Public Business

Public Business Comprised of Two Areas

Public Business consists of “Public Solutions,” which is responsible for business involving regional sales functions, local governments, and medical institutions, and “Public Infrastructure,” which manages business involving government organizations and enterprises supporting national and social infrastructure. Based on the new organization established in April 2017, Public Solutions considers both local needs and required policy seeds. In this area NEC works together with regional stakeholders, such as local governments, universities, and enterprises, to accelerate the development of new regional businesses, such as smart cities and the utilization of the Social Security and Tax Number System (“My Number”), and healthcare. Based on NEC’s many years of achievements gained in supporting government agencies, the Public Infrastructure area further improves the social infrastructure we provide to support safe and comfortable lifestyles for everyone.

[STRENGTHS]
- Strong track record in gaining high visibility, advanced technologies, and high market share in Japan by delivering systems for governmental organizations, local governments, broadcasters, power companies, as well as in cyber security.
- Ability to propose concepts for customers’ future based on “domain knowledge,” specifically operational expertise and deep understanding of the data acquired and handled through many years of working with customers.
- Provision of vertically integrated solutions with the “NEC the WISE” lineup of AI technologies, “NEO Diagnostics” in medicine, and networks including security, and full-layer ICT, including sensing technology.

[OPPORTUNITIES]
- Need for continuous investment to maintain advanced technology and reliability.
- Need for handling complex project management for large-scale projects and the issues inherent in system development using cutting-edge technology to control the impact of additional costs on operating results.

[WEAKNESSES AND COUNTERMEASURES]
- Declining tax revenues due to the falling population in Japan have created a need for solutions that increase government efficiency and performance.
- Need for a new business structure that can cope with changes in the market environment, such as the trend towards broadcasting via IP and transformation of the viewer rating and advertising models.
- Need for constant improvement of quality and cost competitiveness in response to intensifying competition for orders, increasing the number of projects with difficult requirements in cost and quality.
- Need for a business strategy that anticipates changes in existing business fields due to the entry of new participants.

[THREATS AND COUNTERMEASURES]
- Digitalization of government services with the Japanese government’s “Digital Government Action Plan” and wider use of the My Number System.
- Safe, secure, efficient administration of the Olympic and Paralympic Games Tokyo 2020 and further investment to propose for the increasing number of tourists visiting Japan.
- Expansion in demand for strengthening of systems and monitoring services for cyber security.

Digital Healthcare: Contributing to the Transformation of Healthcare and Society Using AI

Kitahara Neurological Institute (KNI) and NEC are engaged in co-creation to solve issues in healthcare and society through AI. The system predicts restless patient behavior 40 minutes in advance with 71% accuracy, and detects patients at high risk of aspiration pneumonia with 87% accuracy, enabling nursing staff to focus on the identified patients and administer preventive intervention. This is expected to help avert protracted hospitalization for the patient and reduce the workload on medical staff. In addition, the system uses speech information classification and structuring technology to effectively reduce nurses record-keeping duties by 58%. NEC will use advanced ICT, such as AI and IoT, to create systems that support healthcare and people in the future.

Investment into Advanced Technologies with an Eye to the Future—Taking on the Challenge of Control in the Aerospace Field

NEC has been involved many years in the development of advanced technologies aimed at resolving social issues, such as control technologies for unmanned aircraft, satellites, air traffic, satellite operation technology and electromagnetic wave monitoring technology.

Satellite Operation

In 2018, NEC Corporation initiated at space project offering comprehensive space solutions, including the development of satellites and ground systems, satellite control, mission operation, and image sales using its own earth observation satellites. This is the first instance in Japan that a manufacturer operates its own satellites. Going forward, we will contribute to solutions and services for social issues, such as assuring conditions following a disaster, as well as monitoring and managing environmental resources.

Flying Cars

Flying cars hold strong potential in commuting, moving to remote islands or into mountainous areas, emergency transportation, and carrying supplies.

NEC Corporation concluded a sponsorship agreement with CARTIVATOR Resource Management, which develop flying cars in Japan for the first time, and participated the Public-Private Conference for the Future Air Mobility Revolution established by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism. NEC Corporation will supply flying control related technologies to contribute to realizing future air traffic control.
Expand business domain for solving social issues

Providing Value across Industry Boundaries by Solving Social Issues

Japan is facing social issues arising from declining birthrates and an aging population, increasing social security costs, a declining work force, and reduced spending and economic power. NEC’s job is to grasp these issues and address them firmly and create sustainable social value. Using our accumulated experience, the latest AI and biometrics technologies, and co-creation, we will take the lead on these issues and provide value across industry boundaries. In this way, we will contribute to sustainable growth and achievement of the company-wide profit target under the Mid-term Management Plan 2020.

Our Environment and New Market Opportunities

The domestic market has remained active, and business model innovation using AI and IoT (Digital transformation) is progressing rapidly beyond the conventional framework of ICT vendors. On the other hand, as the existing ICT market is contracting, our continued growth will require us to expand our business into new domains and contribute even further through solutions to social issues.

Contributing to the Digital Government Action Plan

In this environment, under the Japanese government’s Digital Government Action Plan, the status of government itself has been reviewed with a view to digitalization, placing a priority on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period.

Renewing Social Infrastructure

In the lead up to the Olympic and Paralympic Games Tokyo 2020, we will ensure safety and security by providing public safety-related solutions such as biometrics and behavior detection and analysis, as well as providing wireless networks for administration use and urban operation centers. Furthermore, the games will serve not only to invigorate the domestic market in the short term, but also as a major turning point for the renewal of social infrastructure, much of which was installed during Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period. The new infrastructure will need to embody not only safety and security, but also place greater emphasis on the values of efficiency and equality to solve Japan’s high economic growth period.

Establishing Stable Profitability and Investing in Advanced Technologies to Prepare for the Future

I am responsible for the public infrastructure business, which is where many of NEC’s largest individual projects with long development lead times take place. Many of these projects involve key national infrastructure, making it important to maintain our leading position through continuous technology development and to secure resources. To achieve this, we will improve our profitability through measures such as streamlining our costs, including cost reduction, strengthening our project management capabilities, and achieving appropriate sale prices. By securing resources in this way, we will conduct continuous investment into advanced technologies. The strengths that we have developed in this business include biometric authentication offering world leading accuracy developed in the law enforcement and justice fields, cutting edge cyber security, and achievements in the field of space, carrying out missions in uncharted places in the harsh environment of space, such as “Hayabusa 2.” These technologies currently represent NEC throughout the world in businesses conducted across a variety of fields.

Expanding Business over the Medium- to Long Term

To support business expansions over the medium to long term, we will leverage our advanced technologies to contribute to the creation of a safe and secure society. We will focus on fields such as security ICT, including cyber-security, image analysis, and accident prediction solutions, as well as biometrics solutions used in boarding and customs procedures at airports. We are also making a significant contribution in the field of 4K and 8K satellite broadcasts, which commenced in December 2018, helping the Japan Broadcasting Corporation, key commercial TV stations, and other broadcast stations to realize next-generation broadcasts. Other areas of activity have included trials of a Virtual Power Plant (VPP), which has drawn increasing attention just before the legal separation of power generation and transmission systems to be implemented in 2020, a space utilization service business that makes use of satellites and other technologies, AI-based visualization and analysis of learning status in primary, middle, and secondary school level education, a highlevel air traffic control system using GPS and quasi-zenith satellites, and the start of discussions on “Future Air Mobility Revolution” as a joint public-private initiative. By leveraging NEC Corporation’s advanced technologies, we will drive the creation of new value and expand our business.
Creating Social Value through NEC Value Chain Innovation

Initiatives in the Medium- to Long-Term

Our society faces various kinds of social issues, such as food waste, labor shortages, changes in the consumption environment, and diversifying threats. NEC’s Enterprise Business aims to realize a world where cutting-edge digital technologies are used to address these issues and new value is created through co-creation with customers, connecting people, goods, and processes, reaching across the boundaries between enterprises and industries in a process that we call NEC Value Chain Innovation (VCI). To support a more sustainable planet, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance, NEC is working to promote five values: “Connected Manufacturing,” which will usher in a society where people can live in abundance.

Achievements toward Medium-to-Long-term Targets in Fiscal 2019

For many years, the Enterprise Business has provided IT services to customers in the finance, manufacturing, logistics, retail, and service industries, and in fiscal 2019 our growth outpaced the market. As we continue to respond strongly to our base business fields, we have already started to provide social value through VCI, and we are now accumulating specific use cases such as the following:

- We started collaborating with INTAGE Inc. on a business for optimizing supply and demand across the entire value chain to help solve the issue of food loss and waste. By pairing NEC’s data distribution platform with INTAGE’s various data and analysis expertise, we aim to increase the accuracy of demand forecasting and make use of this to provide a product demand forecasting service.

- NEC has provided a facial recognition authentication system that uses NEC’s facial recognition authentication AI engine, NeoFace, and a POS system that uses image recognition for X-Store, a future convenience store opened by President Chain Store Corporation (7-Eleven Taiwan). The system offers shoppers a new purchasing flow and a more efficient way to pay.

- Mitsui Sumitomo Financial Group, Inc. has introduced dotData, analysis software that automates data science processes. The software was developed by dotData, Inc., a Silicon Valley venture of NEC established through a carve out. The software is helping to increase the sophistication of data analysis throughout Mitsui Sumitomo Financial Group companies. In fiscal 2020, we will strengthen our initiatives, aiming to expand our provision of social value even further.

Revenue / Adjusted Operating Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (Billions of yen)</th>
<th>Adjusted Operating Profit (Billions of yen)</th>
<th>Adjusted Operating Profit Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>39.0</td>
<td>3.9</td>
<td>9.1%</td>
</tr>
<tr>
<td>2019</td>
<td>39.0</td>
<td>3.9</td>
<td>9.1%</td>
</tr>
<tr>
<td>2020</td>
<td>43.0</td>
<td>3.9</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

[STRENGTHS]

- Reliability and achievements cultivated over many years of providing IT services to domestic clients in the manufacturing, retail, and service industries.

- Ability to integrate advanced technology and business to create value and respond flexibly to customers’ needs.

- The knowledge and expertise we have developed in manufacturing innovations in our own plants in the manufacturing industry, as well as supply chain management transformation for global corporations.

[OPPORTUNITIES]

- Our society faces various kinds of social issues, such as global food waste and energy consumption, as well as changes in the human resources environment due to labor shortages, diversification of consumption patterns with an emphasis on CX and a shift towards cashless societies, and fraudulent transactions involving internet banking. Solutions involving use of AI, IoT, and other advanced ICT are expected to play a growing role in solving these social issues.

[WEAKNESSES AND COUNTERMEASURES]

- To solve social issues, we need to strengthen initiatives throughout society across the boundaries between enterprises and industries.

- To achieve further growth, we need to transform to a business model that can consolidate knowledge and resources accumulated for such industry and client across the organization and make use of them.

[THREATS AND COUNTERMEASURES]

- Although the private sector market in IT is expanding, the acceleration in adoption of cloud computing and the penetration of AI and IoT are bringing dramatic change to NEC’s business environment in terms of customers’ investment fields and competitors. Amid this, we expect a decrease in existing solutions businesses in the medium term, and we must therefore create new business models and strengthen our capability to support customers’ digital transformation.

Initiatives to Solve Labor Shortages

As labor shortages become more acute in the retail sector, there is a need to increase the efficiency of store operations. At the same time, the sector also needs to improve CX with a limited workforce and build good relationships with customers.

To help address such issues, in 2018 we opened a labor-saving store with Seven Eleven Japan Co., Ltd., making use of NEC’s AI and IoT technologies. The store features systems to provide comfort and convenience to customers, such as NEC’s first implementation of payment by face recognition authentication in Japan and targeted advertising signage. It also has staff-support systems to reduce the number of staff required to run the store. These include facility operation monitoring, which collects information about equipment such as refrigerators 24 hours a day to support stable operation, and ongoing proposals that use AI will continue to utilize cutting-edge digital technologies such as AI and IoT to provide systems that are designed for customers’ businesses and market needs. In this way, we will contribute to service quality improvements and operational efficiency gains in the retail sector.
Network Services Business

Leading Digital Transformation (DX) by Connecting Value

Atsuo Kawamura
Executive Vice President

Networks for the DX Era: The Importance of Connecting Value

In recent years, DX has been progressing in various industries to solve social issues such as environmental issues, labor shortages, and security threats. DX links the real world with the cyber world through networks, which is key to creating new value using digital technology. As the volume of information increases and networks become increasingly complex, reliable, fast connections are extremely important for realizing DX.

In addition, high-speed, large-capacity, low-latency communications enabled by the spread of 5G will open the door for services that require detailed control, such as automated driving, remote medical care, and remote construction.

NEC will lead DX by combining its strengths in networks cultivated in the telecommunications market, and high-level IT assets such as AI, security, and biometrics, with industry expertise to enable wide-ranging connectivity in the enterprise and public markets as well as the telecommunications market.

Initiatives in Fiscal 2019 and Fiscal 2020

NEC executed structural reforms in fiscal 2019, successfully shifting to a highly profitable structure. In fiscal 2020, we will continue to invest in the network services field for 5G and industry, which are key areas, while maintaining the structure we have achieved through structural reforms to expand highly profitable businesses. In particular, we will develop the globally recognized OSS/BSS of Netcracker Technology Corporation, and increase profitability by expanding the maintenance and operation services field, making use of the expertise we have developed to date.

Towards Realizing 5G

With 5G, we will execute the timely launch of advanced wireless technologies, such as miniaturization, power-saving, and beam-forming technology. In July 2019, we started shipping commercial 5G radio units to NTT DOCOMO, INC. Moreover, through a partnership with Samsung Electronics Co., Ltd., we will expand our product portfolio while also making joint proposals to global telecom carriers. Furthermore, starting with our selection as an equipment provider for Rakuten Mobile, Inc., which promotes “Open RAN” with cloud-native networks, NEC will expand our business with telecom carriers seeking to build open networks.

Co-Creation in the Field of Network Services for Industry

In the field of network services for industry, NEC provides not only applications, but a comprehensive lineup of services from consulting to operation to realize optimal networks for business operations. By utilizing our strengths in both IT and networks, we will promote customers’ DX while continuously engaging in co-creation between businesses and companies using 5G.

The Network Services Business will expand through connecting new value and contributing to DX.

Revenue / Adjusted Operating Profit

![Revenue / Adjusted Operating Profit Graph]

[STRENGTHS]
- Among the best in Japan in terms of track record and accumulated expertise for delivering networks for telecom carriers and networks and IT systems for companies
- Core technologies in the network area such as 5G, mobile, optical/IT operation & management, and IT
- Large-scale mission-critical system integration capabilities cultivated in systems for telecom carriers
- Formation of an ecosystem through achievement of Open-vRAN initiatives and links with 5G

[OPPORTUNITIES]
- Diversification of needs and sophistication of networks, due to the advance of 5G technology
- Increase in telecom carriers seeking open networks
- Expansion of business opportunities due to connection of people, things, and contexts with DX at companies, including operational reforms

[WEAKNESSES AND COUNTERMEASURES]
- To assist business expansion, it is essential to create new value and business models not only through stand-alone value creation by NEC, but also through co-creation with customers

[THERATPS AND COUNTERMEASURES]
- NEC is creating various services using 5G through co-creation with telecom carriers and industry partners. As part of this initiative, we are working on safe disaster recovery through remote control of construction machinery.
- NEC is working on safe disaster recovery through remote control of construction machinery. Restoration of social infrastructure is an urgent priority in disaster-affected areas. However, there is a need to ensure the safety of worksites by avoiding secondary disaster risks, such as landslides.
- Together with Obayashi Corporation and KDDI Corporation, NEC carried out field experiments involving remote control of construction machinery using 5G.
- NEC has also expanded its business by providing comprehensive solutions, from hardware to operating services, and from wireless to fixed lines.

Initiatives for Leading DX

NEC will lead DX by combining its strengths in networks cultivated in the telecommunications market, and high-level IT assets such as AI, security, and biometrics, with industry expertise to enable wide-ranging connectivity in the enterprise and public markets as well as the telecommunications market.
System Platform Business

Platforms to Support Business Innovation through Digitalization

Tomoyasu Nishimura
Executive Vice President

Helping Customers to Create Value

The System Platform Business has accumulated strengths in reliability, quality, and the ability to provide maintenance, operation, and support through our nationwide service center network. We will leverage these strengths while differentiating our platform through the use of hybrid IT, AI for data analysis, including image recognition technologies such as facial recognition, and accelerators such as vector computing technology.

Initiatives Up to Fiscal 2021

The System Platform Business is expected to see a continuing harsh business environment; however, we will make advances in streamlining existing businesses and expanding our focus businesses. During fiscal 2019, we carried out business structure reforms, such as reorganizing our factories in Japan in order to streamline our production system. In fiscal 2020, we will continue to improve our costs, while accelerating DX in our own business scale; need to streamline development, production, maintenance, and other aspects through onsite DX.

Medium- to Long-Term Policy

As customers seek to transform their businesses through DX, there is a rising demand for utilization of conventional IT assets and the data accumulated in them, as well as hybrid IT, which makes appropriate use of the considerably more flexible public and private cloud systems in each case, and rapid, highly accurate analysis of exponentially increasing data and the use of this analysis in business.

With the arrival of the big data era, there are growing needs for rapid, highly accurate processing of vast quantities of data generated in various fields. SX-Aurora TSUBASA is a platform that provides high speed, high performance systems with models for a wide range of customer needs, from use in offices to data centers, by offering a vector processor previously only found in a super computer in a card format. The platform is helping to expand the range of applications for supercomputers beyond the traditional areas of weather and academia. In doing so, we will contribute to the realization of a safe, secure, highly efficient, and abundant society by promoting expansion in usage fields and applications including industrial fields such as manufacturing as well as AI and big data analysis.

Next-Generation Platform, SX-Aurora TSUBASA

On the other hand, in our focus businesses, we will expand our provision of hyperconverged systems*1 and container platforms*2 as an initiative to promote hybrid IT. We also focus on expanding the vector computing-based next-generation platform, SX-Aurora TSUBASA into new fields such as AI big-data analysis and resource exploration.

*1 Integrated products that provide server, storage, networking, and virtualization software together in a single system
*2 Platforms for integration and management of a container environment used to virtualize the application execution environment in a hybrid or multi-cloud

Revenue / Adjusted Operating Profit

[STRENGTHS]

- Reliability and high quality cultivated under an intensely competitive domestic market, high shares in Japan for IT platform products.
- Maintenance, operation and support services provided through a nationwide network of service centers throughout Japan.
- A distinguished group of technologies* in fields such as AI and computing and the ability to provide value to customers by combining them.

* Image recognition technology including face recognition; vector computing technology, etc.

[OPPORTUNITIES]

- Expansion in need for hybrid IT, combining conventional IT with public and private cloud systems, driven by an increase in customers seeking to expand their business through DX.
- Expansion in demand for platforms for gathering and accumulating data and AI/accelerators for rapid, highly accurate analysis driven by growth in customer needs for data utilization.

[WEAKNESSES AND COUNTERMEASURES]

- Relatively high costs compared with global mega-vendors due to differences in business scale; need to streamline development, production, maintenance, and other aspects through DX.
- A need to realign the business towards sales of solutions for customers’ business model as a large proportion of the business comprises conventional sales for standalone hardware.

[THREATS AND COUNTERMEASURES]

- Need to increase added value through hybrid IT to counter growing global competition due to the advance of commoditization in the hardware domain.
- Need to establish differentiation factors by utilizing strengths in image technology including face recognition, vector computing technology, and so forth to counter an increase in companies entering the data utilization field, including companies from different industries, with the advance of digitalization, such as AI.

Revenue (Left scale)

Revenue (Right scale)

Adjusted Operating Profit (Right scale)

(Adjusted Operating Profit Ratio)

(Fiscal years ended on March 31)

(Forecasts)

2018 2019 2020

(Billions of yen)

(150.0) (20.1) (4.0%) 480.0 38.0 (7.9%)

(450.0) (29.3) (6.0%) 500.0

(600.0) 488.6
Global Business

Profitable Business - Strengthening Profitability to Achieve Sustainable Growth

Akihiko Kumagai
Senior Executive Vice President

Initiatives for Medium- to Long-Term Growth

Realizing “NEC Safer Cities” based on the safety business is the main growth engine for the Global Business. While globalization and technological advances have made life more convenient, there is a growing urgency to respond to global issues such as labor shortages, rapid urbanization, and the risk of terrorism spreading due to geopolitical factors. In addition to the area of public safety, where NEC’s biometric authentication technologies have been used to provide safety and security, we will provide solutions that pursue efficiency and convenience not only for our customers, but also for their customers, such as ID solutions at airports.

Moreover, we acquired the U.K. company Northgate Public Services Limited in January 2018, and the Danish company KMD Holding ApS in February 2019, converting both into subsidiaries. Both countries’ governments and local governments are leading the advance into digitalization of asset management, fee payments, and other operations. We will use the platforms developed by these companies as a base for enhancing our own solutions, while expanding our business in the digital government field.

NEC will contribute to the realization of a safe, secure, efficient, and equal society by adopting advanced AI and biometric authentication technologies and strengthening our capabilities through M&A and partnership activities, while always placing top priority on respecting human rights and observing the laws and regulations of each country.

In the service provider markets, such as telecom carriers, in the energy business, we have been focusing on the advanced U.K. and U.S. markets for energy storage systems, putting priority on expanding our track record. However, we will now prepare for further market growth, creating a profitable business structure by expanding solutions such as software and services in response to market changes such as deregulation of the electricity markets, as well as by further cost reduction.

Initiatives for Strengthening Profitability

To realize growth in the Global Business, our No. 1 priority in fiscal 2020 is achieving profitability in our operations.

In markets that are maturing or expected to see increased competition, such as wireless solutions, submarine cables, and displays, we will leverage our accumulated track record and technologies to maintain our business scale and strengthen profitability through partnering and business model transformation. In the energy business, we have been focusing on the advanced U.K. and U.S. markets for energy storage systems, putting priority on expanding our track record. However, we will now prepare for further market growth, creating a profitable business structure by expanding solutions such as software and services in response to market changes such as deregulation of the electricity markets, as well as by further cost reduction.

Revenue / Adjusted Operating Profit (Loss)

(Fiscal years ended on March 31)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (Left scale)</th>
<th>Adjusted Operating Profit (Loss) (Right scale)</th>
<th>Adjusted Operating Profit (Loss) Ratio</th>
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<td>420.5</td>
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<tr>
<td>2020</td>
<td>409.4</td>
<td>17.0</td>
<td>(3.1%)</td>
</tr>
<tr>
<td>2021 (Fiscal years ended on March 31)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

[STRENGTHS]

- Safety business: World-leading biometric authentication technology and analysis technologies (biometric authentication, biometric detection, etc.), and software platforms for the digital government field.
- Service providers: Product capabilities and advanced solutions provided for customer, fee, and operation management systems.
- Strong presence and track record in the market for network equipment (wireless solutions), submarine cable, displays and projectors.

[WEAKNESSES AND COUNTERMEASURES]

- Need to enhance structure in countries and regions to enable provision of solutions tailored to each customer, such as in the safety business.
- Need to accelerate shift of business model from equipment sales to a software and services business.

[OPPORTUNITIES]

- Expansion in demand for safety solutions in countries where there is growing interest in safety and security.
- Increase in demand in the field of software services related to DX for service providers and the field of 5G.
- Increase in demand for energy storage systems and further diversification of related service businesses associated with the deregulation of the electricity markets and the spread of renewable energy.

[THREATS AND COUNTERMEASURES]

- Aggressive approach by emerging market vendors and others in the field of biometric authentication.
- Need to strengthen profitability through partnering and business model transformation in response to increased price competition following the maturation of the markets for products such as wireless solutions and displays.

Airport ID Solutions Create a New Customer Experience

At airports, passengers are required to present their passports and boarding passes when checking in and dropping off baggage, and at each step in the boarding procedure. NEC has applied its world-leading biometric authentication technology to simplify this laborious process at airports, aiming to enhance customer experience.

NEC has applied its world-leading biometric authentication technology to simplify this laborious process at airports, aiming to enhance customer experience.

NEC’s solution ranked first in performance on evaluation tasks conducted by the U.S. National Institute of Standards and Technology (NIST).