

# Technology Solutions

## Services

Fujitsu provides solutions and system integration services that integrate ICT system consulting, design, application development and hardware installation, as well as infrastructure services centered on outsourcing services (complete ICT system operation and management including ICT system management via datacenters) and maintenance services.



Fujitsu ATMs, along with operation and maintenance services, adopted by leading Spanish financial groups BBVA and CaixaBank



Farmers use Akisai to produce Yamada Nishiki rice for brewing Dassai sake



Fujitsu conducted trials using SPATIOWL in the Philippines with venture company Global Mobility Service, Inc.

**OUR STRENGTHS**

Fujitsu's services business holds the leading market share in Japan and the fifth-largest share worldwide. We provide services across a wide range of countries and regions, including Europe, the Americas, Asia, and Oceania.

Outsourcing services are a key field for us, where through our network of over 100 datacenters with 16 main locations centered in Japan, we meet a wide variety of customer needs, offering cloud services such as IaaS, PaaS, and SaaS that make operation of customers' ICT systems easier, and help to make their operations greener.

Fujitsu's strengths lie in its global services structure, a wealth of experience in building large-scale, advanced systems, and abundant system engineering resources with a high degree of technical expertise to support these operations. We use these capabilities to help a diverse range of customers across countries, regions, and languages in utilizing ICT systems, including governments and customers with a global presence.

**IT SERVICES MARKET SHARE IN JAPAN IN 2014 (REVENUE BASIS)**

1	<b>Fujitsu</b>	<b>12.8%</b>
2	Company A	8.7%
3	Company B	8.7%
4	Company C	8.2%
5	Company D	6.4%
6	Others	55.2%

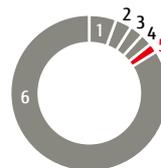


(Source: Gartner, "Market Share: IT Services, 2014" 31 March 2015)

\* Chart created by Fujitsu based on Gartner data

**GLOBAL IT SERVICES MARKET SHARE IN 2014 (REVENUE BASIS)**

1	Company A	5.7%
2	Company B	3.2%
3	Company C	3.0%
4	Company D	2.3%
5	<b>Fujitsu</b>	<b>2.1%</b>
6	Others	83.7%



(Source: Gartner, "Market Share: IT Services, 2014" 31 March 2015)

\* Chart created by Fujitsu based on Gartner data

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## MARKET TRENDS

A CAGR of 1.7% is projected for Japan's IT services market for the period from 2014 to 2017.

The Japanese economy is expected to remain on a recovery track based on signs of a rebound in capital investment in line with improving corporate earnings. In the run-up to the introduction of Japan's Social Security and Tax Number System (commonly known as the "My Number" system), the national government, municipalities, and business enterprises are starting to reshape their ICT infrastructure. In line with this, IT investment in Japan is expected to gradually recover.

The global IT services market is projected to achieve a CAGR of 3.3% from 2014 to 2017, with growth in Asia leading the way. Despite some uncertain market trends, notably in China, the market is expected to continue its gradual recovery. Against this economic backdrop, IT investment is projected to edge upward in every region.

## OPERATIONAL REVIEW AND INITIATIVES

### Fiscal 2014 Business Results and Fiscal 2015 Outlook

Revenue from the Services sub-segment (solutions and system integration, infrastructure services) increased 3.0% year on year to ¥2,706.2 billion in fiscal 2014.

For solutions and system integration, overall sales were held to an increase of 3.5% year on year, as substantial growth driven primarily by the financial and public sectors was partly offset by a weak performance in certain fields.

For infrastructure services, sales were 2.8% higher year on year, lifted partly by the yen's depreciation. Outside Japan, business in the U.K. and Australia was strong.

Operating profit amounted to ¥177.2 billion. Although earnings grew by around 30% year on year due to higher sales in the SI business in Japan, this growth was partly offset by upfront investments for the future. As a result, operating profit was held to an overall increase of ¥3.3 billion year on year.

In regard to the outlook for fiscal 2015, revenue from the Services sub-segment is projected at ¥2,760.0 billion, an

increase of 2% year on year. IT investment in Japan is expected to remain firm, primarily in the public and financial sectors. Operating profit is forecast at ¥185.0 billion with earnings anticipated to grow both in Japan and overseas, based on the higher projected sales.

### Initiatives Going Forward

**Solutions and System Integration:** In light of firm trends toward recovery in IT investment in Japan, Fujitsu is steadily moving forward on system development in both the private- and public-sector fields, including large-scale system integration projects and provision of public ICT infrastructure.

Notably, Fujitsu will work to realize "proactive IT systems" by expanding businesses centered on the digital business platform "MetaArc." Fujitsu will combine the core Systems of Record (SoR), in which it excels, with the new Systems of Engagement (SoE) group of services that utilize IoT devices such as social media and smartphones, in order to promote businesses that fully leverage the knowledge and experience it has cultivated.

In addition, Fujitsu will bolster its competitiveness by taking full advantage of human resources development initiatives such as hackathons\*, effectively utilizing resources, and making effective development investments.

**Infrastructure Services:** In Japan, we expect demand for outsourcing services to remain high as a result of the expansion of cloud services. Meanwhile, the competitive landscape should become increasingly fierce given that competitors have been offering new services.

Fujitsu will optimize system maintenance and operation costs through the provision of its Next Generation Cloud System, with the linchpin Public Cloud Service K5.

Outside Japan, we are working under Fujitsu's global matrix organization to globally provide the same shared products and standardized services in Japan and other countries, offering high-quality ICT services to support all customers, no matter where they do business.

\* Hackathon: An event in which computer programmers, graphic designers, interface designers, project managers, and others involved in software development collaborate intensively on a software-related project.

### RISKS AND ISSUES

In solutions and system integration, there is a demand for more efficient operation of system engineer resources to cope with the buoyant domestic market. In addition, Fujitsu aims to bolster development of system engineers with a focus on management capabilities in order to minimize unprofitable projects. Furthermore, in infrastructure services, the expansion of the cloud services business has intensified competition with other companies, necessitating the development and launch of even more competitive products and services. Moreover, in the overseas business, there is a need to further shift the emphasis from products to services, and rapidly improve the profit ratio. Common priorities in Japan and overseas are to quickly establish the next-generation services business model that will supersede the existing one, and to achieve a high growth rate.

Technology Solutions

# System Platforms

System products and network products are the foundation of ICT infrastructure. System products comprise servers (mainframe, UNIX, mission-critical IA, and x86 servers), storage systems, and middleware on which information systems are built. Network products include mobile-phone base stations, optical transmission systems, and other equipment used to build communications infrastructure.



DWDM system  
FLASHWAVE 9500 Release 8.1



Disk storage system  
FUJITSU Storage ETERNUS  
DX8000 S3 series



2-way multi-node x86 server  
PRIMERGY CX2550 M1



Rear view

**OUR STRENGTHS**

For system products, Fujitsu has a broad lineup of offerings to meet the needs of customers around the world. These include sophisticated and highly reliable mainframe and UNIX servers that support the mission-critical systems of corporations and that are equipped with proprietary CPUs—Fujitsu being one of the few global ICT companies with the technology to make its own processor chips. We also provide x86 servers for cloud computing and other promising business areas, as well as storage systems able to hold increasingly vast amounts of data.

For network products, Fujitsu holds a large market share for optical transmission systems and mobile-phone base stations used by mobile communications carriers in Japan, backed by its advanced technology and support capabilities. We also have a large market share in the highly competitive North American market for optical transmission systems, building on our highly rated technical capabilities and track record.

**SERVER MARKET SHARE IN JAPAN IN 2014**  
(REVENUE BASIS)

1	Company A	23.2%
2	<b>Fujitsu</b>	<b>22.8%</b>
3	Company B	14.4%
4	Company C	11.4%
5	Company D	9.9%
6	Others	18.3%



(Source: IDC Japan, "Japan Quarterly Server Tracker CY15Q2," August 28, 2015)

**OPTICAL FIBER NETWORKING MARKET SHARE FOR NORTH AMERICA IN 2014**  
(REVENUE BASIS)

1	Company A	25.2%
2	<b>Fujitsu</b>	<b>18.5%</b>
3	Company B	11.6%
4	Company C	11.1%
5	Company D	10.0%
6	Others	23.6%



(Source: Ovum, "Market Share Spreadsheet & Analysis: 2015 Global ON," August 2015)

## MARKET TRENDS

**System Products:** The server market in Japan is projected to show a negative CAGR of -0.5% for the period from 2014 to 2017. The x86 server market is expected to maintain growth given the penetration of cloud computing and mobile devices. On the other hand, the high-end server market should continue to be driven mainly by replacement demand.

Globally, the server market is expected to achieve a CAGR of 6.0% from 2014 to 2017. With increased demand for datacenters associated with market expansion in emerging markets and the spread of SNS and cloud computing, the market for volume-zone servers is expected to grow.

**Network Products:** Capital expenditure in the worldwide optical transmission market is declining as communications carriers shift the focus of their investment from infrastructure to enhancing services. Meanwhile, moves to achieve network virtualization and softwarization through software-defined networking (SDN) and network function virtualization (NFV) are rapidly gaining momentum. Accordingly, we expect investment in those fields, as well as investment in 100 Gbps optical transmission and the integration of optical transmission and packet processing, to continue expanding over the medium term.

## OPERATIONAL REVIEW AND INITIATIVES

### Fiscal 2014 Business Results and Fiscal 2015 Outlook

The System Platforms sub-segment reported revenue of ¥596.5 billion, a decrease of 3.1% from the previous fiscal year.

Sales of systems products increased 2.0% year on year overall, as the increase in x86 server sales in Japan and overseas was partially offset by a decline from the large-scale business deals of the previous fiscal year. Network products declined by 7.2% year on year due to investment restraint on the part of carriers in Japan and overseas.

Operating profit for the System Platforms sub-segment totaled ¥45.2 billion, a decrease of ¥14.0 billion from the previous fiscal year. This result reflects the impact of falling sales in

the network products business and an increase in component costs in Europe associated with the euro's depreciation.

In regard to the outlook for fiscal 2015, revenue in the System Platforms sub-segment is projected at ¥600.0 billion, an increase of 0.6% year on year. System products are expected to come under some pressure in the domestic market, while sales of x86 servers are anticipated to grow overseas, including Europe. For network products, Fujitsu anticipates a challenging business environment to remain as we work to increase sales of new products and expand our customer base worldwide.

Operating profit for the System Platforms sub-segment is forecast at ¥50.0 billion. Profit growth reflects the positive impact of sales growth and the streamlining of costs, which are expected to absorb higher costs stemming from the yen's depreciation.

### Initiatives Going Forward

**System Products:** The servers, storage, software, and other products that form the foundation for realizing the IoT are playing an increasingly important role. Fujitsu will endeavor to expand business focused on the digital business platform, which will address a hyperconnected world in which information and processes are connected in a complex web of relationships. Fujitsu will support the crucial infrastructure underpinning the digital business platform with its lineup of highly reliable, high-performance hardware products.

**Network Products:** As data and networks continue to merge, Fujitsu is taking steps toward its next growth stage by accelerating the development of the network virtualization technologies SDN and NFV, while staying on top of the shift to services. In the process, our aim is to expand earnings globally. We will leverage our capabilities in advanced technologies to cope with the increase in data traffic associated with the shift to services, expanding our business by increasing sales of 100 Gbps packet-integrated optical systems. In mobile systems, we will accelerate development of high-density radio base stations compatible with LTE-Advanced.

### RISKS AND ISSUES

In system products, commoditization is progressing, mainly in low-end models, and price competition is intensifying. In addition, there are fears of further declines in profitability as the yen's depreciation drives up component costs. A further issue is the gradual contraction of the market for large, high-end servers. It is important for Fujitsu to pursue cost reductions and efficiency gains, and to boost its price competitiveness while maintaining high quality.

In network products, customers worldwide are tending to hold back on capital expenditure. Fujitsu needs to continue reducing costs and lead times on development of advanced technologies for realizing the next-generation SDN and NFV network systems that customers seek.

# Ubiquitous Solutions

This segment consists of PCs, mobile phones, and mobile-wear. For PCs, Fujitsu provides desktops, laptops, and tablets that are known around the world for their high level of quality and performance. For mobile phones, Fujitsu's offerings include the flagship arrows NX model smartphone as well as the easy-to-use Raku-Raku Phone series. For mobilewear, Fujitsu answers a diverse range of needs through "Connectivity" Products, among them car-navigation systems that interface with smartphones to make navigation systems more enjoyable and intuitive to use for anyone.



LIFEBOOK GH77T, new concept PC with a large detachable screen



arrows NX F-02H, smartphone produced for NTT DOCOMO, Inc.



ECLIPSE AVN-SZX05i, car navigation system

**OUR STRENGTHS**

For PCs, Fujitsu is quick off the mark to deliver high-quality, high-performance products to customers. For the Japanese market, laptops are manufactured by Shimane Fujitsu Limited (in Izumo, Shimane Prefecture), while desktop PCs are manufactured by Fujitsu Isotec Limited (in Date, Fukushima Prefecture). Outside of Japan, Fujitsu Technology Solutions (Holding) B.V. performs assembly and customization of PCs.

For mobile phones, we develop and manufacture high-quality mobile devices, including the flagship arrows NX series of high-performance smartphones with enhanced battery life and iris authentication technology, and the Raku-Raku Phone series with easy-to-read displays, clear-sounding speakers, and intuitive functionality.

For mobilewear, we draw on our long-nurtured expertise with in-vehicle technologies to provide car navigation systems and other types of automotive electronics that make the driving experience more secure, safer, and more comfortable.

**PC MARKET SHARE IN JAPAN IN 2014**  
(UNIT BASIS)

1	Company A	25.7%
2	<b>Fujitsu</b>	<b>18.9%</b>
3	Company B	12.1%
4	Company C	10.3%
5	Company D	9.8%
6	Others	23.2%



(Source: Gartner, "Market Share: Final PCs, Ultramobiles and Mobile Phones, All Countries, 2015 Update" 14 August 2015 (Desk-based+Notebook+Ultramobile Premium))

\* Chart created by Fujitsu based on Gartner data

**MOBILE PHONE SHIPMENTS IN JAPAN IN 2014**  
(UNIT BASIS)

1	Company A	42.6%
2	Company B	13.8%
3	Company C	10.3%
4	Company D	10.2%
5	<b>Fujitsu</b>	<b>7.2%</b>
6	Others	15.9%



(Source: IDC Japan, "Worldwide Quarterly Mobile Phone Tracker, 2015Q2")

## MARKET TRENDS

According to IT research firm IDC Japan, the market for mobile and client computing in Japan is expected to see a CAGR of 3.5% from 2014 to 2017.

For PCs, lower demand following the rush to replace Windows XP devices in the corporate sector is projected to continue until 2016, with a CAGR of -1.2% forecast for shipments of PCs from 2014 to 2017.

For tablets, the consumer market has already shifted to replacement demand and is forecast to shrink, while in the corporate market, tablet adoption in educational settings and Windows-tablet introduction by companies are set to continue. A 2.0% CAGR is forecast for tablet shipments from 2014 to 2017.

A CAGR of 6.5% is forecast for smartphone shipments from 2014 to 2017, as users switch from feature phones to smartphones.

Meanwhile, global demand for car navigation systems is predicted to grow with the expansion of markets in emerging economies. According to a survey by the Japan Electronics and Information Technology Industries Association, shipments of car AVC devices are forecast to grow at a CAGR of 6.0% from 2014 to 2017.

## OPERATIONAL REVIEW AND INITIATIVES

### Fiscal 2014 Business Results and Fiscal 2015 Outlook

Revenue in the Ubiquitous Solutions segment totaled ¥1,062.8 billion in fiscal 2014, a decline of 5.6% year on year.

Worldwide shipments of PCs declined by 20.3% year on year to 4.7 million units. Revenue in Japan declined, reflecting a fallback from a surge in demand at the end of fiscal 2013 preceding a consumption tax increase, along with the end of replacement demand for Windows XP in the first quarter. Unit sales outside of Japan also fell as replacement demand related to Windows XP ran its course.

Revenue declined, reflecting a 10.8% year-on-year decline in shipments of mobile phones to 3.3 million units and sluggish unit sales due to telecommunications carriers changing their sales policies and other factors.

Revenue in mobilewear rose atop an increase in automobile production outside Japan, primarily in North America.

The Ubiquitous Solutions segment reported an operating profit of ¥8.7 billion as earnings rose ¥35.6 billion year on year.

For PCs, the impact of lower sales in and outside Japan and the depreciation of the yen and euro contributing to an increase in parts procurement costs led to a large decline in earnings.

For mobile phones, rigorous cost cutting, along with the effects of business restructuring and an improvement in product quality, led to a significant increase in earnings.

For mobilewear, investment in developing advanced technologies and the ramp-up of production at overseas sites increased costs and resulted in a slight decline in earnings.

### Initiatives Going Forward

Fujitsu, by offering the FUJITSU Mobile Initiative, a system of products and services that provide optimal solutions for the use of mobile devices, will realize the transformation of its customers' work styles and people's lifestyles.

Under the FUJITSU Mobile Initiative, Fujitsu will provide a full range of mobile integration, encompassing products and services from mobile devices to applications and providing consultation based on an extensive track record, as well as system construction and operations services that provide complete, one-stop life cycle support. We will also provide a range of other solutions designed to enable the use of mobile devices across a variety of business functions, including virtual-desktop/remote-access platforms and mobile-application development platforms. Through the use of smart devices, we will help customers to realize business-efficiency improvements, cost reductions, and innovations in inspection and maintenance work. Anticipating a dramatic increase in the number of things connected over networks and an increasing diversity in the kinds of mobile devices available, we have positioned sensors, embedded systems, wearables, and other items as "next-generation front-end interfaces," and are focusing on these fields as the next growth area for the Ubiquitous Solutions business, centered on FUJITSU IoT Solution UBIQUITOUSWARE.

In mobilewear, Fujitsu is advancing its vehicle-ICT business to transform automobiles with ICT, and based on the "Future Link" concept that offers new value by connecting to a variety of information, we are generating products and services that contribute to a free and comfortable mobile society.

### RISKS AND ISSUES

Ongoing global price competition in the market for PCs requires continued efforts to reduce costs, as well as to deal with the increasing cost of parts procurement caused by the depreciation of the yen and euro, while emphasizing profitability in Fujitsu's business operations.

For mobile phones, the number of MVNO (Mobile Virtual Network Operator) devices featuring inexpensive rates has been increasing, and a new market for these devices is forming. At the same time, customer demand is shifting to the mid- to low-price range. Fujitsu must respond to these markets by providing them with attractive products in a timely manner.

For mobilewear, the automotive industry is developing new technologies such as autonomous driving support systems, which will require Fujitsu to respond with efficient, highly reliable software development.

# Device Solutions

The LSI device business and electronic components business comprise Fujitsu's Device Solutions. In the LSI device business, Fujitsu offers wafer foundry services, LSI device sales, and system memory businesses such as FRAM and FCRAM. In the electronic components business, publicly listed consolidated subsidiaries such as Shinko Electric Industries, Fujitsu Component, and FDK provide semiconductor packages and other electronic components, as well as structural components such as batteries, relays, and connectors.

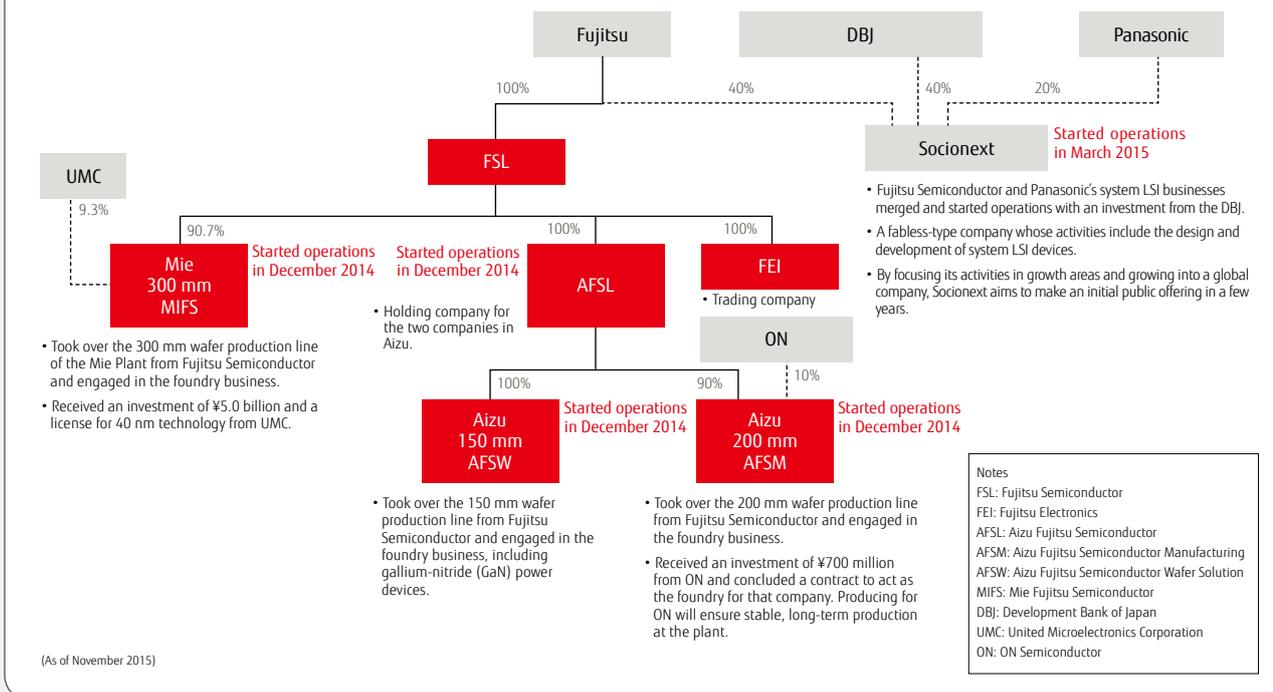


Exterior view of Fujitsu Semiconductor's Mie plant



High-heat-resistant, 16 kbit FRAM MB85RDP16LX with nonvolatile memory configuration optimal for rotary encoders

## Overview of Structural Reforms in Fiscal 2014 and the Restructured FSL Group



### Fiscal 2014 Business Results

Revenue in Device Solutions declined by 0.8% year on year to ¥595.6 billion. Sales in Japan increased 4.8%, with sales of LSI devices growing mainly in products for smartphones and servers. Outside Japan, sales decreased by 6.1%, with LSI-device sales falling due to the impact of the sale of a microcontroller and analog device business and a decline in products for smartphones, mainly in Asia. Electronic component sales were also down on lower sales of semiconductor packages to the Americas.

The segment posted operating profit of ¥36.9 billion, an improvement of ¥25.3 billion from the previous fiscal year. This

was mainly the result of structural reforms in the previous fiscal year that reduced fixed costs, as well as the yen's depreciation against the dollar, which had the effect of increasing dollar-based sales. The impact of increasing competition in semiconductor packages was countered by the effect of lower development costs accompanying the liquidation of a communications semiconductor company.

In March 2015, a system LSI device design and development business was transferred to Socionext Inc., a joint venture with Panasonic Corporation and the Development Bank of Japan, Inc.