IT SOLUTIONS BUSINESS

Takaaki Shimizu
Senior Vice President

NEC provides a range of IT services covering system integration, maintenance and support, operation and outsourcing, as well as cloud services. NEC also supplies the platforms essential to the development of IT systems and enterprise network systems, such as servers, storage, software and IP telephony systems. Using its extensive experience in developing highly reliable systems backed by state-of-the-art IT and network technologies, NEC aims to realize an information society friendly to humans and the earth.

FISCAL 2012 PERFORMANCE AND MAIN ACCOMPLISHMENTS

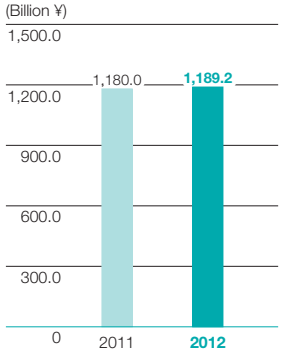
Business segment sales increased 0.8% year on year to ¥1,189.2 billion. This increase mainly reflected steady growth in the IT services business, mostly to government agencies, local governments, medical institutions and the manufacturing sector. This was despite lower sales in the platform business, centered on hardware, primarily due to the impact of the flooding in Thailand.

Operating income improved ¥14.5 billion year on year to ¥44.8 billion. This improvement was mainly due to higher sales, fewer unprofitable projects and cost reductions in the IT services business, which outweighed lower earnings in the platform business due to lower sales and the impact of the flooding in Thailand.

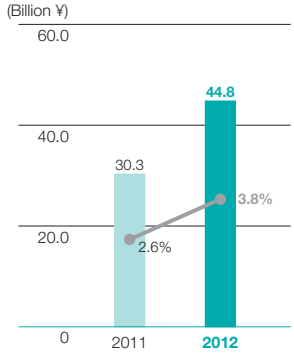
In fiscal 2012, in the IT services business, NEC remained focused on increasing sales of Software as a Service (SaaS) for specific business sectors and operations. Examples included finance, accounting and payroll management systems for 10 local government bodies in Kanagawa Prefecture, and a SaaS-based electronic medical record service for medical institutions. Furthermore, NEC steadily built up its track record of integration of private cloud systems for educational institutions such as Tokai University, and integration of business systems infrastructure for All Nippon Airways, Co., Ltd.

In the platform business, NEC's "UNIVERGE PF Series" (ProgrammableFlow), the world's first next generation network products equipped with the new network control technology OpenFlow, attracted considerable attention. Given the extremely strong customer interest in these products, which substantially reduce network operation and management costs, NEC supplied "UNIVERGE PF Series" products to enterprises and data center operators worldwide. In addition, the "UNIVERGE PF Series" received the "Best of Interop 2012" award at Interop Las Vegas 2012. In other areas, NEC has received many accolades from customers for its platform products supporting cloud computing. For example, NEC's PC server "Express5800 series" achieved the No. 1 share*1 in the Japanese market for the 16th consecutive year. NEC's core cloud platform

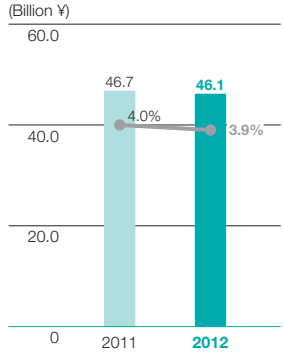
SALES



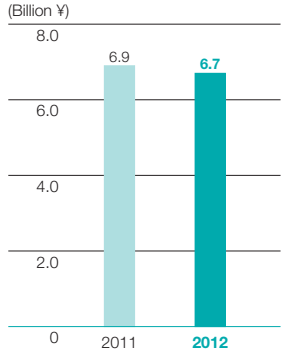
OPERATING INCOME, OPERATING INCOME RATIO



R&D EXPENSES*, R&D EXPENSES RATIO*



CAPITAL EXPENDITURES*



* R&D expenses, the R&D expenses ratio and capital expenditures represent the sum of corresponding figures for the former IT Services and Platform businesses

*1 Source: CY1996–2011 Japan x86 Server Market (Unit, Factory Revenue (Yen)), IDC, Worldwide Quarterly Server Tracker, 2012Q1
*2 Source: Nikkei Computer (16th Customer Satisfaction Survey, August 18, 2011 issue); 1st place integrated operation management software category

software “WebSAM” was also ranked No. 1 in a customer satisfaction survey[*2] for the second straight year.

FOR FURTHER GROWTH

Despite an uncertain outlook due to concerns about a recession in Europe and other factors, IT investment by customers in Japan, which had been curtailed since the Lehman Brothers bankruptcy and the Great East Japan Earthquake, has started to show signs of gradual recovery.

In anticipation of medium-term market developments, such as progress on the shift to cloud computing and expanding demand for IT systems in emerging countries, NEC will accelerate measures for future growth. Efforts will be focused on expanding the services business and global business.

To expand the services business, NEC will enhance its lineup of platform products supporting the delivery of services. In addition, NEC has opened data centers in Kansai and Hokkaido. In the hardware business, NEC will contribute to power conservation efforts by supplying servers, storage and other hardware that can operate in a 40ºC environment, which is 5ºC higher than the general operating temperature limit for such equipment. In the software business, NEC aims to help customers enhance management and create new business using Big Data, which continues to increase tremendously. To this end, NEC is working to increase sales of database software “InfoFrame” that achieves flexible scalability and high reliability through its competitive technology.

Furthermore, NEC will provide comprehensive support ranging from design to operation of customers’ IT assets. Measures include development of solutions for specific business sectors and operations through a strategic cloud business partnership with Microsoft Japan Co., Ltd. for large enterprises, and stronger collaboration in integrated operation and management of systems with Oracle Corporation Japan.

Eyeing expansion of global business, NEC aims to provide support to Japanese companies seeking to enter overseas markets as their strategic partner, with emphasis on companies in the manufacturing and distribution sectors. One example is a cloud oriented accounting service delivered to Sanden Corporation as a global accounting system. NEC plans to roll out this system at their overseas subsidiaries going forward.

Moreover, NEC will continue to strengthen business development based on globally competitive products and services. These include solutions utilizing NEC’s world-class biometrics technologies, such as fingerprint identification and face recognition. Another example is point-of-sale (POS) systems, for which orders are increasing overseas from major convenience store operators in Indonesia and Mexico, among other customers.

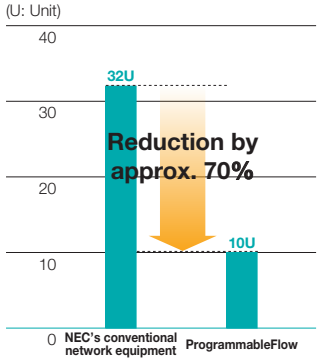
Through the foregoing measures, the IT services and platform businesses will work as one and combine their expertise in specific business sectors and operations developed over the years, as well as technologies and products where their strengths lie. The goal is to further enhance and promote the supply of value-added solutions from the customer’s viewpoint.

Contactless hybrid finger scanner

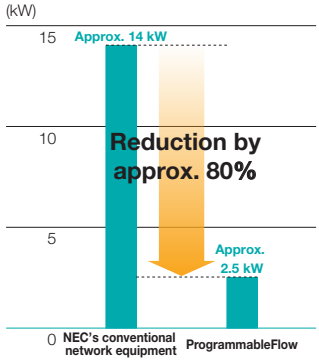
ADVANTAGES OF IMPLEMENTING UNIVERGE PF SERIES:

- Installation space and power consumption: Reduced by 70-80%
- Switchover time in the event of a disruption: Less than 1 second
- Dramatic reduction in operating costs

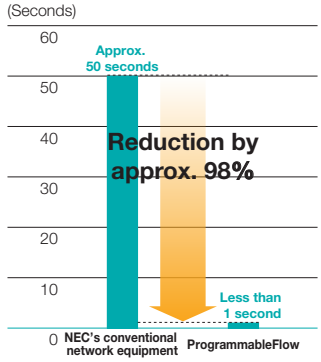
INSTALLATION SPACE (CORE SWITCH, ETC.)



POWER CONSUMPTION



SWITCHING TIME IN THE EVENT OF DISRUPTION



CARRIER NETWORK BUSINESS

NEC supplies equipment required for network implementation to telecom carriers, along with network control platform systems and operating services. NEC's wealth of experience in large-scale network implementation and strong technical capabilities contribute to the development of highly reliable communications networks.

Shunichiro Tejima
Senior Vice President

FISCAL 2012 PERFORMANCE AND MAIN ACCOMPLISHMENTS

Business segment sales increased 4.4% year on year to ¥602.7 billion. This increase mainly reflected steady growth in sales of mobile network infrastructure in Japan, as well as submarine cable systems.

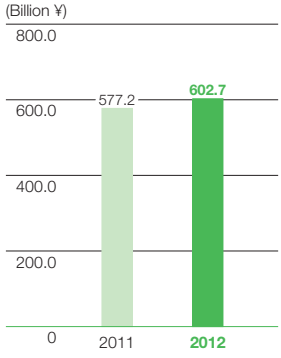
Operating income improved ¥12.8 billion year on year to ¥50.6 billion, mainly due to a sales increase in Japan and submarine cable systems.

In fiscal 2012, NEC captured business opportunities arising from data traffic growth driven by the uptake of smartphones in Japan. Notably, NEC began shipping LTE base stations to KDDI Corporation in addition to NTT DOCOMO, INC. In overseas business, NEC won large submarine cable system projects linking Japan and various Asian countries, including the South-East Asia Japan Cable system in April 2011 and the Asia Pacific Gateway system in December 2011. In other areas, NEC made steady progress with the launch of new ultra-compact microwave communications system, "iPASOLINK" Series, which extends its cover from access to metro area, following commencement of sales in the previous fiscal year. NEC had won more than 200,000 "iPASOLINK" orders on a cumulative basis as of May 2012. The services and management business expects to see market expansion surpass growth in capital expenditures in network infrastructure equipment. In this business, NEC launched M2M solutions "CONNEXIVE," in addition to acquisition of the business support system division of Convergys Corporation of the U.S. Through these initiatives, NEC has reinforced its execution framework for bringing globally competitive products and solutions to market as early as possible.

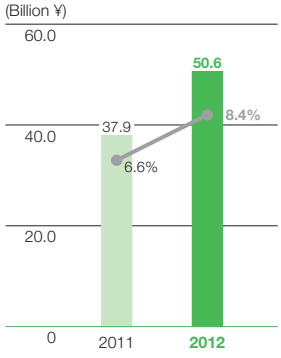
FOR FURTHER GROWTH

Data traffic is projected to grow sharply with the rapid uptake of smartphones in Japan and growing demand for mobile phones in emerging countries, presenting major business opportunities for NEC. In this environment, NEC will continue to concentrate business resources on four key

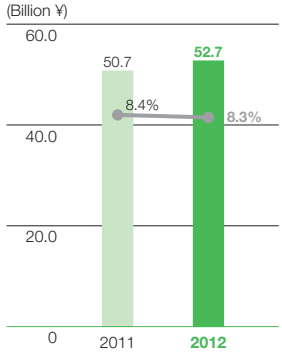
SALES



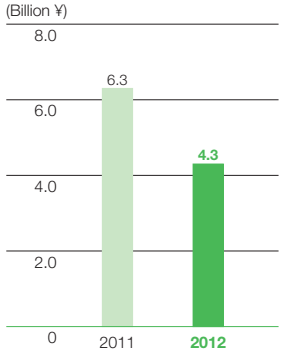
OPERATING INCOME, OPERATING INCOME RATIO



R&D EXPENSES*, R&D EXPENSES RATIO*



CAPITAL EXPENDITURES*



* R&D expenses, the R&D expenses ratio and capital expenditures represent the figures for the former Carrier Network business.

areas: wireless broadband access, mobile backhaul, submarine cable systems, and services and management. NEC will strive to enhance its position in global markets while driving growth in sales and earnings.

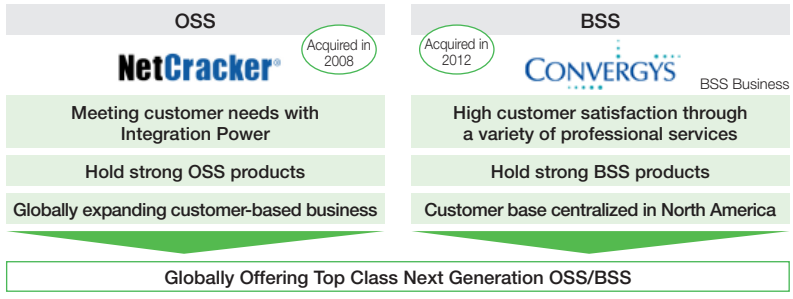
In wireless broadband access, NEC entered into an agreement for collaboration with Cisco Systems, Inc. of the U.S. on the deployment and sale of commercial LTE networks targeting overseas markets. Cisco Systems boasts a world-class delivery track record in the market for core networks. In addition to completing the LTE projects in Japan currently under way, NEC will promote LTE business in overseas markets through the joint supply of Cisco Systems' mobile core systems, and NEC's LTE base stations. Furthermore, in femtocells, NEC already has 60 commercial-use/trial-based contracts*1. By cultivating new customers and increasing ties with existing ones, NEC will strive to further expand femtocell shipments.

In mobile backhaul, NEC has commenced a portion of PASOLINK development and production operations in India, one of the world's largest markets for mobile backhaul. This move is aimed at minimizing the impact of the yen's appreciation and further enhancing PASOLINK's competitiveness. Looking ahead, NEC will continue to bolster business development by taking full advantage of its advanced wireless transmission technology and high quality and efficient manufacturing operations.

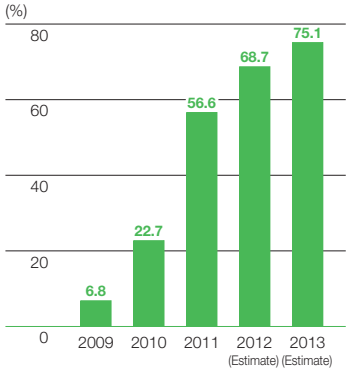
In submarine cable systems, NEC will steadily drive business expansion by seizing business opportunities in the Asia-Pacific region, where demand is strong. Another priority for expanding business will be to address growing demand in recent years for earthquake and tsunami observation systems.

In services and management, NEC will combine the respective strengths of the operation support systems of NetCracker Technology Corp. and the business support system of Convergys, in order to achieve a fully integrated system including service implementation to operations, monitoring and billing. This will give NEC the ability to address the need for enhanced services and greater cost efficiency among telecom carriers. In other areas, NEC is focusing on M2M solutions, which mainly target the domains of agriculture, the environment, energy, transportation and logistics and remote control of machinery, as well as the cloud business, where NEC has already won orders from telecom carriers in Europe, Latin America and CIS countries. In these fields, NEC will further upgrade and extend its lineup of services in an effort to cultivate and develop overseas markets.

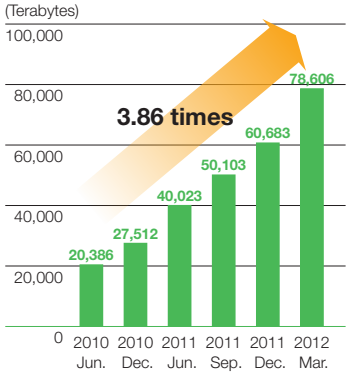
AIMS OF ACQUIRING CONVERGYS CORPORATION'S BSS OPERATIONS



SMARTPHONE SALES VOLUME RATIO IN JAPAN



TREND IN MOBILE COMMUNICATIONS TRAFFIC IN JAPAN



LTE compact wireless base station (MB4300 Series)

Source: Ministry of Internal Affairs and Communications, MM Research Institute, Ltd. (Minato City, Tokyo)

*1 The number of commercial-use/trial-based contracts as of May 31, 2012.

SOCIAL INFRASTRUCTURE BUSINESS

NEC provides eco-friendly, reliable and secure systems and solutions that contribute to a comfortable society. Through information and communications technology (ICT), these systems and solutions support the sophisticated operation of social infrastructure, including broadcasting and video distribution systems, control systems, transportation and public network systems, fire and disaster prevention systems, and aerospace and defense systems.

Tomonori Nishimura
Senior Vice President

FISCAL 2012 PERFORMANCE AND MAIN ACCOMPLISHMENTS

Business segment sales increased 3.6% year on year to ¥330.4 billion. This increase mainly reflected steady growth in the social systems field including broadcasting, and fire and disaster prevention systems, despite a decline in sales in the aerospace and defense systems fields due to government expenditure cutbacks in Japan.

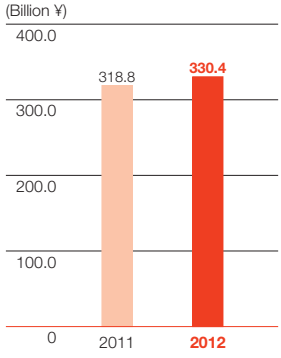
Operating income improved ¥1.6 billion to ¥16.2 billion, mainly reflecting increased sales and cost reductions.

In fiscal 2012, in the social systems field, particularly broadcasting and video distribution systems, NEC delivered a studio system for multimedia broadcasting to mmbi, Inc., which launched "NOTTV™,"*1 Japan's first broadcasting service for smartphone users. In addition, digital terrestrial TV transmitters designed to provide digital terrestrial TV broadcasting service to the Kanto region were delivered to TV Asahi Corporation, TV TOKYO Corporation, and Fuji Television Network, Inc. These digital terrestrial TV transmitters, which reduce power consumption by more than 40% compared with conventional models, have been installed on "TOKYO SKYTREE®"*2. Overseas, NEC supplied digital broadcasting equipment to Argentina. Ever since its first delivery in 1998 to the U.K., where the world's first commercial digital terrestrial broadcasting service was launched, NEC has delivered more than 3,000 digital terrestrial TV transmitters to 42 countries around the world. Leveraging this track record and its technical capabilities as competitive advantages, NEC will continue to provide products that meet customer needs.

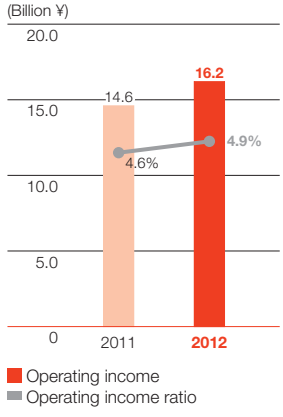
Since fiscal 2011, demand for disaster prevention systems in Japan has increased significantly due to regional enlargement and digitization of wireless communication networks of fire and disaster prevention systems. NEC has maintained a high market share in this field by leveraging software defined radio (SDR) technology developed ahead of the industry. Moreover, NEC also delivered postal automation systems to Switzerland and Malaysia.

In the aerospace and defense systems field, NEC was chosen to design the systems of the asteroid explorer for the "Hayabusa 2 Project," which is scheduled for launch in 2014. This comes in recognition of NEC's solid track record

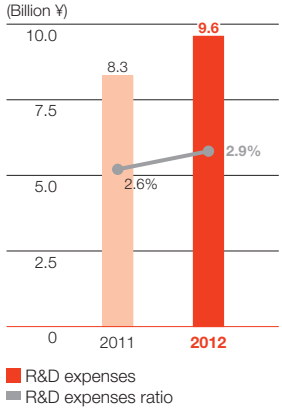
SALES



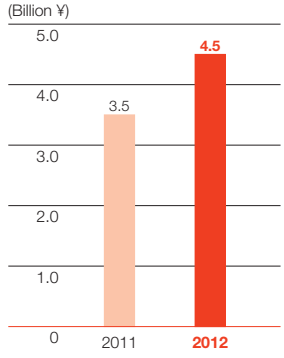
OPERATING INCOME, OPERATING INCOME RATIO



R&D EXPENSES, R&D EXPENSES RATIO



CAPITAL EXPENDITURES



*1 NOTTV is a trademark of mmbi, Inc.
*2 "TOKYO SKYTREE" is a registered trademark of TOBU RAILWAY CO., LTD. & TOBU TOWER SKYTREE CO., LTD.

and experience in this field. The asteroid explorer will be the successor to the original “Hayabusa” asteroid explorer, which returned to Earth in June 2010.

FOR FURTHER GROWTH

The social infrastructure business should continue to expand as earthquake recovery-related projects get fully under way. Expansion should also be driven by continuing demand for digital communications in the fire and disaster prevention, broadcasting and transportation systems fields.

In light of this business environment, NEC’s first priority will be to build a stable operating base by ensuring that it seizes business opportunities. Opportunities will include replacement demand driven by regional enlargement and digitization of wireless communications networks of fire and disaster prevention systems, upgrades to the second generation of ETC systems, and renovation of broadcasting studio facilities. Another opportunity will be overseas demand for TV transmitters.

Furthermore, NEC aims to launch new businesses by developing technologies related to telematics systems, intelligent transportation system (ITS) communications (vehicle-to-vehicle and road-to-vehicle communications) and smart grids (control of energy).

NEC is also focused on expanding business globally by utilizing the business assets it owns. NEC has a strong track record in projects such as astronomical observation satellites and the “Hayabusa” asteroid explorer. Leveraging this strength, NEC will develop compact Earth observation satellites with a low cost and short delivery time utilizing the NEXTAR small standard satellite bus module system*3.

Digital terrestrial TV transmitters installed on “TOKYO SKYTREE®” (Broadcasting and video distribution systems)

NEC plans to market this satellite to emerging countries primarily in Asia, where there are growing needs for owning satellites for disaster prevention and other purposes. NEC also intends to create new businesses in the safety domain, including surveillance of critical facilities and disaster prevention systems, with the view to develop the safety business globally. This effort will comprehensively utilize NEC’s strengths in various technologies such as sensor, network and information processing technologies.

NEC has other unique products, such as the X-info Table (read “Cross-info Table”), a large tablet device that enables the rapid gathering and analysis of information by multiple people, and terahertz imagers, which has sensitivity in terahertz waves*4 and can find out something from terahertz images that cannot be observed with visible light or infrared radiation. By proposing unique solutions harnessing these sorts of products, NEC will strive to win new customers.

“Hayabusa 2” (Image provided by Akihiro Ikeshita)

High-performance fire-fighting command center (Fire and disaster prevention systems)

*3 Bus system: Structurally, artificial satellites consist of a mission-specific component for performing communications, Earth observation and other tasks, and a bus component that provides functions common to all satellites, such as attitude control and power supply. NEC is working on standardizing the bus component of satellites.

*4 Terahertz waves: These electromagnetic waves are situated between visible light / infrared radiation and radio waves. Because they can be transmitted through paper, plastic, fabrics, smoke and other substances, terahertz waves are attracting high hopes for applications in various fields, such as non-destructive inspection, healthcare and drug discovery and detection of illegal substances.

PERSONAL SOLUTIONS BUSINESS

NEC supplies smartphones, mobile phones, Internet services, personal computers for enterprises, display solutions and other products. It is also engaged in the creation of new terminal devices that serve as interfaces between cloud computing and users, and services that add value to such terminals. Harnessing cutting-edge technology, NEC develops products and services that are simple and convenient for everyone.

Takemitsu Kunio
Senior Vice President

FISCAL 2012 PERFORMANCE AND MAIN ACCOMPLISHMENTS

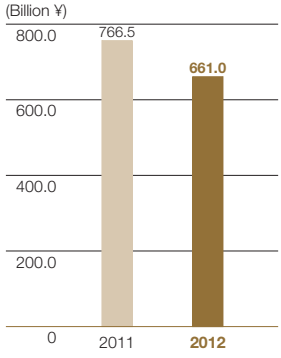
Business segment sales decreased 13.8% year on year to ¥661.0 billion. This decrease mainly reflected the deconsolidation of the PC business for individual customers from the second quarter, following the establishment of a joint venture with Lenovo Group Limited. Another factor was the negative impact of sluggish mobile phone sales.

The segment posted operating income of ¥1.0 billion, an improvement of ¥2.9 billion from the operating loss recorded in the previous fiscal year. This improvement was mainly due to more efficient spending of development expenses and cost reductions.

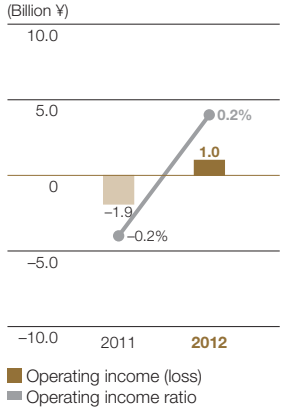
In fiscal 2012, NEC concentrated its efforts in the mobile phone business on the shift to smartphones and global business expansion. In Japan, NEC put a smartphone supply structure in place for Japan's three major telecom carriers by launching "MEDIAS"*1 brand smartphones for KDDI Corporation and SOFTBANK MOBILE Corp., following a launch for NTT DOCOMO, INC. In addition, NEC rolled out the DOCOMO smartphone "docomo NEXT series MEDIAS LTE N-04D" that is compatible with the next-generation LTE-based mobile phone service Xi™*2 (read "crossy"). Overseas, NEC began shipping mobile phone products to the Chinese and Thai markets, after commencing shipments to Verizon Wireless of the U.S. However, the competitive landscape intensified drastically in Japan due to the entry of overseas mobile phone vendors into the domestic market. As a result, NEC's mobile phone sales volume fell far short of its initial target, and also decreased in year-on-year terms.

In tablet devices, NEC was the industry's first to launch a tablet device for a telecom carrier, with the rollout of DOCOMO tablet "MEDIAS TAB N-06D". This model features a 7-inch high-definition LCD that can be used to view the "NOTTV™"*3 broadcasting service for smartphone users. For enterprises, NEC launched "Cloud Communicator LT-B", a tablet device optimal for business use, such as sales activities at stores and offices, as well as outside the office. Furthermore, Sumitomo Life Insurance Company has

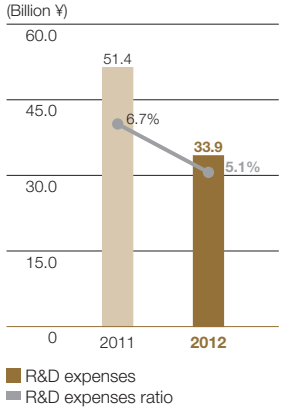
SALES



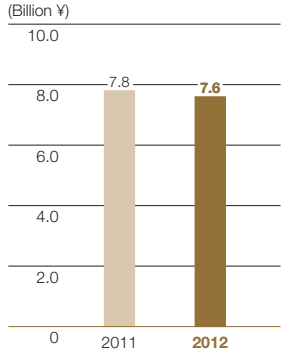
OPERATING INCOME (LOSS), OPERATING INCOME RATIO



R&D EXPENSES, R&D EXPENSES RATIO



CAPITAL EXPENDITURES



*1 MEDIAS is a trademark of NEC CASIO Mobile Communications, Ltd.
*2 Xi (crossy) is a trademark or registered trademark of NTT DOCOMO, INC. in Japan and/or other countries.
*3 NOTTV is a trademark of mmbi, Inc.

chosen to use 40,000 NEC tablet PCs based on Windows® and compatible with the LTE service as new handheld devices for sales representatives. Through these activities, NEC was endeavoring to expand its product lineup.

FOR FURTHER GROWTH

As the Japanese market goes through a dramatic transformation, NEC's mobile phone business has seen sluggish growth in mobile phone sales volume, due to a lack of competitiveness in smartphones and delays in developing business globally. In response, NEC will implement far-reaching structural reforms aimed at restoring sound operations. In tablet devices, NEC must accelerate efforts to open up new markets. Going forward, NEC will strive to develop leaner operations to solve these issues, while working to expand business.

In the mobile phone business, NEC will first step up its collaborative development with overseas Joint Design Manufacturers (JDMs), together with the outsourcing of production to overseas JDMs. This will enable NEC to streamline its development and production operations in Japan, while maintaining and increasing its competitiveness.

Next, NEC will strive to develop mobile phones that fully harness its edge in thin and lightweight technologies as well as water-proof, dust-proof, and shock-resistant technologies. NEC will focus on developing appealing products, including foldable, dual-screen models. These efforts will be directed at improving the competitiveness of NEC mobile phones. Also, NEC will strive to enhance various services and links with the cloud-based services, in addition to improving mobile phones themselves, in an effort to further increase its competitiveness.

DOCOMO smartphone
"docomo with series MEDIAS X N-07D"

In addition to these measures, NEC plans to launch products that fit the needs of mobile phone carriers, by catering to regional and customer characteristics. Business will be expanded mainly in North America, but also in the countries of Latin America and the APAC (Asia-Pacific) region.

In tablet devices, NEC will launch models for individual customers, while expanding the product lineup for telecom carriers and enterprises. Tablet devices offer prospects for a broad range of uses. Examples include devices to operate and display information about households including HEMS, as well as for e-books and educational services. In fact, NEC has already built up a track record in implementing tablet devices at cable TV providers, educational institutes, and financial institutions. Overseas, NEC will strengthen its hand in the mobile cloud solution business in China. Building on its track record, NEC aims to steadily expand business worldwide.

"MEDIAS TAB N-06D" is a waterproof tablet customers can use to watch "NOTTV™"

Tablet device
"Cloud Communicator LT-B"