure stance has focused on meeting statutory disclosure requirements, and efforts to determine optimal disclosure content from the perspective of shareholders and investors have not always been sufficient, in my opinion. In that regard, I think the Stewardship Code and Corporate Governance Code announced in 2014 and 2015, respectively, had a salutary effect on improving corporate disclosure stances. This has led to the expansion of non-financial information disclosure related to ESG and the SDGs, which is frequently emphasized these days.

(President Yoshida) > The government has encouraged companies to aim for ROE 8% and restore Japan's earning power. The reason for this is that Japanese companies have been earning less than their counterparts in Europe, America and Asia. I think that there was a time when we were content to just compare ourselves to our Japanese peers without looking at the rest of the world, but now we must hold ourselves to global standards of achievement. Regarding governance, I attach great importance to the perspective of outside directors. While discussing exactly what we can and cannot do with the rest of the Board of Directors, I'm committed to openly disclosing information.

Q What do you think recent corporate scandals tell us about the need for compliance systems?

(President Yoshida) > In Advantest's case, 95% of our sales are overseas and so are more than half of our employees. The customs and logic of Japan, where we have our headquarters, may not always operate globally. There are regional differences due to history, culture, and customs that must be handled carefully. However, there are certain lines that cannot be crossed, and these must be enforced clearly and without exception. I believe it is the responsibility of top management to convey this to employees and educate them in the importance of compliance.

(Director Sumida) > Looking at the scandals that have occurred at various companies, I think they are a result of people not being able to stand up for principles that should be obvious to every schoolchild. The spirit of compliance cannot be instilled overnight. I think it is very important for top management to repeatedly convey these "obvious things" to employees over and over again in their messaging in order to create a solid organizational culture.

(President Yoshida) > Just one scandal can cause a catastrophic loss of trust in a company. Of course, education to prevent scandals is important, but we have also



been focusing on crisis management on the premise that scandals may and will occur in the future, for example, by expanding our internal reporting system to make sure nothing ever gets swept under the carpet.

Q What are Advantest's challenges regarding diversity, especially in terms of women's advancement?

(Director Sumida) > In the world of accountant, little distinction is made between men and women. I myself have always believed that chances will come my way if I do not put artificial limits on myself. Due to recent workstyle reforms, increased productivity has made it easier to avoid overtime. This has created a work environment that is friendlier to women, who used to have difficulty balancing work with childbirth and childcare. I think this means that we no longer have to worry about gender differences.

(President Yoshida) > Advantest has relatively few female employees, so there are female department managers, but no female executive officers or vice presidents yet. I think this is one of our challenges. To promote the active participation of women, I believe it is important not to give special consideration to women, but to give them equal opportunities regardless of gender, and promote them according to their abilities and motivation, just as we do for men.

(Director Sumida) > I also believe that privileging women just because they are women is lamentable, in a sense. I think it is important to treat employees equally based on their individual abilities and motivations, and it is also important for top management to clearly communicate that message.

Corporate Governance

Our Basic Approach to Corporate Governance

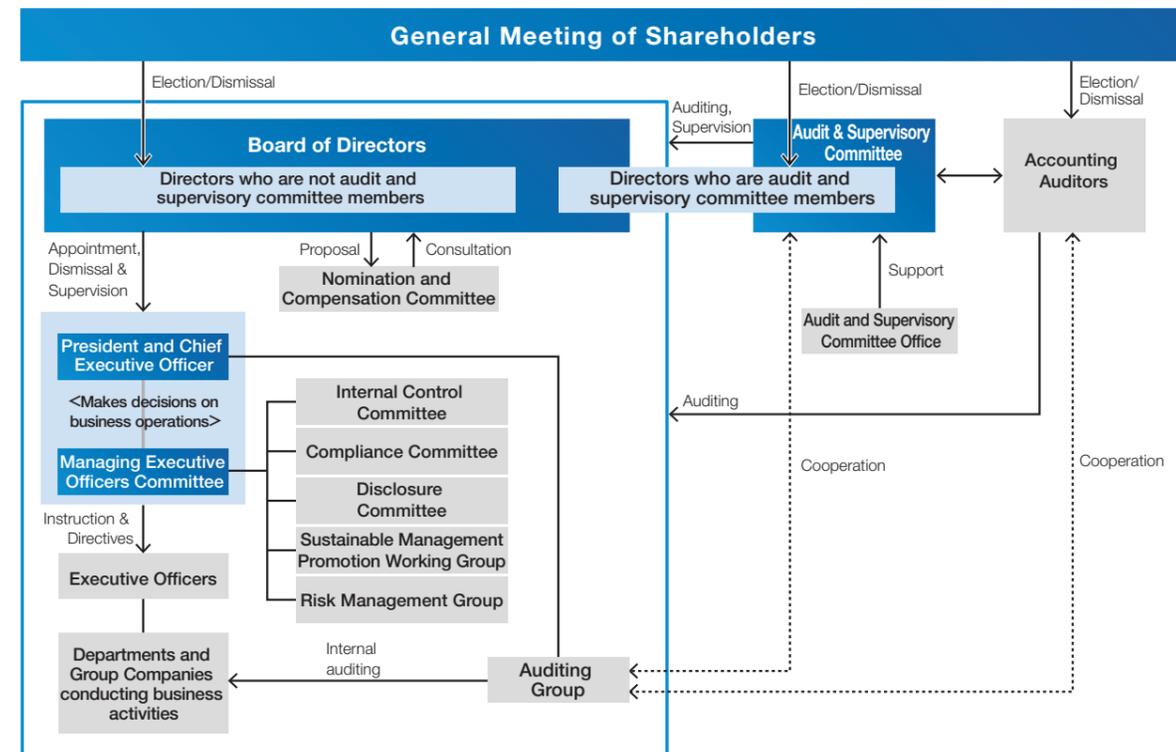
Advantest's corporate mission is "enabling leading-edge technologies." The Advantest Group constantly strives to improve so that we can offer products and services that satisfy customers around the world, and contribute to society through the development of advanced technologies.

In accordance with this mission, and in response to our mandate from stakeholders, Advantest aims to achieve a sustainable level of business development for the Group

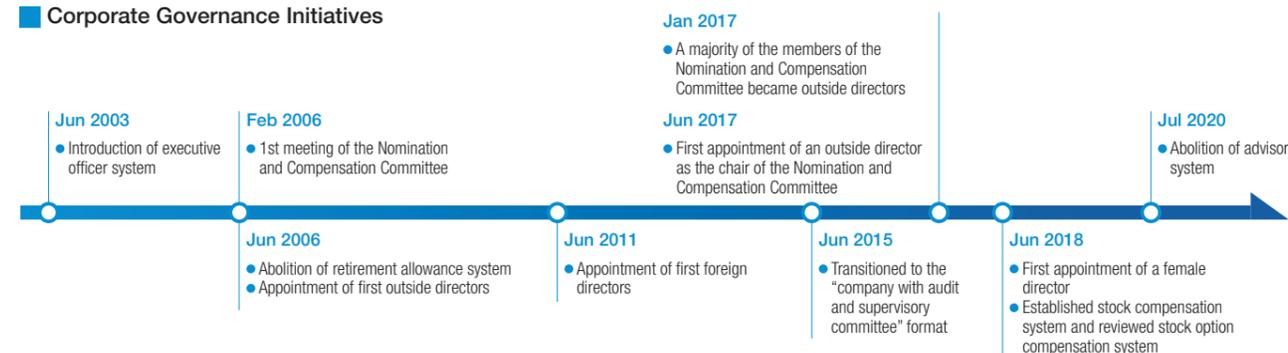
and to enhance corporate value over the medium to long term. To that end, the Group has established a fair, efficient, and highly transparent governance system. Please note that our Corporate Governance Basic Policy is available on our website at the following link:

<https://www.advantest.com/investors/management-policy/corporate-governance>

Corporate Governance Scheme

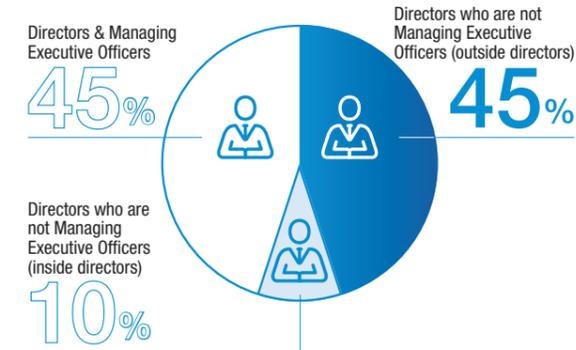


Corporate Governance Initiatives



Governance Highlights

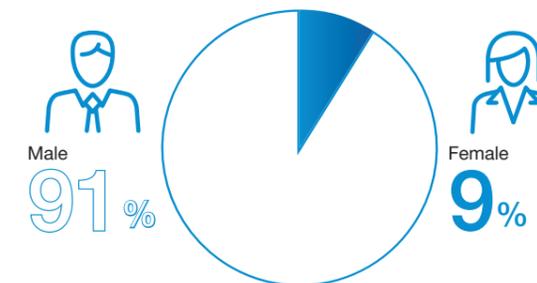
Inside / Outside Director Ratio



Total Tenure (As of 25 June, 2020)



Gender Ratio



Japanese / Non-Japanese Director Ratio



Chairpersons

Yoshiaki Yoshida

Board of Directors
(CEO, Inside director)

Yuichi Kurita

Audit & Supervisory Committee
(Non-Managing Executive Officer, Inside director)

Toshimitsu Urabe

Nomination and Compensation Committee
(Non-Managing Executive Officer, Outside director)

List of Governance Systems (As of June 25, 2020)

Structure	Company with an Audit and Supervisory Committee
Number of Director	11 Persons · Directors & Managing Executive Officers (Inside) 5 Persons · Directors who are not Managing Executive Officers (Inside) 1 Person · Directors who are not Managing Executive Officers (Outside) 5 Persons
Term of Office for Directors	1 year (2 years for directors who are members of the Audit and Supervisory Committee)
Incentive for Directors	Performance-based Remuneration System (Executive directors only)
Disclosure of Compensation for individual Directors Committee (voluntary basis)	Only Directors who received Compensation of 100 Million yen or More
Number of Audit and Supervisory Committee member	3 Persons
Number of Outside Director among above	2 Persons
Number of Independent Directors	5 Persons
Accounting Auditor	Ernst & Young ShinNihon LLC
Executive Officer System	In Place

Board of Directors / Board Effectiveness

Role of the Board of Directors

The Board of Directors of Advantest, as the company's highest management decision-making body, determines important matters such as the management policy and management strategy of the entire group, and also monitors and supervises the execution of business by those responsible. By including multiple outside directors as members of the Board of Directors, we have strengthened the oversight and supervisory functions of the Board of Directors. At meetings of the Board of Directors, directors with a wide range of knowledge and experience express their opinions from various perspectives and hold lively discussions of the agendas proposed by management. These meetings review the company's mid- to long-term management policy, executive appointment and compensation, budget and performance settlement of accounts, M&A proposals, etc. and are held about once every month, lasting about 3 to 5 hours. The current board of directors is composed of five inside executive directors, one inside non-executive directors, and five outside non-executive directors, for a total of 11 members (this includes all directors who are also Audit and Supervisory Committee members). Two of the directors are non-Japanese and one is a woman. In order to maintain seamless communication among directors, we have arranged for simultaneous interpretation at meetings of the Board of Directors so that we can speak freely in both Japanese and English. Materials and minutes are also translated into English. We endeavor to provide the materials to directors no less than three business days before meetings in principle. Details of the members of the Board of Directors are as described on page 55 to 56. The Chairman of the Board of Directors is Yoshiaki Yoshida, Representative Director, President and CEO of the Advantest Group.

Activities of the Board of Directors

Main Actions Taken by the Board of Directors in 2019

Revision of The Advantest Way

Advantest recently revised The Advantest Way to clarify our management mission, vision, core values, action guidelines and action standards, taking into account the opinions of outside directors and overseas executive officers offered at meetings of the Board of Directors. Outside directors also advised the Board that employees around the world need to be more aware of The Advantest Way, so we are holding workshops around the world to raise awareness.

→ See pages 41-42

Review of Important Rules

We have reviewed important rules such as the Regulations of the Board of Directors. The process of sending information to outside directors in advance and confirming their opinions has enabled us to enact more appropriate regulations.

Enhancement of Internal Reporting System

Since outside directors suggested that our internal reporting system be expanded, we have set up an outside desk to accept anonymous reports on incidents and to enable reports from outside the company.

→ See page 49

Advantest's COVID-19 Response

The Board of Directors heard reports about the COVID-19 pandemic and its impact on Advantest's business, and discussed it.

Results of Board Meeting Effectiveness Survey

Advantest distributes a survey in the form of a questionnaire to all directors every March through April to evaluate the effectiveness of the board of directors. The main items to be evaluated are as follows:

Structure of the board of directors

Number of members, diversity of members, status of outside directors with respect to other concurrent positions, etc.

Management of the board of directors

Timing of distribution of materials, content of materials, prior disclosure of agenda, number of agenda items, frequency of board meetings, chairman's effectiveness, quality of online meetings/simultaneous interpretation, etc.

Agenda of the board of directors

Management strategy, delegation to executives, succession plan, compensation system, risk, conflict of interest, appointment/dismissal of directors, compliance, etc.

Board of directors support system

Reports from the Nomination and Compensation Committee, provision of information to outside directors, training for directors, use of experts, etc.

Result in FY2018

The results of the fiscal 2018 survey showed that it was necessary to formulate a succession plan for representative directors, reanalyze risks affecting Advantest's business, and consider the training provided for directors. The status of each of these items is as follows:

Status of Actions Required

- Advantest is currently working on the formulation of a succession plan for the representative director. In the future, the Nomination and Compensation Committee will deliberate on it and the board of directors will take the initiative in implementing it.
- Regarding re-evaluation of risks affecting Advantest's business, the executive side analyzed these risks and their discussion was published in our securities report, including the specific risks.
- Executive officers who had not attended governance training attended training related to governance, and in addition, lectures by ESG and corporate value enhancement experts were held for Japanese directors and executive officers.

The FY2019 effectiveness evaluation of the board of directors was also discussed at the board of directors meeting in May 2020. At that time, it was confirmed that the composition of the board of directors was appropriate and that the board of directors exchanged opinions freely. On the other hand, the following points were raised for future improvement:

- Materials distributed by the Board of Directors and explanation method
- Method of reporting from the Nomination and Compensation Committee
- How outside directors can best utilize outside experts

Audit System / Nomination and Compensation Committee / Others

Audit System

Advantest transitioned to the status of a company with an Audit and Supervisory Committee on June 24, 2015. In accordance with our audit policy and audit plan and division of duties, Audit and Supervisory Committee members attend important meetings such as the Board of Directors, Managing Executive Officers Committee, Internal Control Committee, Compliance Committee, and Disclosure Committee, hear reports on the execution of duties from the directors and executive officers responsible, inspect important decision documents, investigate the status of operations and assets of the head office and major subsidiaries in Japan and overseas, and also audit the performance of executive officers, and other business execution organizations in cooperation with the Audit Office and other internal control departments. The Audit and Supervisory Committee consists of one internal director and two external directors. The Audit and Supervisory Committee implements its audit and supervisory functions by attending important meetings, collecting information by listening to business reports from the executive departments, and strengthening cooperation with our accounting auditor and the internal audit department. One full-time member has been named to the Audit and Supervisory Committee to improve the quality of its work. Mr. Yuichi Kurita, inside director and Audit and Supervisory Committee Member, has many years of experience as an officer in charge of corporate planning, finance and management of the Company. Another member of the Audit and Supervisory Committee, Ms. Sayaka Sumida, is an outside director who works as a certified public accountant at an audit corporation. Both have experience and sufficient financial and accounting knowledge. In addition, Mr. Koichi Nanba, an outside director and Audit and Supervisory Committee Member, has extensive knowledge of legal affairs. Mr. Kurita chairs the Audit and Supervisory Committee. Outside directors who are Audit and Supervisory Committee members attend meetings of the Internal Control Committee and participate in on-site audits of business execution departments conducted by the full-time Audit and Supervisory Committee member as necessary to actively audit and supervise the status of business execution of the company. In addition, the Audit and Supervisory Committee collaborates with our accounting auditor, the Audit Office and other internal control departments, and the Audit & Supervisory Board Members of Advantest Group companies, ensuring opportunities for exchanging opinions and communication.

With regard to internal audits, we have established an Audit Office, and multiple dedicated employees routinely monitor the maintenance and operation status of the company's internal controls, as well as identifying problems, pointing out issues, and making recommendations for improvement.

Regarding accounting audits, Advantest has an audit contract with Ernst & Young ShinNihon LLC and receives

prescribed audits. The certified public accountants who executed Advantest's accounting audit work in FY2019 are Mr. Makoto Usui, Mr. Akiyuki Matsumoto, and Mr. Keiichi Wakimoto. All of them have continuously performed Advantest's audits for up to seven years. In addition, assistants performing Advantest's accounting audit work consist mainly of certified public accountants and include those with specialized knowledge, such as system experts.

Nomination and Compensation Committee

Advantest has established the Nomination and Compensation Committee as a non-mandatory organization, which complements the Board of Directors, to decide on the appointment, selection, and dismissal of Directors and Executive Officers, and to determine their compensation. The Nomination and Compensation Committee is responsible for the functions of both the Nomination Committee and the Compensation Committee. The Nomination and Compensation Committee is responsible for improving the fairness, rationality and transparency of the appointment, selection, and dismissal of Directors and Executive Officers and of their compensation.

The Nomination and Compensation Committee is composed of members selected from among the directors by resolution of the Board of Directors. To incorporate an independent perspective, the majority of the members are outside directors. The Human Resources Department serves as the secretariat of the Nomination and Compensation Committee.

Main Discussion Agenda of the Nomination and Compensation Committee in 2019

- Discussion of director and executive officer candidates
- Fixed remuneration, performance-linked bonuses, stock compensation levels, and future plans
- The advisor system
- Discussion of appointment contracts for directors and executive officers

The current members of the Committee are Toshimitsu Urabe, Koichi Nanba and Yoshiaki Yoshida. Toshimitsu Urabe is the chairman.

Regarding directors and executive officers, the Nomination and Remuneration Committee shall comply with the policy and procedures for appointment, selection, and dismissal of directors and executive officers established by the Board of Directors, and shall recommend persons as candidates to the Board of Directors who will contribute to a sustainable level of business development and enhancement of corporate value over the mid-to-long term. In addition, regarding outside directors, in addition to the

forementioned the policy and procedures, the "Independence Criteria for Outside Directors" established by the Board of Directors shall also apply. Candidates recommended to the Board of Directors have a wealth of knowledge and be expected to contribute positively to the Board of Directors.

Appointment and Selection Criteria for Outside Directors

The Committee comprehensively considers the personality, concurrent status as a director of other companies, the number of years as an outside director of the Company, etc., to select candidates from among those who meet the independence criteria established by Advantest and have any of the following qualifications:

- Person with legal expertise, such as a lawyer
- Person who has experience in corporate management
- Person who has considerable knowledge of finance and accounting
- Person who has knowledge and experience in industries related to Advantest's business such as semiconductor-related industries
- Person who has extensive experience in research and development
- Others who have background or ability equivalent to the above items

Managing Executive Officers Committee

The Managing Executive Officers Committee is made up of executive officers and higher, and deliberates on a certain number of important matters as decided by executive organizations. Since Advantest has a number of non-Japanese managing executive officers, discussions incorporate each country's perspective and reflect various opinions. Meetings are held about twice a month, mainly in the form of web conferences.

Internal Control Committee

The Internal Control Committee identifies important risks for the entire Group and analyzes them. At the same time, it has clarified which departments are responsible for each risk, and policies and procedures for dealing with them. The Internal Control Committee consists of 23 members, including Unit Leaders and administration department personnel. One member is an outside lawyer who acts as advisor. In addition, outside directors can participate as observers.

Compliance Committee

The Compliance Committee promotes compliance activities, including education for employees provides education on human rights issues, and handles consultations and complaints. The Compliance Committee consists of nine members, one of whom is an outside lawyer.

Disclosure Committee

The Disclosure Committee oversees proper disclosure by the company. The Disclosure Committee consists of 26 members, including Unit Leaders.

Sustainable Management Promotion Working Group

The Sustainable Management Promotion Working Group helps each business division incorporate policies related to ESG/the SDGs into the strategies it formulates on the basis of policies and priority measures enacted by higher-ranking organizations such as the Managing Executive Officers Committee, and supports the business divisions in carrying out activities in line with the PDCA cycle. It consists of 40 members, chiefly the leaders of all business divisions, including four executive directors.

Risk Management Committee

The Risk Management Committee is responsible for formulating measures to respond to the possibility of events such as disasters and other incidents that would make it difficult to continue business, and any possibility of harm to our employees, as well as the possibility of scandals that lead to social problems. The Committee consists of 18 members, including executive officers, general managers, deputy general managers, business managers, and functional members, and is chaired by the president.

In FY2019, the Committee confirmed the safety of employees during and after Typhoon Hagibis and executed Advantest's overall COVID-19 response.

Compensation and the General Meeting of Shareholders

Design of Compensation to increase Corporate Values

■ Compensation Policy and Process

Compensation for directors and executive officers is described in "Policies and procedures for determining Compensation for directors and executive officers," as follows. Compensation consists of fixed compensation, bonuses, and stock compensation linked to business performance, in proportions deliberated on by the Nomination and Compensation Committee and decided by the Board of Directors. Directors who are Audit and Supervisory Committee members and outside directors receive only fixed compensation.

■ Policies and Procedures for Determining Compensation for Directors and Executive Officers

1. Purpose

Regarding the compensation of directors and executive officers, this policy has been devised so as to contribute to the sustainable development of the Group, improvement of corporate value over the medium to long term, contribution to shareholder profits, hiring and retention of excellent management resources, and optimization of motivation.

2. Compensation Structure and Decision Policy

Compensation for directors (excluding directors who are Audit and Supervisory Committee members) and executive officers is structured to best achieve the purpose defined in 1. above, consisting of 1) fixed compensation, 2) performance-based bonuses, and 3) stock compensation. The amount and ratio of these shall be set appropriately. In consideration of the role and

independence of outside directors, only fixed compensation shall be paid them.

(1) Regarding fixed compensation, the Committee shall refer to external objective data and set it at an appropriate level according to the duties and responsibilities that executives carry out.

(2) Positioning performance-based bonuses as a short-term incentive, the Committee calculates them based on performance indicators such as sales, operating margin, net income, and ROE of the Group.

(3) Stock compensation is positioned as a long-term incentive and a way of sharing value with shareholder. Stock options and performance-linked stock compensation are granted on the basis of comprehensive consideration of performance trends, business environment, stock price levels, etc. With regard to performance-based stock compensation, the number of shares received will fluctuate based on performance indicators such as sales, operating margin, net income, and ROE of the Group for three consecutive fiscal years.

3. Compensation Decision Procedure

Compensation for directors (excluding directors who are Audit and Supervisory Committee members) and executive officers shall be discussed by the Nomination and Compensation Committee based on consultation with the Board of Directors and will be proposed to the Board of Directors. The Board of Directors shall discuss proposals from the Nomination and Compensation Committee and determine compensation. The remuneration of directors who are Audit and Supervisory Committee members will be determined through consultation with directors who are Audit and Supervisory Committee members.

General Meeting of Shareholders as a Venue for Dialogue with Shareholders

We regard the General Meeting of Shareholders as an opportunity for dialogue with our shareholders. In 2020, we prioritized COVID-19 safety precautions to ensure the safety of our shareholders and their families, holding the event at a larger venue than usual so that shareholders could feel at ease. In addition, for shareholders who could not attend in person, for the first time we posted video of the business reports delivered at the meeting on our website, enabling shareholders to access them on demand. Going forward, we will continue to take into consideration the fact that some shareholders may find it difficult to attend in person, and enable a greater number of shareholders to participate, by providing more open access to general meetings of shareholders.



Upper Limits on Director Compensation

	Fixed compensation	Performance-linked stock compensation	Stock options
Directors who are not Audit and Supervisory Committee members (excluding outside directors)	No more than JPY600 million per year*1	No more than JPY200 million per year*2	No more than JPY200 million per year*2
Outside directors who are not Audit and Supervisory Committee members		N/A	
Directors who are Audit and Supervisory Committee members	No more than JPY100 million per year*1		

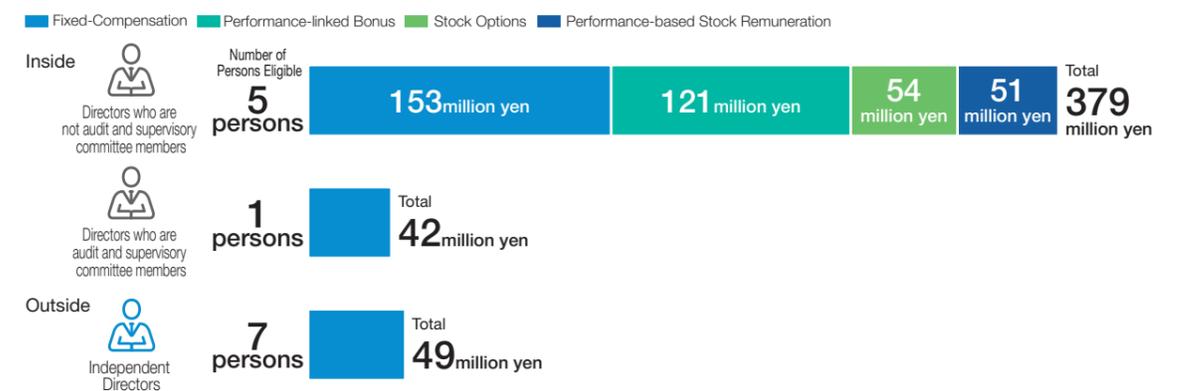
*1 By resolution of the 73rd Ordinary General Meeting of Shareholders held on June 24, 2015

*2 By resolution of the 76th Ordinary General Meeting of Shareholders held on June 27, 2018

Directors Who Received Compensation of 100 Million yen or More and the Amount of Compensation Thereof (FY2019)

Name	Total Amount of Compensation (million JPY)	Type of Officer (As of March 31, 2020)	Company Category	Total Amount of Compensation by Type			
				Fixed-Compensation	Performance-linked Bonus	Stock Options	Performance-based Stock Remuneration
Yoshiaki Yoshida	149	Representative Director, President and CEO	Advantest Corporation	60	51	20	18
Soichi Tsukakoshi	101	Director, Managing Executive Officer	Advantest Corporation	41	37	11	12
Hans-Juergen Wagner	138	Director, Managing Executive Officer	Advantest Corporation	10	-	11	12
		Managing Director	Advantest Europe GmbH	57	48	-	-

Composition of Compensation for Directors (FY 2019)



* There were five Outside Directors as of March 31, 2020, but the above compensation amounts and numbers include one inside director and two outside directors who stepped down on June 26, 2019.

11 Year Financial Highlights

Advantest corporation and its consolidated subsidiaries
Each fiscal year beginning on April 1

	US GAAP					IFRS					
	FY2009 (2010/3)	FY2010 (2011/3)	FY2011 (2012/3)	FY2012 (2013/3)	FY2013 (2014/3)	FY2014 (2015/3)	FY2015 (2016/3)	FY2016 (2017/3)	FY2017 (2018/3)	FY2018 (2019/3)	FY2019 (2020/3)
Financial Results											
Fiscal year											
Net sales	53,225	99,634	141,048	132,903	111,878	163,803	162,111	155,916	207,223	282,456	275,894
Gross profit	25,928	48,470	68,748	68,920	49,333	91,755	91,475	89,740	106,588	154,039	156,497
Selling, general and administrative expenses*1	37,567	42,359	67,911	68,840	85,702	74,897	78,878	75,835	82,101	89,377	97,789
Operating income	(11,639)	6,111	837	80	(36,369)	16,858	12,597	13,905	24,487	64,662	58,708
EBITDA*2	(7,325)	10,320	7,675	8,143	(28,101)	21,588	17,562	19,063	29,511	69,629	69,600
Income (loss) before income taxes	(9,926)	5,551	(3,442)	(1,293)	(35,501)	20,767	11,767	15,022	24,282	66,211	58,574
Net income (loss) attributable to owners of the parent	(11,454)	3,163	(2,195)	(3,821)	(35,540)	16,753	6,694	14,201	18,103	56,993	53,532
Cash flows											
Cash flows from operating activities	(17,746)	(693)	12,302	(2,215)	(3,776)	24,481	7,728	15,833	28,254	44,792	66,475
Cash flows from investing activities	10,824	(5,828)	(37,670)	(11,498)	(4,711)	(1,310)	(2,395)	(3,521)	(2,329)	(15,915)	(38,819)
Cash flows from financing activities	(1,803)	(12,028)	9,887	(2,914)	27,202	(1,298)	(13,531)	(1,002)	(15,237)	(13,724)	(17,916)
Free cash flows*3	(6,922)	(6,521)	(25,368)	(13,713)	(8,487)	23,171	5,333	12,312	25,925	28,877	27,656
Cash and cash equivalents at end of year	96,439	75,323	58,218	45,668	68,997	97,574	85,430	95,324	103,973	119,943	127,703
Fiscal year-end											
Shareholders' equity	150,242	138,132	131,552	141,241	116,252	101,810	93,619	109,517	124,610	198,731	231,452
Total assets	188,663	180,312	219,226	225,515	229,856	233,237	210,451	231,603	254,559	304,580	355,777
Information per share											
Basic earnings (loss) per share (¥)	(64.09)	18.03	(12.67)	(22.03)	(204.10)	96.15	38.35	81.07	101.94	302.35	270.12
Diluted earnings (loss) per share (¥)	(64.09)	18.03	(12.67)	(22.03)	(204.10)	87.67	35.38	73.95	92.69	287.37	268.96
Shareholders' equity per share (¥)	840.65	797.20	759.22	812.70	667.36	583.28	536.28	619.33	696.04	1,004.53	1,166.51
Dividend per Share	10.0	10.0	15.0	20.0	15.0	15.0	20.0	25.0	32.0	92.0	82.0
Number of shares issued at year-end	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770	199,566,770
Management indicator											
Overseas net sales as a % of total net sales	77.5	77.5	88.6	89.4	89.1	92.0	92.0	88.2	93.2	94.7	94.6
Net sales per employee (¥100 million)	16.9	31.5	31.6	29.0	24.2	35.9	36.1	35.3	46.5	61.0	54.7
Gross profit margin	48.7	48.6	48.7	51.9	44.1	56.0	56.4	57.6	51.4	54.5	56.7
Operating Income Margin	(21.9)	6.1	0.6	0.1	(32.5)	10.3	7.8	8.9	11.8	22.9	21.3
Net income ratio	(21.5)	3.2	(1.6)	(2.9)	(31.8)	10.2	4.1	9.1	8.7	20.2	19.4
SG&A ratio to sales	70.6	42.5	48.1	51.8	76.6	45.7	48.6	48.7	39.6	31.6	35.4
R&D Expenses (¥100 million)	17,896	21,197	30,303	33,062	32,670	29,507	31,298	31,170	33,540	37,852	40,070
R&D as a % of total net sales	33.6	21.3	21.5	24.9	29.2	18.0	19.3	20.0	16.2	13.4	14.5
Capital Expenditures	34	38	70	126	56	42	40	48	54	66	99
Depreciation and Amortization (¥100 million)	43	42	68	81	83	47	50	52	50	50	109
EBITDA margin	(13.8)	10.4	5.4	6.1	(25.1)	13.2	10.8	12.2	14.2	24.7	25.2
Cash conversion cycle (day)	158	131	126	172	192	143	163	186	137	132	162
Shareholders' equity ratio	79.6	76.6	60.0	62.6	50.6	43.7	44.5	47.3	49.0	65.2	65.1
ROE	(7.3)	2.2	(1.6)	(2.8)	(27.6)	18.5	6.9	14.0	15.5	35.3	24.9
Dividend payout ratio	—	55.5	—	—	—	15.6	52.2	30.8	31.4	30.4	30.4
US Dollar to Yen exchange rate	92	85	79	83	100	108	121	108	111	110	109
Euro to Yen exchange rate	131	113	111	105	133	140	133	119	129	129	121
Performance-related data											
Global real GDP growth (Source: IMF) %	(0.1)	5.4	4.3	3.5	3.5	3.6	3.5	3.4	3.9	3.6	2.9
Worldwide semiconductor sales (Source: WSTS) Billion US dollar	226	298	300	292	306	336	335	339	412	469	412
SoC tester market size (Source: Advantest) Million US dollar	900	2,200	2,000	2,050	1,450	1,950	1,650	2,000	2,200	2,550	2,700
Memory tester market size (Source: Advantest) Million US dollar	200	600	550	450	420	420	470	470	750	1,150	650

*1 Selling, general and administrative expenses from the fiscal year ended March 31, 2015 are composed of selling, general and administrative expenses, other income/expenses.
 Figures until the fiscal year ended March 31, 2014 consist of research and development expenses, selling, general and administrative expenses, restructuring and impairment charges.
 *2 EBITDA= Operating income + Depreciation and amortization, EBITDA margin = EBITDA/Sales
 *3 Free cash flows= Cash flows from operating activities - Cash flows from investing activities

Sustainability Accounting Standard Board (SASB) Disclosures

Advantest corporation and its consolidated subsidiaries
Each fiscal year beginning on April 1

The Advantest Group reports sustainability related information based on the Sustainability Accounting Standards Board (SASB) standards to amplify and focus our practice of rigorous disclosure. SASB standards are to help businesses around the world identify, manage and report on the sustainability topics that matter most to our investors. And it can help investors by encouraging report that is comparable within an industry. Some accounting metrics do not apply to Advantest's business activities in Japan, but in view of the purpose of these standards, we have endeavored to disclose as much information as possible.

TOPIC	ACCOUNTING METRIC	SASB Code	CATEGORY	UNIT OF MEASURE	FY2014 (2015/3)	FY2015 (2016/3)	FY2016 (2017/3)	FY2017 (2018/3)	FY2018 (2019/3)	FY2019 (2020/3)
Green Gas Emissions	(1) Gross global Scope 1 emissions	TC-SC-110a.1	Quantitative	Metric tons(t) CO ₂ -e	3,755	3,880	3,824	3,811	4,671	4,471
	(2) Amount of total emissions from perfluorinated compounds	TC-SC-110a.1	Quantitative	Metric tons(t) CO ₂ -e	2,384	1,085	939	339	156	177
Energy Management in Manufacturing	(1) Total energy consumed	TC-SC-130a.1	Quantitative	Gigajoules (GJ)	683,021	685,503	735,810	770,186	843,788	887,610
	(2) Percentage grid electricity	TC-SC-130a.1	Quantitative	%	76	76	78	79	79	66
	(3) Percentage renewable	TC-SC-130a.1	Quantitative	%	14	14	12	12	11	26
Water management	(1) Total water withreenergy consumed	TC-SC-140a.1	Quantitative	Thousand cubic meters (m ³)	283	280	288	249	281	261
	(2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	TC-SC-140a.1	Quantitative	%	0	0	0	0	0	0
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	TC-SC-150a.1	Quantitative	Metric tons (t)	17.4	7.1	7.7	6.4	10.1	11.9
		TC-SC-150a.1	Quantitative	%	100.0	100.0	74.1	100.0	100.0	99.9
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	TC-SC-320a.1	Discussion and Analysis	—	Advantest conducts risk management for the health and safety of our employees. (For details please refer to: https://www.advantest.com/ja/sustainability/safety)					
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	TC-SC-320a.2	Quantitative	¥	0	0	957,552	0	0	0
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are									
	(1) Foreign nationals	TC-SC-330a.1	Quantitative	%	7	8	8	8	8	9
	(2) Located offshore	TC-SC-330a.1	Quantitative	%	0	0	0	0	0	0
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	TC-SC-410a.1	Quantitative	%	84	82	81	85	89	85
	Processor energy efficiency at a system-level for: (1) servers, (2) desktops, and (3) laptops	TC-SC-410a.2	Quantitative	Various, by product category	n / a					
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TC-SC-440a.1	Discussion and Analysis	—	Advantest conduct risk management for the use of critical materials. (For details please refer to: https://www.advantest.com/ja/sustainability/procurement)					
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	TC-SC-520a.1	Quantitative	¥	0	0	0	0	0	0
	Total production	TC-SC-000.A	Quantitative	Output	1,031	968	1,116	1,891	2,270	2,065
	Percentage of production from owned facilities	TC-SC-000.B	Quantitative	%	39	50	39	45	53	39

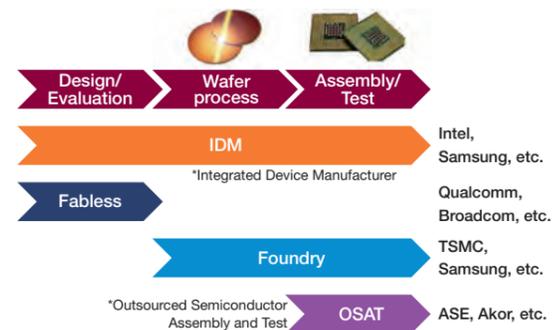
Commentary: The Semiconductor Supply Chain and Semiconductor Test



The Semiconductor Supply Chain: Horizontal Disintegration

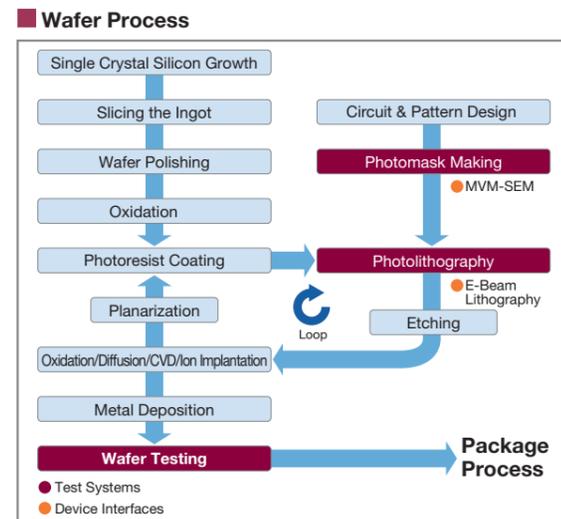
Semiconductors used in all kinds of products, such as mobile phones, computers, home appliances, automobiles, and industrial equipment, have become indispensable to our lives. The global semiconductor market is valued at over \$400 billion.

Manufacturing technology for semiconductors is evolving very quickly, and there are many specialized design and contract manufacturing companies working to respond to these advances. In the past, semiconductor design, manufacturing, and even the manufacture of semiconductor production equipment were all carried out in-house by semiconductor manufacturers--vertical integration. However, as the design circuits increased in scale and manufacturing technology became more complex, the financial burden of semiconductor development and capital investment increased, and the supply chain was gradually disintegrated across a horizontal global network of specialized providers. Today's semiconductor industry is dominated by "pure-play" foundries and "fabless" design companies.



Semiconductor Production Equipment Manufacturers

Semiconductor production involves hundreds of processes, including pattern exposure and etching. The fundamental technologies required for each process are diverse, including applied chemistry, material engineering, and electronic engineering, and each process uses equipment provided by semiconductor production equipment (SPE) manufacturers possessing specialized technology and expertise. SPE manufacturers who possess different processes and fundamental technologies also act as partners, cooperating to create advanced processes.

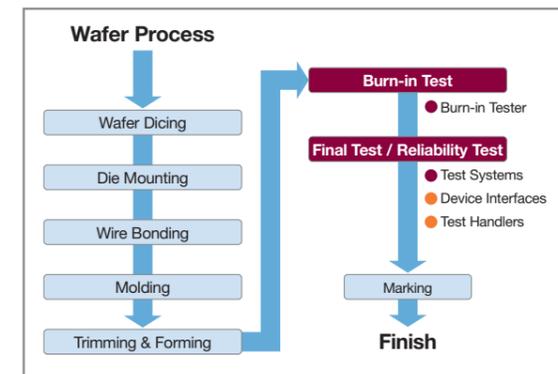


The Necessity of Semiconductor Test

Semiconductors that push the limits of nanometer-based technology are not always perfect. In addition to poor circuit connections and short circuits, operating voltage and timing flaws may prevent them from performing their functions. Especially with semiconductors made using state-of-the-art processes, product quality can vary significantly until the manufacturing process matures.

The test process is the only process in the long semiconductor manufacturing process whose purpose is to ensure that the products work as designed. In addition to diagnosing good and defective products, it is also possible to classify performance (grading) according to the level of electrical signals and analyze the content of defects, so that test results can be used to improve other design and manufacturing processes.

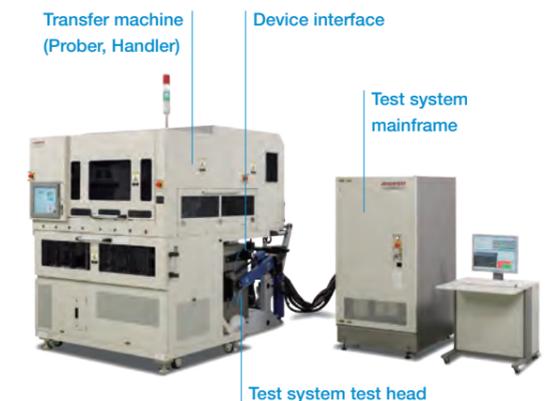
Package Process



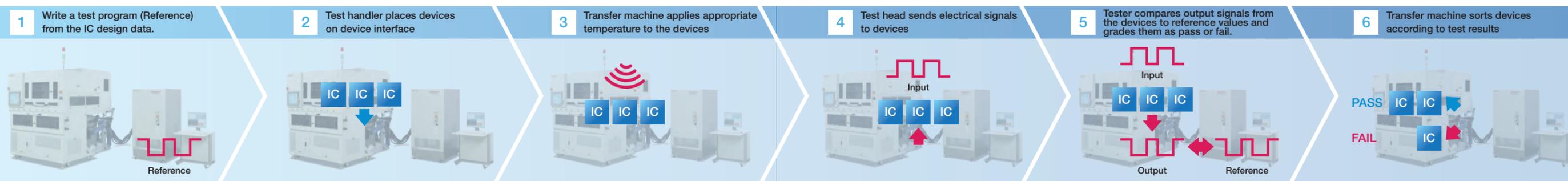
Semiconductor Test Equipment

Semiconductor test includes various test items such as checking for poor connections and short circuits, checking input / output voltage / current values, verifying logic circuit operations, and switch timing. Semiconductor test equipment integrates the electronic measurement functions required to test these items into test systems. Furthermore, since test systems are usually used in semiconductor factories, it is essential for them to provide both advanced measurement technology and mass production technology that can test large numbers of semiconductor devices efficiently.

Semiconductor test equipment contributes to the growth of the entire semiconductor industry and to society in general by supporting the automatic, high-volume, timely, and economical production of semiconductors manufactured with advanced technology.



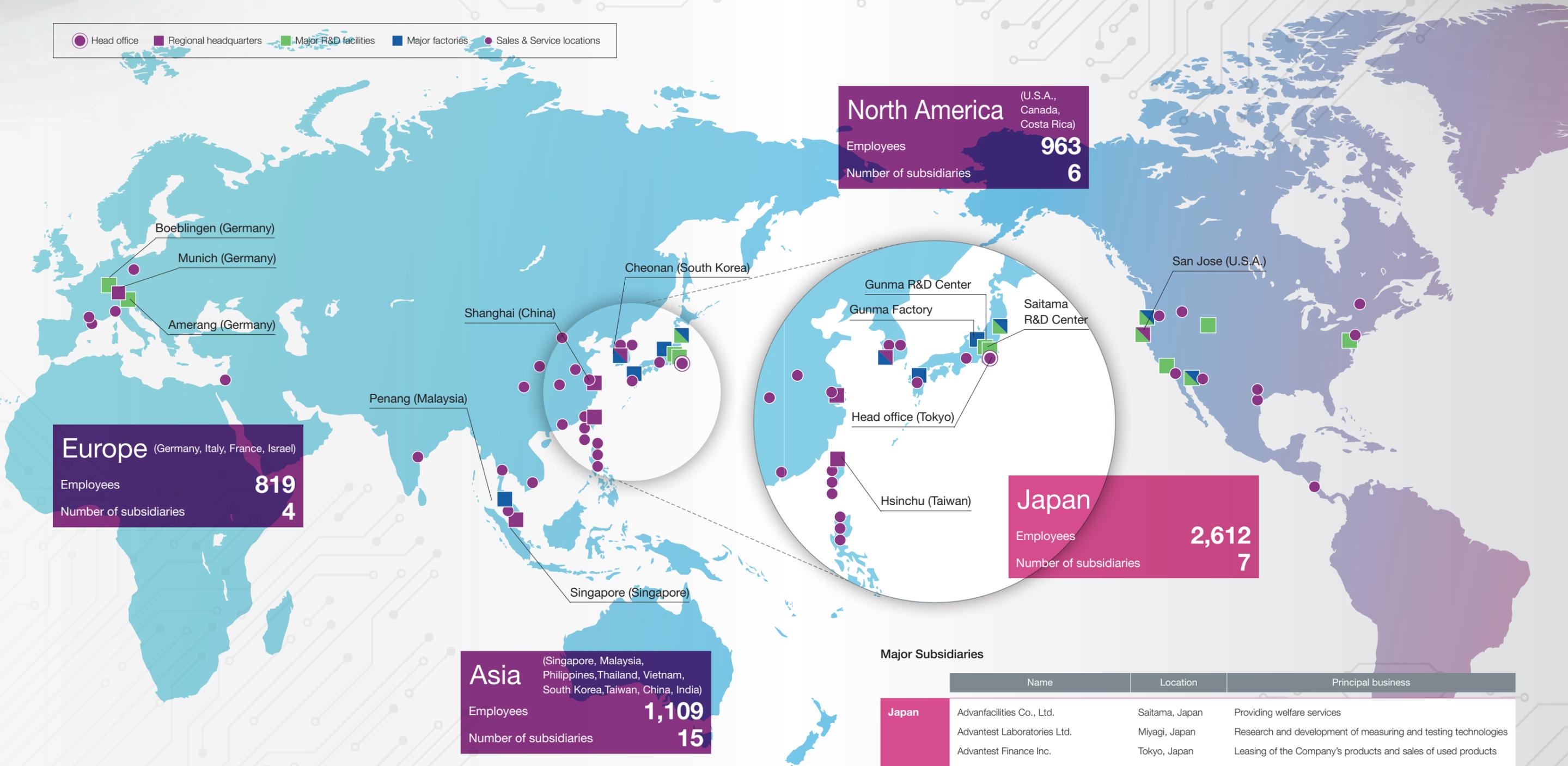
Workflow from test program design through to production test



Global Network

(As of March 31, 2020)

● Head office
 ■ Regional headquarters
 ■ Major R&D facilities
 ■ Major factories
 ● Sales & Service locations



Europe (Germany, Italy, France, Israel)

Employees **819**

Number of subsidiaries **4**

North America (U.S.A., Canada, Costa Rica)

Employees **963**

Number of subsidiaries **6**

Japan

Employees **2,612**

Number of subsidiaries **7**

Asia (Singapore, Malaysia, Philippines, Thailand, Vietnam, South Korea, Taiwan, China, India)

Employees **1,109**

Number of subsidiaries **15**

Employees **Total 5,503**

Number of subsidiaries **Total 32**

Major Subsidiaries

	Name	Location	Principal business
Japan	Advantest Facilities Co., Ltd.	Saitama, Japan	Providing welfare services
	Advantest Laboratories Ltd.	Miyagi, Japan	Research and development of measuring and testing technologies
	Advantest Finance Inc.	Tokyo, Japan	Leasing of the Company's products and sales of used products
	Advantest Kyushu Systems Co., Ltd.	Fukuoka, Japan	Development, sales and support of the Company's products
	Advantest Component, Inc.	Miyagi, Japan	Development and manufacturing of the parts
Overseas	Advantest America, Inc.	California, U.S.A.	Development and sales of the Company's products
	Advantest Europe GmbH	Munich, Germany	Development and sales of the Company's products
	Advantest (Singapore) Pte. Ltd.	Singapore	Sales of the Company's products
	Advantest Korea Co., Ltd.	Cheonan, Korea	Support for sales of the Company's products
	Advantest Taiwan Inc.	Hsinchu, Taiwan	Sales of the Company's products
	Advantest (China) Co., Ltd.	Shanghai, China	Support for sales of the Company's products
	Advantest (M) Sdn. Bhd.	Penang, Malaysia	Manufacturing of the Company's products

Corporate Overview / Stock Information

As of March 31, 2020

Corporate Overview

Registered Name	ADVANTEST CORPORATION
Head Office	Shin Marunouchi Center Bldg., 1-6-2, Marunouchi, Chiyoda-ku, Tokyo 100-0005
URL	https://www.advantest.com/
Established	December 1954
Capital	32,363 million yen
No. of Employees	5,503 (Include temporary employees.)
Business Description	Semiconductor and Component Test System Business, Mechatronics System Business, Services, Support and Others

Stock Information

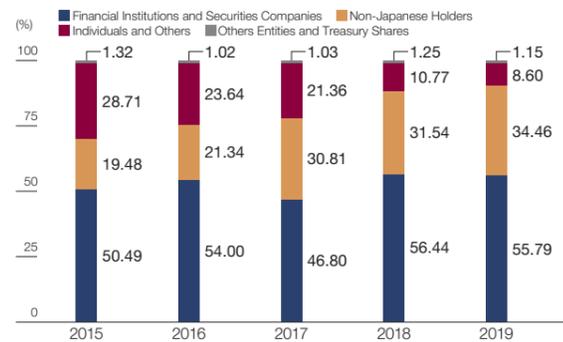
Fiscal Year	April 1 through March 31	No. of Shares Outstanding	199,566,770
Ordinary General Meeting of Shareholders	June	Number of Shareholders	36,520
No. of Issuable Shares	440,000,000		

Major Shareholders

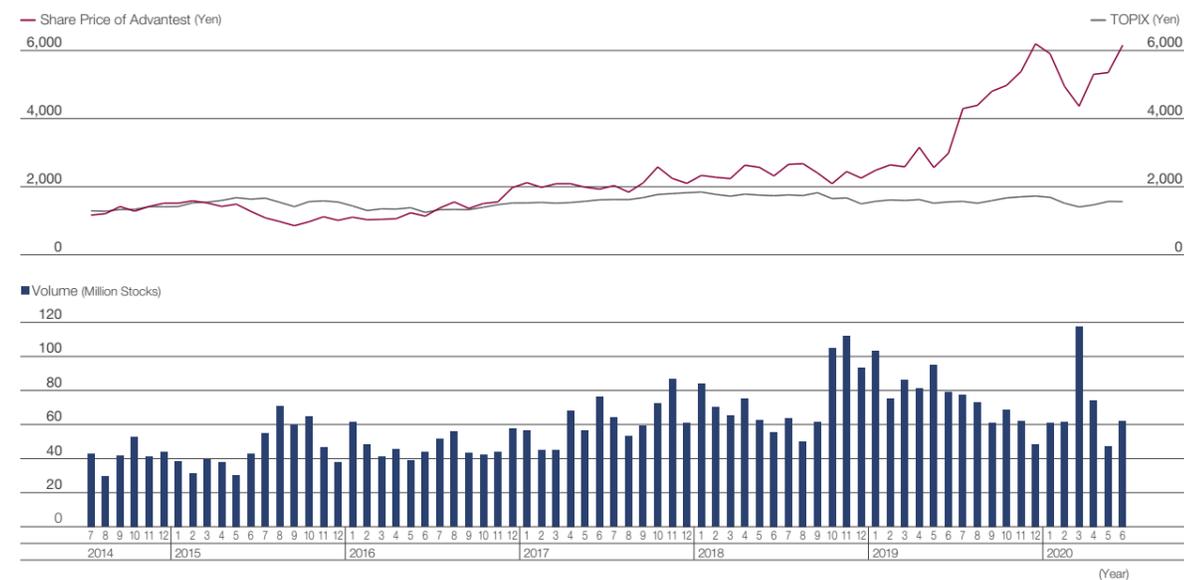
Name	Number of Shares (in thousand)	Percentage of Ownership (%)
The Master Trust Bank of Japan, Ltd. (trust account)	52,246	26.26
Japan Trustee Services Bank, Ltd. (trust account)	23,533	11.82
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	6,061	3.04
Trust & Custody Services Bank, Ltd. (investment trust account)	5,146	2.58
Japan Trustee Services Bank, Ltd. (trust account 4)	3,889	1.95
JP MORGAN CHASE BANK 385151	3,444	1.73
Japan Trustee Services Bank, Ltd. (trust account 5)	3,028	1.52
STATE STREET BANK WEST CLIENT - TREATY 505234	2,995	1.50
SSBTC CLIENT OMNIBUS ACCOUNT	2,376	1.19
Japan Trustee Services Bank, Ltd. (trust account 7)	2,317	1.16

(Notes) 1. Number of Shares is rounded down to the nearest thousand.
 2. The number of treasury shares (614,239 shares) that Advantest owns does not include Advantest shares which the Board Incentive Plan Trust owns (57 thousand shares) and Advantest shares which the Employee Stock Ownership Plan Trust owns (214 thousand shares).
 3. Percentage of Ownership is rounded down to the second decimal place.

Breakdown of Shareholders



Share Prices and Volume



On the Publication of Advantest's Integrated Annual Report 2020



Yasuo Mihashi
 Managing Executive Officer, Executive Vice President,
 Corporate Planning & Stakeholder Relations Group

Since we published our first integrated annual report in October 2019, we have received feedback from a wide range of stakeholders. In addition, the process of producing the integrated report also pointed up areas for improvement. Based on these, we have made some revisions to the Integrated Annual Report 2020.

First, we thoroughly reviewed our treatment of materiality, examined management issues and strengthened our responses, and clarified our engagement with important topical issues such as climate change, as well as the measures we are taking on each item and the departments responsible for them. Key strategies and themes have been defined for each materiality item, based on the "six commitments" set forth in our mid- to long-term management policy.

In addition, regarding the Sustainability Report that Advantest published until last year, the details of our

past achievements and activities have been newly summarized in a "Sustainability Data Book," and our discussion of future policies and measures related to sustainability has been incorporated into the Integrated Annual Report. As a result, the Integrated Annual Report has become a "one-stop handbook solution" for stakeholders to understand our corporate value, including non-financial information.

Social and economic uncertainty is increasing due to the COVID-19 pandemic and friction between the United States and China, but our purpose in issuing an integrated report to tell our value creation story remains unchanged. We will continue to dialogue with stakeholders and strive for ever clearer and more proactive information disclosure.

Advantest, a Preferred Sustainability Investment

External Evaluation (2019-2020)

- Selected for the FTSE4Good Index Series, a series of benchmark and tradable indexes for ESG (Environmental, Social and Governance) investors
- Selected for the FTSE Blossom Japan Index, which measures the performance of Japanese companies that demonstrate strong Environmental, Social and Governance (ESG) practices
- Selected as a constituent stock of the SNAM Sustainability Index, which combines ESG value and stock valuation
- Selected for the MSCI Japan Equity Women's Empowerment Index (WIN) and MSCI Japan Equity Women's Empowerment Index (WIN) Select
- Ranked first in VLSresearch's annual customer satisfaction survey, after ranking in the "10 BEST" for 32 consecutive years
- Received Environmental Human Resources Development Corporate Awards "Encouragement Award"



Publication Policy and Request for Feedback

Advantest's Integrated Annual Report 2020 includes comprehensive information on our ESG management, in addition to financial information such as business performance, sales activities, and our mid-term management plan. The first report was published in 2019, making the 2020 edition our second integrated annual report. We would deeply appreciate comments and feedback to help us make the 2021 edition even better.

Contact

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<https://www.advantest.com/contact>