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A Future for People and IT



Integrated Report 2022

Apr. 1, 2021 – Mar. 31, 2022

Long-Term Vision

A Company that offers a “Future for People and IT”

The IT infrastructure that supports society embodies the dreams and aspirations of many people, including our customers. At the same time, the very best systems embrace the strong will of engineers to realize people’s dreams and aspirations. To appreciate such thoughts, NSD aims to be a Company that offers a “Future for People and IT.”

NSD in Numbers*1

Established in 1969

Net sales	¥71.1 bn
Operating income	¥11.4 bn
Operating margin	16.0%
ROE	15.7%
Dividend payout ratio	52.3%
Total return ratio	86.3%
Employees	3,560
SE ratio*2	95.3%
Turnover ratio*3	2.9%

*1 The above figures are based on fiscal 2021 results.
*2 The ratio of system engineers to non-consolidated employees.
*3 The turnover ratio among non-consolidated employees.

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Editorial Policy

This integrated report touches on important financial and non-financial information while highlighting topics that we want to convey to shareholders, investors, and other stakeholders, so that they have a better understanding of the initiatives undertaken by the NSD Group to continuously enhance corporate value. For more information, please visit our website.

Reporting Period: April 1, 2021 to March 31, 2022
(This report includes some information pertaining to after the reporting period)
Reporting Scope: NSD Co., Ltd., and NSD Group companies

Disclaimer

This report is intended to provide information on the NSD Group’s efforts to enhance corporate value, and is not intended to solicit the purchase or sale of shares. Any forward-looking statements in this report, such as performance forecasts, are based on information available to the Group and the outlook at the time that this report was produced. NSD makes no promise that it will achieve these forward-looking statements which may also be subject to change without prior notice. NSD shall not be responsible for any damages resulting from the use of this report.

Growth Trajectory

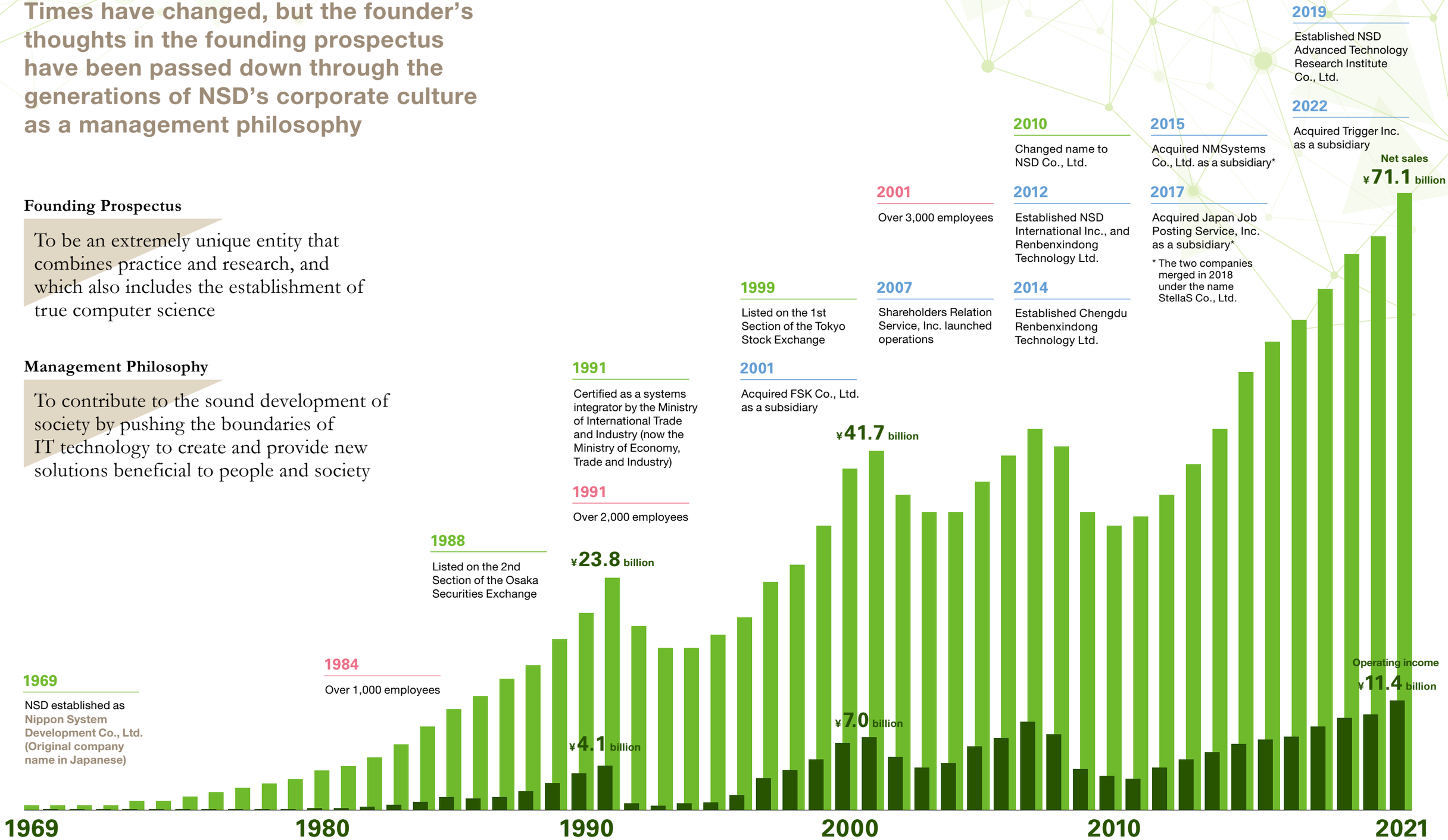
Times have changed, but the founder's thoughts in the founding prospectus have been passed down through the generations of NSD's corporate culture as a management philosophy

Founding Prospectus

To be an extremely unique entity that combines practice and research, and which also includes the establishment of true computer science

Management Philosophy

To contribute to the sound development of society by pushing the boundaries of IT technology to create and provide new solutions beneficial to people and society



* Figures for 1998 and earlier are non-consolidated figures.

President's Message

We will share the benefits of growth with all our stakeholders by steadily implementing the four basic strategies of the medium-term management plan.

Yoshikazu Imajo
President & CEO



Q. What is your view of the current business environment surrounding the NSD Group?

Responding to the demands for DX as an infrastructure company essential to society

In recent years, we have seen rapid advances in AI and other cutting-edge technologies, giving exponential growth to the boundaries of how information technology can be used. And in the past few years during the pandemic, as society as a whole has shifted to a new normal where working from home and contactless interactions have become ever more widespread, the role of IT has become increasingly important.

Until several years ago, IT played a role mainly in terms of improving the quantity and speed of existing operations, for example, improving business productivity or ease-of-use. In recent years however, advances in cutting-edge technologies, such as AI, have made it possible to solve problems in unprecedented ways, contributing to the development of society in qualitative terms, such as by creating new businesses and transforming lifestyles. Against this background, the radical change that is digital transformation (DX) has, as with the demands of the times, spread to every corner of society, so much so that IT is now deemed to be a critical infrastructure of society.

The NSD Group's management philosophy is to contribute to the sound development of society by pushing the boundaries of IT technology to create and provide solutions beneficial to people and society. Now that IT technology has advanced and the scope of its use has expanded and deepened, it is time for the NSD Group to contribute to the development of society more broadly. While leveraging our unique role and place in the world, NSD will seek to grow sustainably together with society.

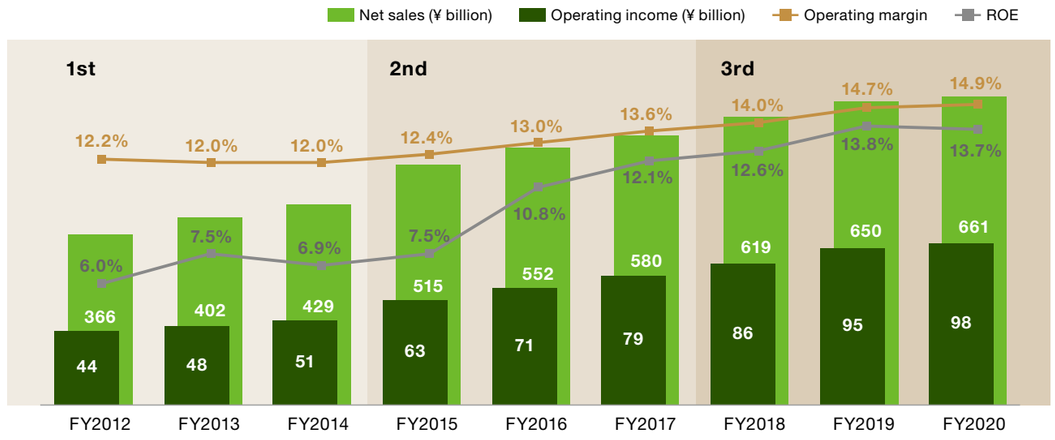
Q. How do you think the medium-term management plan has gone so far?

Achieving a lean profit structure and clarifying our intended business model

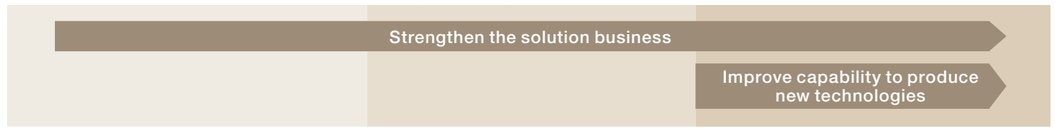
The current medium-term management plan (medium-term plan) is the fourth plan I have formulated as president of the Company. Looking back at the two medium-term plans from fiscal 2012 and fiscal 2015, as well as expanding and developing our mainstay system development business, we set out to strengthen our solution business, launching initiatives to build a second earnings base. We did this to take advantage of new growth opportunities stemming from the shift away from the age of system ownership to system utilization.

Also, under the previous medium-term plan from fiscal 2018, as the spread and expansion of cutting-edge technologies such as AI and IoT became more of a reality, we positioned strengthening new technological areas as a fresh measure, and defined the new technology domains of the system development business and the solution business as new core business, focusing on them as future growth drivers.

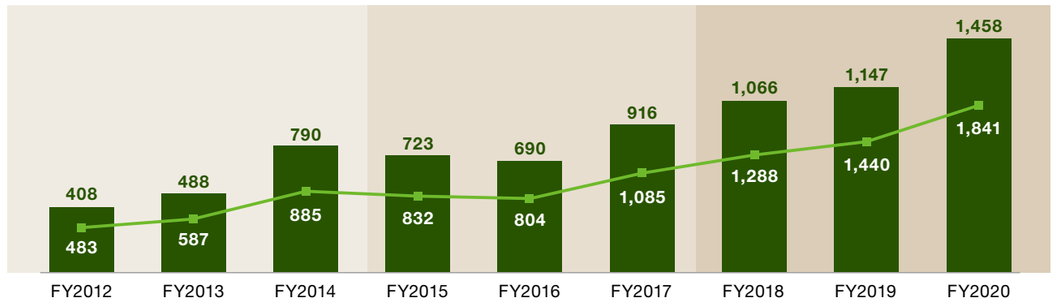
Performance trends (over the three medium-term management plans)



Key issues in the medium-term management plans



Evaluation from the market



*1 The Company implemented a two-for-one stock split on January 1, 2020. The stock prices before fiscal 2018 in the graph above show the amounts corresponding to one share after the stock split.
*2 Market capitalization is calculated based on the number of shares in circulation excluding treasury stock.

Through these three medium-term plans, although still not enough, we have been able to move away from the business model of NSD as just a contracted developer to one where the solution business forms the second pillar. And in the system development business, the direction we have taken of strengthening new technology domains has been widely communicated to everyone in the NSD Group. So, with these past three medium-term plans I believe we have been able to make our new business model and the direction we should be heading known to all.

In terms of business performance over the nine years of the three medium-term plans, net sales increased from 34.4 billion yen in fiscal 2011 to 66.1 billion yen in fiscal 2020, while operating income increased from 3.3 billion yen to 9.8 billion yen. Overall, we saw significant growth with net sales growing by 1.9 times and operating income 2.9 times. In addition to this quantitative growth, we were able to significantly improve our earning power with our operating margin increasing significantly from 9.8% to 14.9% and ROE up from 4.7% to 13.7%, creating a more lean profit structure.

The continued growth of these business results and the future potential of the IT business have been rated highly by the market with NSD's market capitalization having increased approximately fivefold from 29 billion yen to 145.8 billion yen.

Q. What are the aims of the current medium-term management plan?

Aiming to be a corporate Group with net sales over 100 billion yen

The current medium-term plan, which started in fiscal 2021, continues the direction of the previous plan while having the aim to be a Group with net sales exceeding 100 billion yen in five years time. To achieve this goal, or new stage of growth for the NSD Group, we need to improve the quality and quantity of the businesses that serve as its foundation. This is why we have formulated four basic strategies (page 9) in the current medium-term plan and are making every effort to achieve them.

NSD's strength in the system development business is that we can provide extensive and long-term support for the development of large-scale systems for our customers by leveraging our wealth of business knowledge. In the medium-term plan, we will further refine this strength, and in light of the accelerating need for DX, we will actively work on development in the domains of new technologies and DX to achieve sustainable growth in the system development business.

In addition, although the solution business continues to grow, we need to make further advances to achieve our goal of making it the second earnings pillar for the Company. This is why, in the current medium-term plan, we will not only strengthen sales of existing solutions, but also focus more on developing new solutions. The use of new technologies will play a part in this. With the NSD Advanced Technology Research Institute at its core, we have built a collaborative system with investment from customers to promote research and development into new technologies that meet the needs of various industries from a frontline perspective.

Under the current medium-term plan, the new technologies and DX-related system development business, as well as the solution business, have been defined as the two key areas for NSD. By concentrating our management resources, we intend to grow net sales 2.5 times from 18 billion yen in the final year of the previous medium-term plan to 45 billion yen in the final year of the current plan. To make this a reality, we not only need organic growth but we also need to look at M&A. During the period of the current medium-term plan, we plan to invest 20 billion yen into M&A. By doing so, we expect to further boost our solution business.

To achieve net sales of 100 billion yen, it is vital that we establish new core business as "real" core business so that we can reap the rewards gained through M&A. And as three years for our previous medium-term plans was thought to be too short, we have decided to extend the period for the current medium-term plan to five years.

Q. What is your assessment of the first year of the current medium-term plan?

Net sales, new core business net sales, and operating income all exceeded projections

Although business activities were somewhat limited due to restrictions on movement owing to the pandemic in



Overview of the medium-term management plan (FY2021–FY2025)

Basic strategies

Five-Year Goals

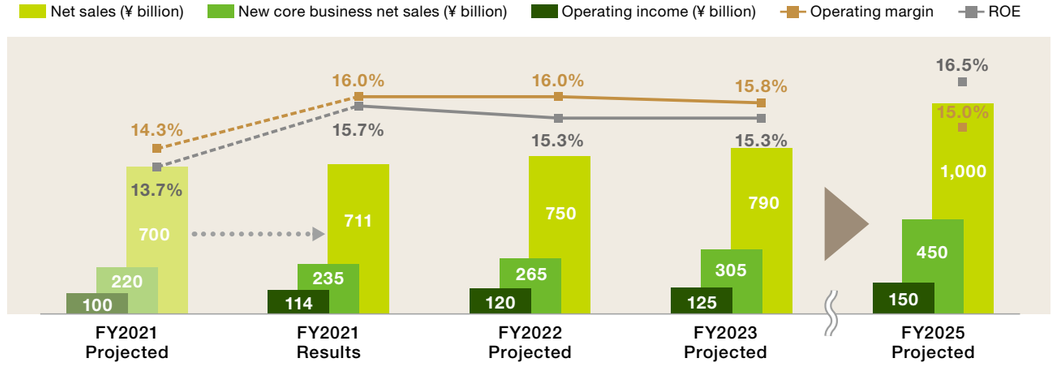
- To have a corporate Group of businesses with strengths in specific fields in multiple domains
- To have a corporate culture that adds a uniquely NSD touch to systems development
- To have a group of IT engineers who create business transformation together with our customers

- **(1) Achieve sustained growth in the system development business**
- **(2) Greater focus on new technologies and DX business to build up results**
- **(3) Expand size of the solution business into a second pillar of the Company**
- **(4) Stronger efforts for the SDGs and ESG**

Specific strategies

(1) System development	· Strengthen ability to win projects from customers and greater responsiveness in upstream processes to that end · Build up results in new technologies and DX business · Win new business in domains such as administrative digitalization by the government and 5G/6G · Secure the human resources needed to drive growth
(2) New technology and DX	· Develop AI products (e.g. location information solutions, image analysis, voice recognition), expand sales base, and speed up business development · Deepen collaboration and co-create with customers, expand outside networks in new technology field · Promote sharing of knowledge and expertise from across specialist departments to each division in the Company · Train engineers in new technologies and DX, expand training and incentive systems to add more engineers and improve their technical skills
(3) Solution business	· Accelerate expansion of business scale by acquiring existing products and brands through M&A · Further strengthen sales capabilities for HR products (ORDIA, JobSuite) and educational products (MANA BOX) · Develop and commercialize new services in the field of shareholder services · Accelerate the rollout of leading healthcare brand (CAReNA) in Japan and overseas
(4) SDGs/ESG	· Establish promotional organization within the Company · Formulate KPIs and build a system to routinely check their progress

Consolidated performance targets



the first half of fiscal 2021, during the first year of the current medium-term plan, the number of new infections dropped in the second half, bringing a return to a more normal business environment. In addition to the resumption of postponed projects there was active investment in new IT applications including DX. As a result, net sales, new core business net sales, and operating income all exceeded projections, marking a smooth start to the first year of the medium-term plan. In light of this overachievement, we made an upward revision to our targets in May 2022 for the second year of the plan and beyond.

In terms of strengthening our business structure, we set up the Advanced Technology Strategic Business Unit with the aim of strengthening our field of advanced technology. This business unit oversees the NSD Advanced Technology Research Institute, which is responsible for product planning, and the Advanced Technology Business Division, which is responsible for commercial development. Through close cooperation between both these pillars, we will accelerate our planning and development efforts.

In terms of performance, net sales were 71.1 billion yen, an increase of 5.0 billion yen from fiscal 2020. Of this, net sales in new core business increased by 5.5 billion yen year on year to 23.5 billion yen thanks to significant growth in the new technologies and DX-related systems development business, helping to serve as a driver for growth. As for profitability indicators, the operating margin was 16.0% and ROE was 15.7%, improving by 1.2 points and 2.0 points respectively from fiscal 2020, further improving profitability.

Q. What challenges do you face in achieving the medium-term plan and further growth in the future, and how will you overcome them?

NSD has three challenges: securing system engineers, developing self-starters, and accelerating solutions development

To achieve the goals of the medium-term plan, I believe the Company faces two challenges from a short- to medium-term perspective and one for medium- to long-term growth.

The first issue we need to resolve in the short to medium-term is securing system engineers. The shortage of system engineers in the IT industry has been apparent for several years, and dealing with this problem has become an increasingly important issue. Up to now, NSD has adopted a principle of hiring new graduates and has trained system engineers in-house. At present, as the business continues to expand at an ever greater pace, we are recruiting more mid-career hires who are able to be immediate assets for the Company, but we still need to increase employee numbers. In light of this situation, we have set up offices in regions other than where our main offices are located and have begun initiatives to recruit the best talent in those areas. For instance, we opened the Sendai Business Site in August 2022 and the Hiroshima Business Site in December. Finding system engineers this way through such a local recruitment drive has proved to be a powerful means of bolstering our workforce.

With the increasing number of people now working from home because of the pandemic, we have also seen issues in terms of training new employees. Communication, which is not normally a problem when it is face-to-face, can be difficult in a work-from-home environment. These difficulties in terms of communication especially when training new employees are a major stumbling block to learning, so it is vital to come up with more inventive training programs and on-the-job training to implement more effective personnel development measures as the circumstances dictate.

The second short- to medium-term challenge is to further accelerate the development and provision of new solutions. Many of the NSD Group's solutions are quite niche and we have a large share of these niche markets, but the scale of the market for each solution is not so great. This is why, in addition to steadily growing individual solutions, it is crucial that we seamlessly bring new products and services to market. As part of these efforts, the NSD Advanced Technology Research Institute (in charge of planning) and the Advanced Technology Business Division (in charge of development) mentioned above are working in lockstep. For example, as well as an active exchange of personnel between the two organizations, highly experienced employees from within the Group come together to pool their ideas and resources. In addition, we are actively looking at M&A as a means to develop new solutions and shorten our time to market.

The medium- to long-term issue for NSD is the development of human resources who are actively able to take on challenges. NSD's strength lies in our ability to accurately understand customer needs, combined with our wealth of business knowledge and technical capabilities required to meet these needs. As IT evolves day by day and the business environment undergoes major changes, and at an ever greater pace, it is vital that we have, in addition to our current strengths, human resources with autonomy who are able to demonstrate their creativity to generate new business. As mentioned earlier, the purpose of establishing the NSD Advanced Technology Research Institute and the Advanced Technology Business Division was to strengthen our ability to respond to new technologies. But not only this, by creating opportunities for engineers from both inside and outside the Company to interact, it was also hoped that a new culture of spontaneous business ideas and challenges for new technologies would be born. The NSD Advanced Technology Research Institute is now in its fourth year. I feel that our younger employees are gaining experience and that a free, more open-minded style of work is taking root. Going forward, I would like to expand this way of working to other business divisions, and incorporate the process of taking on challenges into our personnel assessment system.

Q. In recent years, non-financial initiatives such as sustainability and ESG have become the benchmarks by which corporate value is assessed. Please tell us about some of these initiatives.

Sustainability as the cornerstone of management

In recent years, we have seen more and more urgent and pressing issues. These include climate change, a so-called global climate crisis, and a falling working-age population due to both aging and declining populations in developed countries. Amid such circumstances, non-financial initiatives, or environmental, social, and governance (ESG) factors, are attracting attention as a means for companies to contribute to a sustainable society, and as an important management strategy that supports corporate growth over the medium to long term.

Based on our management philosophy, the NSD Group has contributed to sustainability through our corporate activities by creating solutions that contribute to the sound development of society. However, in light of the increasing urgency and severity of social issues related to sustainability, we have decided to further strengthen ESG initiatives as one of our basic strategies in the current medium-term plan, consolidating these ideas in our Sustainability Declaration.

Moreover, for NSD to effectively help build a sustainable society, we must promote initiatives that reflect our strengths, management issues, and industry characteristics from among a wide range of issues.

From this perspective, we have identified material issues for all ESG factors, environmental, social, and governance, and compiled and published our policies for addressing these issues, along with measures and target indicators, etc. In terms of initiatives on these material issues, we will not only solve the issues we face, for example, reducing power consumption, improving the working environment, and better governance, but as an IT company, I believe we need to solve the issues faced by our customers and society by providing solutions that make use of information technology.



Q. Finally, what message do you have for all NSD stakeholders?

Continuing to grow by contributing to a sustainable society

Now that IT has become a social infrastructure, I recognize that using the power of IT to meet the diverse needs of our customers is inseparable from resolving all the many different social issues.

By positioning our goal to help build a sustainable society as a medium- to long-term growth strategy, we will continue to solve each individual issue through dialogue with our employees, customers, shareholders, and investors, growing as a Company that offers a "future for people and IT."

Value Provided by the NSD Group to Society

Solving social issues with the power of IT by supporting smart living and DX in various industries

As an independent system integrator, NSD solves social issues by developing systems and providing solutions based on our business knowledge and technical capabilities built up over more than half a century.

System Development

Finance

Our main customers are banks, trust banks, insurance companies, securities companies, and credit card companies. We are supporting a wide range of operations, from core systems such as bank accounts and information systems to industry-specific systems such as systems to calculate insurance premiums and online trading systems for securities companies.



Service

We support a wide range of customers, from news organizations to schools and research institutes. For example, for news organizations, we are working on a system that provides full support for reporting work, from managing interview schedules to creating news reports and program progress charts, as well as a system that supports the reporting of elections and marathon races.



Manufacturing

We support customers in a wide range of fields, from electronics and automobiles to food and pharmaceuticals. We are supporting improvements in productivity in various production processes with product supply and demand systems that automatically calculate supply and demand forecasts by product, and production management systems that manage everything from production planning to parts procurement, manufacturing instructions, and cost accounting.



Telecommunication

Our main customers are major telecommunications carriers, from landlines to mobile phones. As well as being involved in the development of core systems such as contract management systems and billing calculation systems, we are also supporting the development of services that utilize cloud computing and apps, which are increasing against the backdrop of improvements in communication technologies such as 5G.



Transportation

Our main customers are airlines, railway companies and transportation companies. For airlines and railway companies, we are supporting general operations with reservation, maintenance, attendance management, and other systems, and for transportation companies, we are supporting operational efficiencies with systems that centrally manage the status of shipments and deliveries.



Public Organizations

Our main customers are central government agencies, local governments, and affiliated organizations. Utilizing our expertise cultivated through system development at many public agencies, we are supporting operational efficiencies by systematizing government offices and making modifications in line with system revisions, as well as providing a one-stop portal for administrative procedures.



NSD Strengths Supporting a “Future for People and IT”

1 Stable customer base

For more than half a century since our founding in 1969, NSD has worked on system development for many customers, including financial institutions, manufacturers, and social infrastructure companies. At the same time, we have built a relationship of trust with our customers and established a business model for receiving orders on an ongoing basis. These so-called “lifelong customers” can be said to be the Group’s greatest strength.

2 Outstanding technical capabilities

For over half a century, NSD has accumulated a wealth of business knowledge and expertise through the development of a wide variety of systems for many customers. In more recent years, we have been refining our ability to apply cutting-edge technologies such as AI, IoT, and robotic process automation (RPA) to business, with a focus on creating and providing solutions that solve business issues in collaboration with customers mainly at the NSD Advanced Technology Research Institute.

3 Human resources that inspire trust

At NSD we have around 3,000 highly specialized engineers who can meet the diverse needs of our customers, from individual consulting to mission-critical large-scale system development. We also develop our employees into true professionals by improving not only their technical capabilities but also their human capabilities. Having such employees helps to build relationships of trust with customers, creating a virtuous business cycle.

Solution

Human Resources

We provide a variety of solutions in the field of human resources, from recruiting new graduates and mid-career workers to employing dispatched workers. We provide solutions that support everything from recruitment marketing to selection progress management, as well as solutions that centrally manage the series of operations required for employing dispatched workers.



Security

In addition to designing and building secure network environments, we provide a variety of solutions that address security risks such as information leaks and unauthorized access. For example, as Japan moves away from PPAP, a common file-sharing method using password protection, we are helping to support this initiative by providing solutions that can safely transmit and receive large amounts of highly confidential data.



Healthcare

We provide solutions that support health and productivity management, as well as solutions that support highly specialized medical practice. With one smartphone, the remote health support service can perform everything from sending out health information to registering and checking data such as weight, blood pressure, and blood sugar levels, making it an ideal tool for health and productivity management.



The Use of Advanced Technology for the “Future of People and IT”

With the rapid trend toward digitalization, customer demands for the use of advanced technologies are growing. At NSD, we are working to meet the needs of our customers and solve social issues by developing solutions that utilize advanced technologies in collaboration with our customers. We are planning and developing next-generation products tailored to the market based on careful marketing research, as well as the fundamental technologies we have researched to date, such as natural language analysis, image analysis, and voice analysis.



Value Creation Process

NSD aims to build a sustainable society and continuously improve corporate value by using IT to solve various social issues that arise as a result of changes in the external environment

External Environment

- Worsening climate change problem
- Evolution of IT technology
- Lack of IT human resources
- Greater cyber risks
- Fall in working-age population due to declining birthrate and aging population
- More diversity

Materiality

Environment
Reducing impact on global environment

Society
Contributing to the development of society using the power of IT

Creating a workplace where diverse human resources can thrive with job satisfaction

Governance
Strengthening the foundation for the Company's existence

Management Resources

People
- Professional human resources
- Opportunities to take on challenges
- Comfortable working environments
- Trustworthy business partners

Technology & Expertise
- Extensive business knowledge and expertise
- Advanced technology expertise and application capabilities
- Solid management system

Customer Base
- Solid customer base consisting of diverse industries and business categories
- Co-creation in advanced technology fields

Finance
- Strong financial base
- Stable cash flow

Management Philosophy

The NSD Group contributes to the sound development of society by pushing the boundaries of IT technology to create and provide new solutions beneficial to people and society, while viewing coexistence and co-prosperity with employees, customers, and shareholders as the very essence of our corporate activities.

Vision A Company that offers a "Future for People and IT"

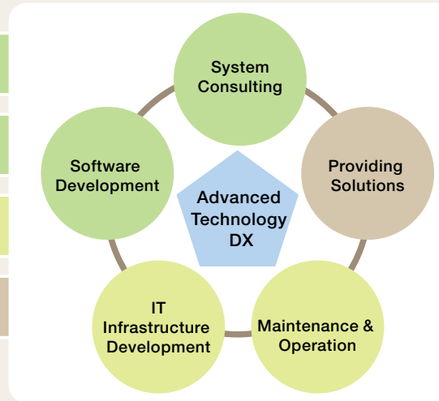
Business Strategies

- Sustained growth in the system development business
- Expand advanced technology and DX-related businesses
- Make the solution business a second pillar of the Company

Effective use of M&A

Business Activities

- Financial IT » P.21
- Industry & Infrastructure IT » P.22
- IT Infrastructure Construction » P.23
- Solution Business » P.24



Foundation to Support Sustainable Growth

- Human Resource Management
- Supply Chain Management
- Governance

Value Provided to Society

Creating Economic Value

- Net sales: ¥71.1 billion
- Operating income: ¥11.4 billion
- Net income attributable to owners of the parent: ¥7.8 billion
- ROE: 15.7%

(Fiscal 2021 results)

Creating Social Value

Employees
- Growth and career development
- A healthy and rewarding work environment

Customers
- Sustained growth
- Innovation

Business Partners
- Value creation through co-creation
- Fair and equitable transactions

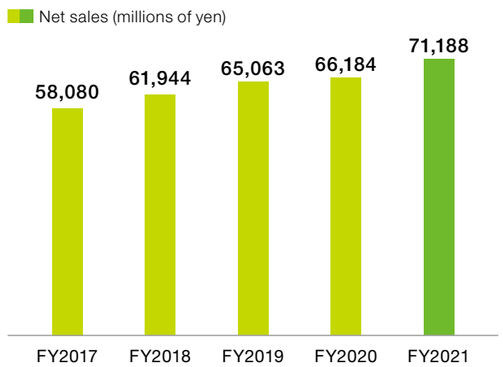
Shareholders
- Improvement and return of shareholder value
- Highly transparent information disclosure and dialogue

Communities
- Solutions that support social infrastructure
- Employment opportunities

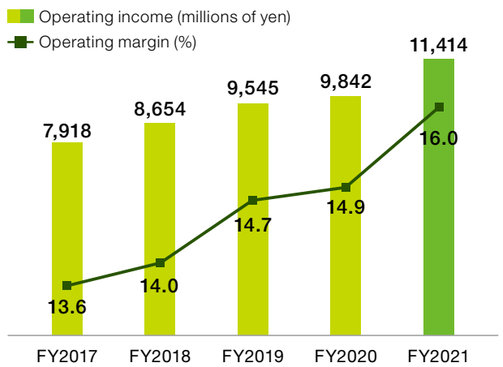
Financial and Non-Financial Highlights

Financial Indicators

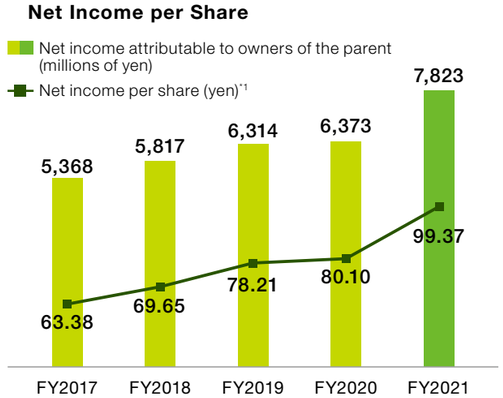
Net Sales



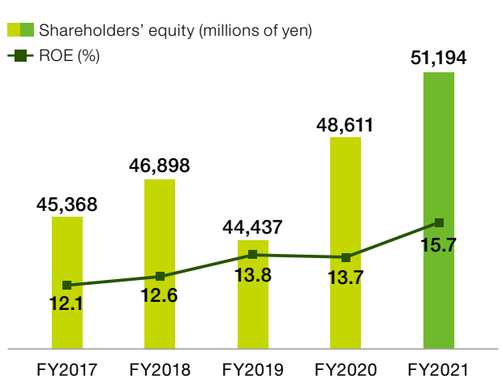
Operating Income / Operating Margin



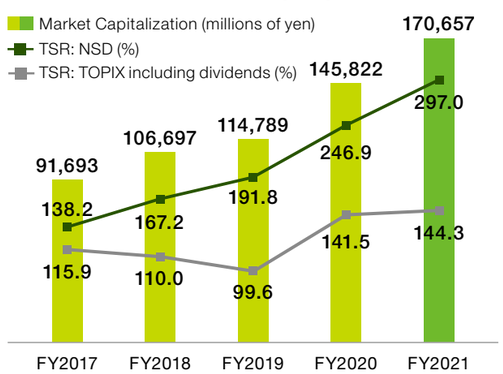
Net Income Attributable to Owners of the Parent / Net Income per Share



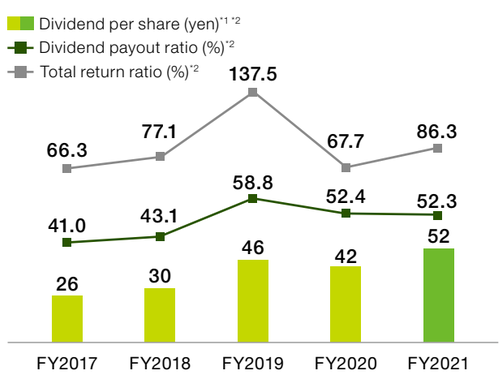
Shareholders' Equity / Return on Equity (ROE)



Market Capitalization / Total Shareholder Return (TSR)



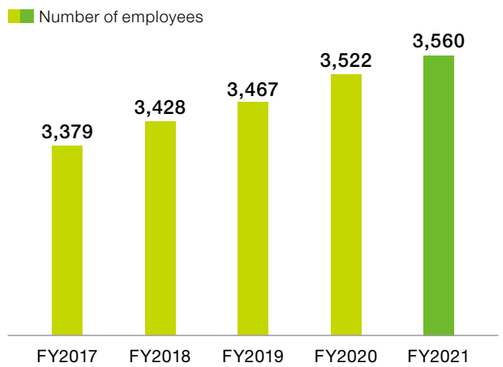
Shareholder Returns



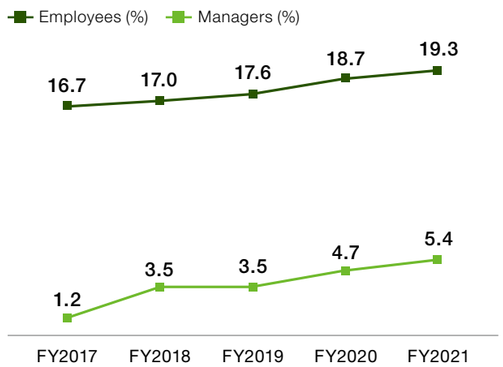
*1: Per share indicators are based on the number of shares after the Company's stock split executed on January 1, 2020.
*2: Fiscal 2019 indicators are calculated to include the Company's 50th anniversary commemorative dividend (14 yen per share).

Non-Financial Indicators

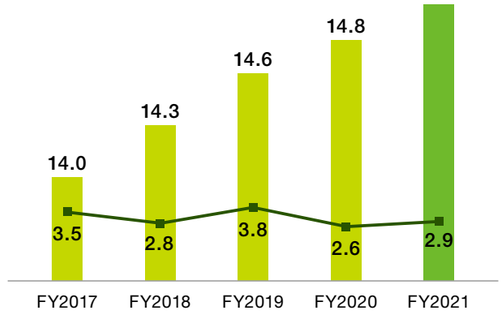
Employees



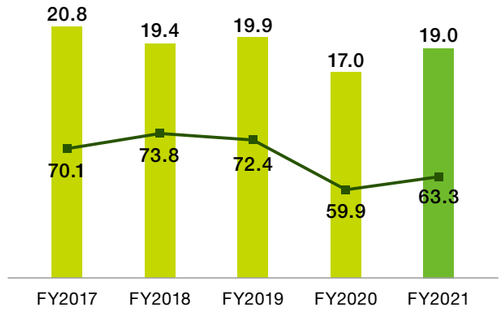
Female Ratios



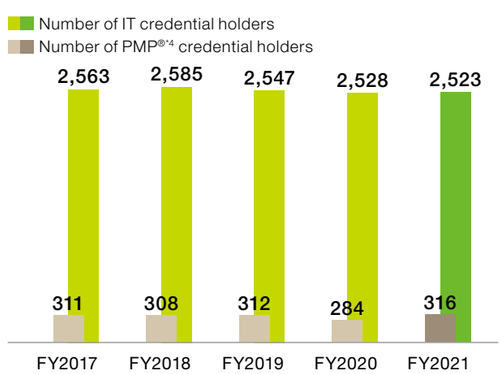
Average Years of Service / Turnover Ratio



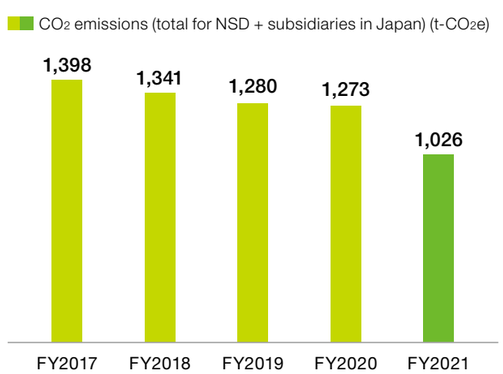
Average Monthly Overtime Hours / Ratio of Paid Vacation Days Taken



Number of Employees with IT Credentials



CO_2 Emissions



*3: Calculated excluding mandatory retirements and persons using the Company's early retirement incentive program.
*4: Project Management Professional (PMP)® is a registered trademark of the US-based Project Management Institute.

Core Business of the NSD Group

Helping customers to strengthen international competitiveness using IT and other new technologies



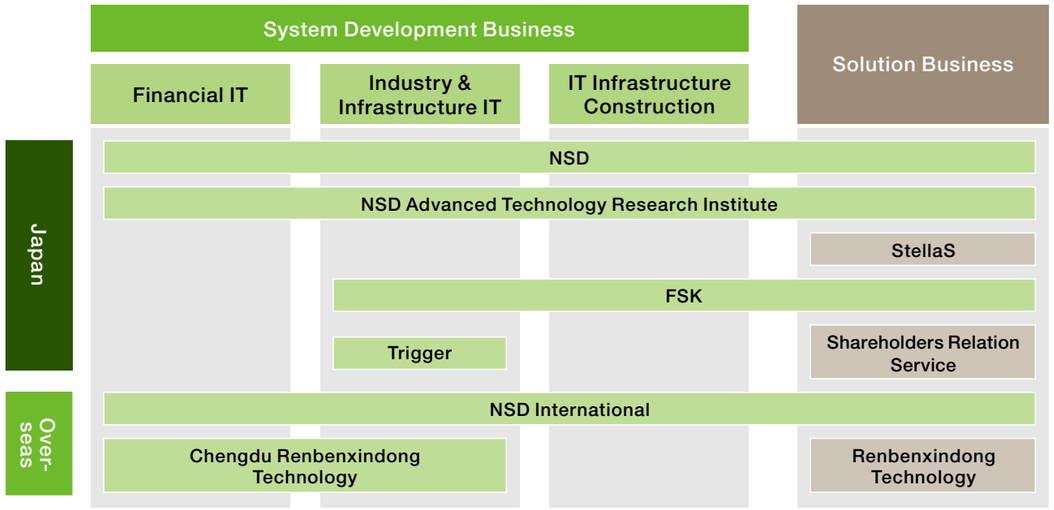
Osamu Yamoto
Director,
Senior Managing
Executive Officer
COO

Since its founding, NSD's core business has been system development. With a strong customer base, NSD has grown by supporting customers' business operations with the power of IT. Currently, we are working to make the solution business our second pillar of the Company, after the system development business, in order to strengthen and stabilize our management base.

In recent years, corporate in Japan is facing the important tasks of promoting in DX and redeveloping legacy systems to ensure its survival in international markets. Moreover, IT is considered a promising solution to Japan's declining working-age population resulting from the country's changing demographics. For this reason, there are growing expectations and demand for IT. Amid this, NSD commands its extensive operational knowledge gained through long-standing relationships with customers and its ability to incorporate advanced technology and other IT into practical business settings with the aim of helping customers to strengthen their international competitiveness with IT as well as achieving sustainable growth together with customers.

In our medium-term management plan running from fiscal 2021 to fiscal 2025, we have defined the system development business related to new technology and DX and the solution business as our new core business. We are now working to expand these businesses quantitatively and enhance them qualitatively. As for the system development business related to new technology and DX, the Technology & Process Support Department and Advanced Technology Business Division support development departments not only from technical aspects but also exploring innovation in development processes to strengthen development capabilities using new technology as a company-wide effort. In the solution business, the NSD Advanced Technology Research Institute and the Advanced Technology Business Division identify customer needs in terms of advanced technology through collaboration, promote planning and commercialization of new solutions, and expand our product lineup.

Through these efforts, our financial performance in fiscal 2021, the first fiscal year of the medium-term management plan, was commendable. Driven by the growth of this new core business, net sales reached 71.1 billion yen, compared to the forecast of 70 billion yen, and operating income totaled 11.4 billion yen, compared to the forecast of 10 billion yen. Looking ahead, we will refine our IT capabilities, including in advanced technology, and further enhance NSD's value by contributing to customers' sustained growth.



System Development Business

We provide comprehensive system services based on customer needs, from system planning and design to development and operational support post installation. Furthermore, our system development business comprises the three segments of financial IT, industry & infrastructure IT, and IT infrastructure construction.

Financial IT

We provide software development and system consulting mainly for financial services customers, such as banks, insurers, and securities companies.

For customers in banking, we provide continuous development and maintenance of IT systems, information systems external connection systems, and market systems focused on accounting. For insurers and securities companies, we offer extensive development and maintenance services, from core systems to peripheral systems.

This segment continues growing as one of NSD's core businesses, harnessing our strength of operational knowledge and expertise underpinned by our long-standing relationships with customers.

Industry & Infrastructure IT

We provide software development and system consulting to customers in a wide range of industries, including manufacturing, telecommunications, transportation, and the public sector.

We have long-standing relationships with customers in the telecommunications, transport, and electricity and gas sectors supporting social infrastructure. We understand the core business processes unique to each industry and develop software supporting the very heart of business while sharing our customers' vision and management strategies.

We also maintain long-standing relationships with customers in the manufacturing and services industries. This enables us to address customer needs using proposal and technical capabilities based on our wealth of experience.

IT Infrastructure Construction

We provide one-stop services for IT infrastructure and networks construction, system consulting, and system maintenance and operation to a broad range of customers, including financial institutions and the public sector.

Centered on cloud technology, we offer a host of products and services utilizing our strength as an independent systems integrator, spanning from various branded servers to storage, network equipment, the latest operating systems, and middleware. We help customers to build out their infrastructure environment by resolving various cost issues while ensuring the highest level of quality.

Solution business

Using technological development capabilities honed in software development, we develop and provide proprietary software products from the standpoint of resolving business and social issues.

We offer an extensive lineup of solutions, from highly ubiquitous security software to packages for specific industries and healthcare solutions.

In recent years, we are also focusing on development of solutions using advanced technology. We are working to plan and develop next-generation products tailored to the market based on careful marketing research, as well as the fundamental technologies we have researched to date, such as natural language analysis, image analysis, and voice analysis.



Business Strategy by Segment: System Development Business

Supporting the acceleration of DX in society based on understanding of various customers' operations

We are working to resolve customers' challenges by utilizing our operational knowledge and expertise built up through many years of business dealings with customers since our founding. In recent years, we are using advanced technology to address the new needs of customers with the power of IT tailored to changes taking place today while maintaining legacy assets.

Strengths in System Development Business

- In-depth operational knowledge and expertise gained from many years of business dealings with customers in a number of industries and sectors
- Ability to apply AI, IoT and other advanced technology in actual business settings
- Around 3,000 engineers with advanced expertise
- Solid customer base centered on major blue-chip companies

Opportunities / Risks

Opportunities

- Growing need for next-generation systems following acceleration of DX in society
- Advancements in innovation driven by 5G / 6G
- Growing investment in labor saving and automation solutions amid Japan's declining working-age population

Risks

- Tougher competition in the DX market
- Price reduction in downstream processes of software development
- Shortage of open system engineering talent

Basic Strategies

Achieve sustainable growth of the system development business by adapting to changes in the operating environment

Specific Strategies

- Strengthen ability to win projects from customers, and greater responsiveness in upstream processes to that end
- Build up results in new technologies and DX business
- Win new business in domains such as administrative digitalization by the government and 5G/6G
- Secure the human resources needed to drive growth

Financial IT

Segment Overview

We provide software development and system consulting for financial services customers, such as banks, insurers, and securities companies.



Main examples of development

- Banking: accounting systems (deposits, forex, lending, etc.) and information systems (customer information file and anti-money laundering)
- Trust: pension management systems and securities agency systems
- Securities: online trading systems and order-taking systems
- Insurance: policy management systems and sales support systems
- Credit cards: credit information management systems and e-commerce payment systems

Vision in the Medium-Term Management Plan

- **Accurately respond to the diverse needs of customers from legacy systems to systems that utilize new technology, and further deepen our business relationships**

In recent years, the banking system has been transitioning to next-generation systems, giving rise to strong demand for reconfiguring legacy systems into more flexible systems.

NSD has many years of experience developing and maintaining key customer systems and understands every aspect of these systems.

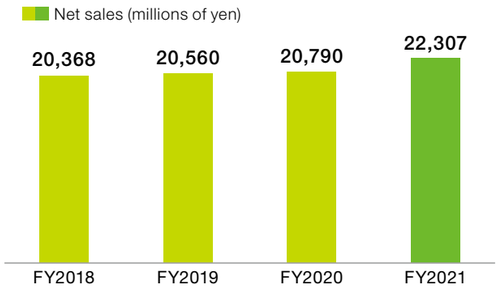
In addition to this knowledge, we will support customers' DX and further deepen our relationships by focusing on development of engineers who can handle open system development from upstream processes, such as new development environments, method designs, and framework studies.

FY2021 Results

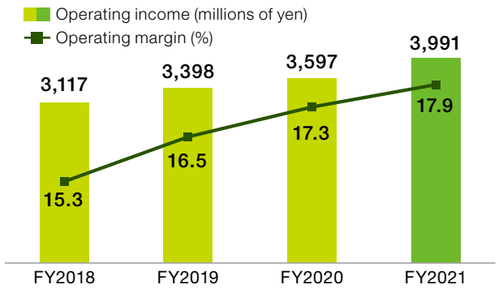
In fiscal 2021, segment net sales increased 7.3% year on year to 22,307 million yen and operating income rose 11.0% to 3,991 million yen.

Sales for insurance companies declined as large-scale projects peaked, but sales and profits for the Financial IT segment as a whole increased as a result of a steady expansion in orders from major banks and credit card companies, partly due to the renewal of core systems, including next-generation accounting systems, and the resumption of projects that had been postponed due to the pandemic.

Net Sales



Operating Income / Operating Margin



Industry & Infrastructure IT

Segment Overview

We provide software development and system consulting to customers in manufacturing, telecommunications, transportation, and the public sector.



Main examples of development

- Service: election reporting system
- Transportation: operations plan management system
- Manufacturing: product supply-demand management system
- Telecommunication: calling rate management system
- Commerce: order management system
- Electricity: power rate management system
- Construction: design management system

Vision in the Medium-Term Management Plan

- **Improve response capabilities to new technology and DX projects by working with the Advanced Technology Strategic Business Unit**
- **Increase orders in new fields utilizing 5G / 6G**

In the industry & infrastructure IT segment, we do business with customers in a wide range of industries, and there is growing demand for new technology and DX across all these industries.

At NSD, the Advanced Technology Strategic Business Unit is exploring innovation in the development of new technology and DX. It is also improving responsiveness of our software development by sharing technologies within the company horizontally and vertically. In addition, we will focus on training open system engineers to meet the various needs of our customers.

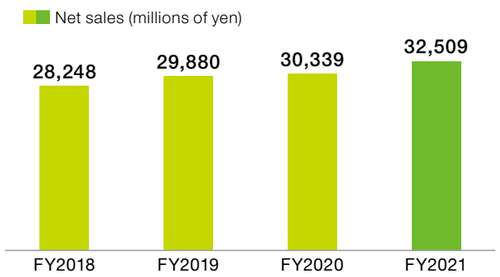
As the need for services that address large capacity and low latency utilizing 5G and 6G technology is expected to increase in the future, we will improve our expertise and technology related to telematics services with the aim of increasing orders in new fields.

FY2021 Results

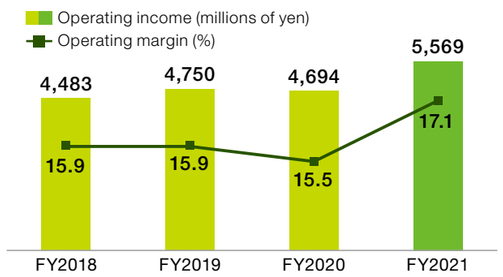
In fiscal 2021, segment net sales increased 7.2% year on year to 32,509 million yen and operating income rose 18.6% to 5,569 million yen.

Sales for the electricity, gas and water sector declined as large-scale projects peaked, but sales and profits for Industry & Infrastructure IT as a whole increased as a result of steady expansion in orders in the manufacturing, service and transportation sector due to greater appetite for IT investment and orders from new customers.

Net Sales



Operating Income / Operating Margin



IT Infrastructure Construction

Segment Overview

We provide services for IT infrastructure and networks construction, system consulting, and system maintenance and operation to a broad range of customers, including financial institutions and the public sector.



Main Services

- Planning and procurement: consulting services and IT Infrastructure service sales support
- Design, construction, and implementation: design and build-up support of cloud, platforms, networks, storage, virtualization infrastructure and security, and application development support
- Operation and maintenance: system management and maintenance services, system operation services, life cycle management services, and help desk services

Vision in the Medium-Term Management Plan

- **Foster technical skills and talent mobilization leading non-functional requirements mainly using cloud technology**
- **Expand new business to help companies transit away from legacy systems and promote government digitalization**

The key to sustainable growth in the IT infrastructure field is improving our responsiveness to virtualization technology, cloud use, operation automation, and other technologies following the needs of today. We will cross-functionally share knowledge and expertise with the Advanced Technology Strategic Business Unit and the NSD Advanced Technology Research Institute to enhance our technical skills and mobilization capabilities.

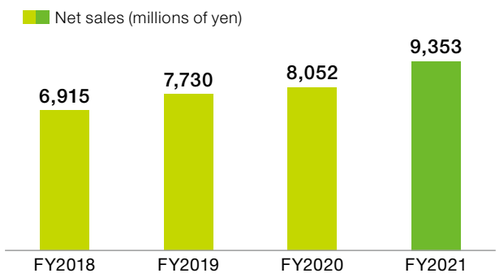
In addition, there is a growing movement by companies to break away from legacy systems and by government to promote digitalization. This necessitates response to non-functional requirements such as security and scalability on a different level than before. To make the best proposals for these requests, we will focus on improving our consulting capabilities in addition to enhancing our technical skills as mentioned above.

FY2021 Results

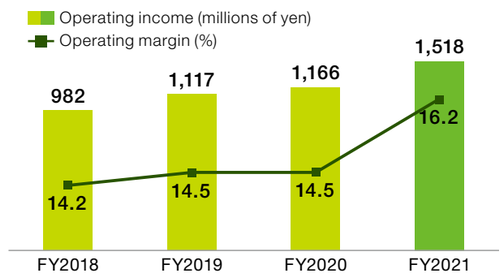
In fiscal 2021, segment net sales increased 16.2% year on year to 9,353 million yen and operating income rose 30.1% to 1,518 million yen.

Sales and profits increased as a result of steadily linking orders to breaking away from legacy systems and responding to digitalization such as infrastructure construction projects for government agencies and cloud projects for banking, insurance, and securities. The segment also saw an increase in orders for business process outsourcing projects from local governments.

Net Sales



Operating Income / Operating Margin





Business Strategy by Segment: Solution Business

Offering solutions unique to NSD that address both business and social issues

Using technological development capabilities honed in software development, we develop and provide proprietary software products from the standpoint of resolving business and social issues.
We offer an extensive lineup of solutions to resolve customer challenges, from highly ubiquitous security software to packages for specific industries and healthcare solutions.

Strengths in the Solution Business

- Wealth of technical skills gained from software development
- Ability to apply AI, IoT and other advanced technology in actual business settings
- Ability to gain insight into customer needs using a solid customer base

Opportunities / Risks

Opportunities

- Growing appetite to invest in solutions driven by the acceleration of DX in society
- Rising demand for security solutions amid growing cyber risks
- Increasing health awareness as the population ages

Risks

- Tougher competition and lower prices caused by the emergence of competing solutions
- Greater competition to acquire advanced IT talent

Basic Strategies

Expand size of the solution business into a second pillar of the Company

Specific Strategies

- Accelerate expansion of business scale by acquiring existing products and brands through M&A
- Further strengthen sales capabilities for human resource-related products (ORDIA, JobSuite) and education-related products (MANA BOX)
- Develop and commercialize new services in the field of shareholder services
- Accelerate the rollout of leading healthcare brand (CAReNA) in Japan and overseas

Solutions

Human Resource Solutions

JobSuite

One-stop solutions in human resources

We provide a number of one-stop solutions in human resources, from creation of recruitment websites and recruitment marketing using advertisements to progress management involving the selection of new graduate and mid-career recruits.

ORDIA

Core business management solutions exclusive to staffing services

Linking with a variety of peripheral systems, we support companies with staffing management and progress management of recruitment unique to their industry, along with attendance and salary management tailored to various employment contract types, all as a one-stop solution.

Logistics Solutions

MIMERIT

Business warehouse management solutions for inventory control and billing

We assist companies with detailed management functions such as individual product identification and traceability required for quality assurance.

Rental Business Support Solutions

i-Rent Plus

Rental business solutions compatible with various business conditions and sizes

Our solutions feature functions tailored to each industry, from streamlining daily operations such as billing to managing inventory levels and transactions and analysis functions.

Shareholder Benefit Program Services

GoodP

Complete outsourcing services for shareholder benefits programs

We provide a complete lineup of support required to implement a shareholder benefits program, including program planning, provision, administrative tasks such as ordering products for shareholders, and handling inquiries from shareholders.

Security Products

eTransporter

Secure file-sharing system

The system ensures large files and highly confidential information can be sent and received securely. It can also be linked with email, encryption, and traceability solutions, supporting customers not only with file transmission, but also additional value-added functions.

Medical and Healthcare Solutions

CAReNA

Remote health support service using smartphone app

We provide a health and productivity promotion platform via smartphone app covering all aspects, from implementation of health measures for all employees to health guidance to individuals using medical fitness.

GluKetto

Service using visualization of blood sugar trends to improve living habits

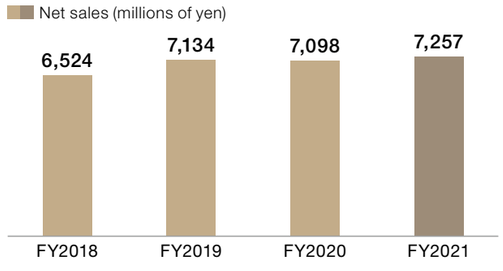
This service records a person's daily blood sugar levels using a measurement device to visualize the relationship with living habits. It informs users about how blood sugar readings are affected by their daily eating routine to support them in making changes and improving their living habits.

FY2021 Results

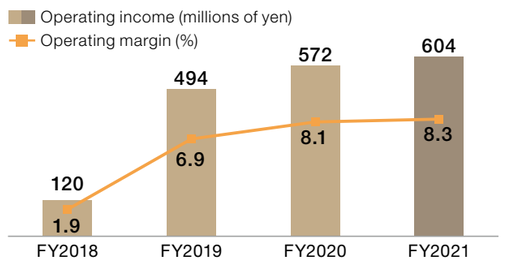
In fiscal 2021, segment net sales increased 2.2% year on year to 7,257 million yen and operating income rose 5.5% to 604 million yen.

The segment posted higher sales and profits owing to steady sales of human resource solution ORDIA and sales growth of security products in response to the move away from PPAP, a common file-sharing method using password protection, which offset decreased sales in shareholder benefits services owing to the adoption of new accounting standards for revenue recognition and the recoil from hardware upgrades for local governments in the previous fiscal year.

Net Sales



Operating Income / Operating Margin



Special Feature

The Future Ambitions of the NSD Group's Research of Advanced Technology

With the rapid speed of innovation in advanced technology including AI, IoT, data analysis, cloud computing, augmented reality (AR), virtual reality (VR), and blockchain, today, the world requires further improvements in productivity and business model transformation brought about by digital transformation (DX). The NSD Group is promoting such transformation alongside its customers, focusing on research of advanced technology with an eye on five and ten years down the road. Mr. Hidetaka Kikawada, who heads up the NSD Group's research and development of advanced technology, below discusses more about the Group's current situation and future.



Hidetaka Kikawada

Director and Managing Executive Officer, NSD Co., Ltd.
Head of Advanced Technology Strategic Business Unit
In charge of Market Development Business Division
In charge of Social Platform Division
President & CEO, NSD Advanced Technology Research Institute Co., Ltd.

Our Research of Advanced Technology to Date

Aiming for Grounded Research on Advanced Technology Together with Customers

Before I talk about the NSD Group's initiatives and outcomes in advanced technology, I would like to begin by discussing our approach to and structure for research and development.

First, NSD's success over the past half a century has been made possible by our constant focus on the customer and our efforts to work alongside customers in enhancing technology, expertise and quality. Today, the Group's workforce has grown to some 3,500 employees, but our fundamental approach to research and development remains unchanged. Of course, the needs of our customers and technology, however, have become even more sophisticated over the years. Especially recently, the pace of innovation in advanced technology symbolized by AI is speeding up, making business model transformation driven by DX a vital component of companies' future growth prospects. Amidst this, to promote business using a wide range of advanced technologies, it is important to ensure that we have the prevailing technological knowledge and competence to turn this knowledge into reality for our customers. Therefore, in 2017 when the social implementation of AI first began in earnest, NSD established the AI Utilization Promotion Office and initiated its efforts to gather information and conduct research on advanced technology. NSD Advanced Technology Research Institute Co., Ltd. was established in 2019 after this office was spun off into a standalone company.

A major characteristic of the NSD Group's research and development is identifying advanced technology themes for commercialization in several years' time and then carrying out R&D from investigative research to solution provision through the corporation of the NSD Advanced Technology Research Institute, with its research function, and NSD's Advanced Technology Business Division, which promotes commercialization focused on development. General R&D sometimes begins from basic research on elemental technologies with a time horizon of 10 to 20 years in the future. In the case of the NSD Group, we consider research and development as one approach to increasing the future value of customers, as has been the case throughout our history.

Additionally, to achieve this objective, the NSD Advanced Technology Research Institute has established a unique business structure unlike any other company. We engage in R&D through partnerships with customers harnessing our strength of long-lasting relationships of trust with major corporations in each industry. Of course, we have our own proprietary R&D, too. Essentially, we work with investee companies to focus on applied research underpinning solutions to management issues and future concepts. This entails grounded research of advanced technology benefiting actual business operations while carefully exploring the usefulness of each advanced technology in-house. To further speed up our advanced technology initiatives, NSD established the Advanced Technology Strategic Business Unit in October 2021, further strengthening collaboration between the Advanced Technology Business Division and the NSD Advanced Technology Research Institute.

Our Current Research of Advanced Technology

Creating Myriad Outcomes through Co-Creation with Partner Companies

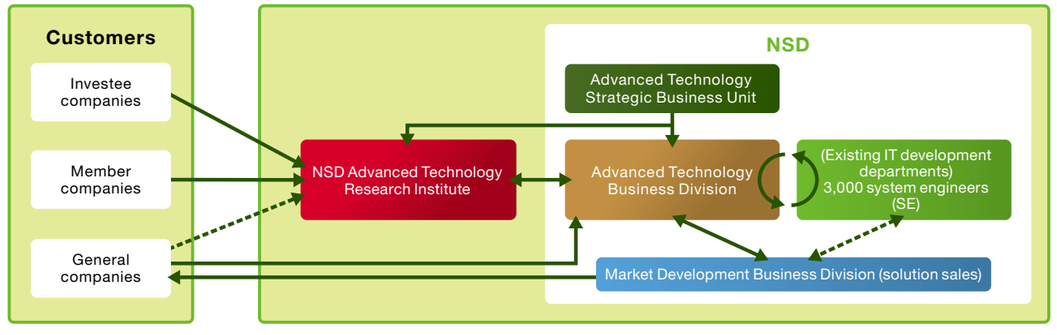
Regarding research outcomes to date, the NSD Advanced Technology Research Institute is now in its fourth year since inception and it has already achieved solid progress in the form of products and services now in use around the world; not to mention its involvement in an increasing number of demonstration experiments. The themes of advanced technology are expanding outward to include AI-driven image analysis, natural language analysis, user interface (UI), AR, VR, and blockchain. In terms of analysis systems powered by AI, we are developing our own algorithms based on the characteristics of machine learning for each customer issue. Also, we are pursuing speed and scalability in the development and operation of IT systems harnessing agile development and microservice architecture.

Within these activities, we receive many customer needs in image analysis and natural language analysis, and we have established a strong level of technology, expertise, and knowledge. The use of technology where work processes involving visual confirmation with the naked eye, such as movements of goods and people in the factory, product finishing, people's expressions during interviews, are switched over to camera footage for analysis using a proprietary AI algorithm is set to grow going forward.

These solutions are made possible by core technologies established through our own proof of concept (PoC). We also on occasion establish research themes based on ideas gained from the challenges facing customers. During the commercialization process, the NSD Advanced Technology Research Institute works with the Advanced Technology Business Division to provide solutions unique to the NSD Group and adopt methods based on teamwork with customers as partners. In recent years, the number of joint research projects is also on the rise. We greatly value co-creation sharing our technology, knowledge, and expertise with partners.

In terms of outcomes, even in collaboration between the NSD Advanced Technology Research Institute and the Advanced Technology Business Division, we are making greater progress with personnel

Structure of Actions for Advanced Technology



Investee companies
Internetworking & Broadband Consulting Co., Ltd. (IBC), Iwatsu Electric Co., Ltd., Nippon Telegraph and Telephone West Corporation, Signpost Corporation (in alphabetical order)

Member companies
JR Kyushu System Solutions Inc., Konoike Transport Co., Ltd., Lenovo Enterprise Solutions LLC, Lenovo Japan LLC, Marubeni Corporation, Marubeni Information Systems Co., Ltd., T&D Information System Ltd. (In alphabetical order)

exchanges than expected and have sped up development by combining each other's technologies. For example, in response to IT modernization* issues faced by customers of the Advanced Technology Business Division, the NSD Advanced Technology Research Institute retains an extensive collection of elemental technologies useful as possible solutions. Personnel exchanges between the two organizations help to speed up solutions to customers' modernization issues. This collaborative process also increases the technical skills and expertise of employees of the Advanced Technology Business Division, while employees of the NSD Advanced Technology Research Institute are able to gain a keen sense of customers' needs and cultivates their insight of frontline operations. As a result, the NSD Group has been able to create this positive cycle, giving rise to a greater ability to address modernization issues.

* Modernization: Revamping aging legacy systems based on current needs. This is an important action considered the first step for companies to achieve DX.

Examples of Technology and Research

Image analysis
Object (kinetic) detection analysis
Identification of uniqueness

UI, VR, AR
Voice and gesture UI
Utilization of VR and AR, etc.



Natural language analysis
Voice and sound analysis
Speaker identification and word vectoring

Other fields
Blockchain

Examples of Commercialization Solutions

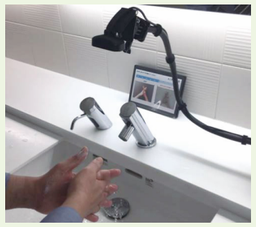
Tracking Navi

Tracking Navi visualizes people's movements in factories and other facilities. This applied solution combines the autonomous navigation technology of the National Institute of Advanced Industrial Science and Technology (AIST) with NSD's weight reduction technology. It analyzes people's movements in real time to create more productive work floor layouts and determine work procedures. Since it does not require large numbers of sensors, Tracking Navi has earned a strong reputation from customers for its reduced maintenance and cost performance.



TeA-L/Right

TeA-L/Right helps to promote correct handwashing practices. It uses AI to analyze handwashing to determine whether they are using the correct procedure and methods. It keeps handwashing records, which can be used as proof for hygiene control checks or comparison with work performance. Since it can also determine compliance with a customer's specific handwashing procedure and methods, TeA-L/Right can be used in a number of settings requiring strict handwashing practices, such as food factories and restaurants.



Solution Supporting Meeting Minutes Preparation Process (to be announced soon)

Using voice recognation technology and speaker identification technology, this solution can transcribe the spoken words of each speaker into text and also insert bookmarks at important junctures of the voice file using one stamp, making it easier to prepare meeting minutes and review the details of a meeting. The system is also convenient since only the minute taker needs to install the app. It can be used to transcribe text for both in-person and online meetings, ensuring compatibility with any work style.





NSD's advanced laboratory

The Future of Our Research of Advanced Technology

Accelerating Commercialization and Human Resource Development, Paving the Way for NSD's Technology in the Future

Our future measures can be found in the "new technology and DX" section of our current medium-term management plan.

- **Develop AI products (e.g. location information solutions, image analysis, voice recognition), expand sales base, and speed up business development**
- **Deepen collaboration and co-create with customers, expand outside networks in new technology field**
- **Promote sharing of knowledge and expertise from across specialist departments to each division in the Company**
- **Train personnel in new technologies and DX, expand training and incentive systems to add more personnel and improve their technical skills**

When it comes to number one, development of AI products, we hope to release a constant stream of unique NSD solutions such as Tracking Navi and TeA-L/Right. Additionally, we are making progress with the planning and development of solutions proposing new ways of utilizing AI, and we hope to release these during the period of the current medium-term management plan.

As for number two, collaborate/co-create and expand outside networks in new technology fields, we intend to respond flexibly by constantly opening the door to new possibilities with not only existing partners, but IT venture companies as well. For example, we are hosting personnel from the research fields of AIST.

In regard to number three, sharing knowledge and expertise internally, we are working to step up collaboration between NSD Advanced Technology Research Institute and business divisions within NSD, such as the Financial Business Division, the Social Infrastructure Business Division, and the Industrial Business Division. Although unrelated to this sharing, customers have applauded our efforts to share technology, knowledge, and expertise through personnel exchanges with partners as I mentioned earlier, and we intend to continue these arrangements to further enhance the continuity of our research activities.

As for number four, develop and train human resources and expand incentives, we will further enhance recruitment and development of talent from the standpoint of strengthening our management base. The NSD Advanced Technology Research Institute continues to hire graduate students with research experience in AI. With three to four years of practical experience, they have demonstrated the ability to deliver exceptional results. In research for commercialization, we sometimes co-create with customers, which I believe is a great motivator for our employees. To ensure that we can quickly provide the right answer to the required solutions, we will focus on building up our work environment where our employees can gain various types of experience. As for incentives, too, we will explore and implement the best framework for increasing employee motivation and satisfaction.

Unlike NSD's existing businesses, our culture starts from investigative research and development and our team has many younger employees, so I feel that our culture is symbolized by a free spirit where people speak their minds and actively engage in discussion. As our people bring this culture to the other 3,500 employees of the NSD Group, we hope to help create a corporate culture that is more ambitious and open to tackling new challenges.

Since its founding, NSD has grown on the back of its strong reputation among its many customers for technical prowess and sincerity in business. I believe that this spirit remains the same as it is passed down to today's generation of employees. We will pass down this tradition to the next generation of talent, as we continue working to ensure NSD is a corporate group essential to society in the future because of its development and social implementation of advanced technology.