INITIATIVES BY REGION

Japan

Customer Solution Profile



Illustration by Akihiro Ikeshita

Japan Aerospace Exploration Agency (JAXA)

The Hayabusa Asteroid Probe Successfully Completes Sample Return Mission World's First Collection of an Asteroid Sample and Return to Earth

Japan's space agency, the Japan Aerospace Exploration Agency (JAXA), launched the asteroid probe Hayabusa in May 2003. It was the world's first attempt to collect and return to Earth a rock sample from an asteroid, which would provide important clues in the study of the birth and evolution of the solar system. Overcoming numerous obstacles and problems, in June 2010 the probe returned to Earth with particles collected from the asteroid Itokawa. Fujitsu contributed to the success of this mission by developing and operating the "orbit determination system," the "real-time satellite status monitoring and fault diagnosis system," and the "ground data transmission system for communicating with the satellite."

The "orbit determination system" is a data processing system to determine the probe's current location and speed, with the results of the orbit determination used to correct the probe's flight path. Over the seven years from Hayabusa's launch until its return to Earth, Fujitsu made accurate assessments of the probe's location and speed, contributing greatly to the precision guidance necessary for the probe to arrive at Itokawa, and for atmosphere entry.

The "real-time satellite status monitoring and fault diagnosis system" is a system to convert and display in real time the data sent by the probe on the status of the various onboard instruments, automatically diagnose faults by processing the complex variables in the data, and report the results to the operators. Hayabusa experienced a series of malfunctions and problems with its various instruments, and the system's ability to quickly provide the operations teams with accurate information helped guide the severely damaged Hayabusa back to Earth.

The "ground data transmission system for communicating with the satellite" provides a link between the ground stations in Japan and overseas that communicated with the probe, and the Spacecraft Operation Center in Sagamihara, Kanagawa Prefecture. In addition to the Hayabusa probe, this system provides support for all satellite operations conducted from the Sagamihara Spacecraft Operation Center.

Going forward, Fujitsu will continue to aid in the advancement of Japan's space exploration technologies through the development and operation of JAXA's ground systems.

GRAPH 1

Share of 2010 IT Services Market Sales in Japan (Revenue Basis)



(Source: Gartner, "Market Share: IT Services, 2010" 31 March 2011)

Market Trends

Japanese IT market growth is expected to fall 4.2% year on year in 2011. → GRAPH 2

Many observers are taking a harsh view of the Japanese economy in the wake of the Great East Japan Earthquake. It is unclear to what extent economic activity will be impacted by power shortages and parts supply issues resulting from damaged manufacturing lines. Furthermore, the impact of the nuclear crisis is not limited to Japan but extends globally in terms of reduced exports and fewer travelers arriving from overseas. Under these circumstances, anxiety is rising with regard to corporate earnings, and it is anticipated that companies will become increasingly cautious when making capital investments, narrowing their scope to prioritize reconstruction and restoration. Public-sector IT budgets are also projected to shrink in the immediate future as resources are diverted to disaster recovery.

In light of this, the server market in Japan is expected to contract more than 10% compared with the previous year. In addition to concerns about companies postponing IT

GRAPH 2 IT Market Forecasts (Japan)



(Source: IDC The Worldwide Black Book Q1 2011)



* Including intersegment sales

investment, the use of datacenters with a view to risk avoidance, and the trend toward server integration and consolidation accelerates in tandem with a shift to lower prices.

The communication devices market is projected to experience only slight growth. Although the investment cycle of Next-Generation Networks (NGNs) has passed its peak, this will likely be countered by an expected rise in the pace of mobile base station installations for Long Term Evolution (LTE) services, and an anticipated boost from disaster-related spending.

The IT services market is expected to see a continued contraction of 1%–2% year on year in line with overall reductions to IT budgets. Many new IT system development projects are set for cancellation or delay as a result of the disaster, and cuts in system operating expenses are foreseen.

At the same time, however, companies are expected to revise IT system operations to take account of business continuity plans (BCP) formulated after the March 2011 disaster, and to adopt new IT services such as cloud computing as part of their disaster recovery efforts. Demand is also anticipated for system upgrades to comply with regulatory changes, and over the medium term, expansion in the IT services market is expected to return.

Initiatives Going Forward

Fujitsu aims to establish a dominant presence in Japan's IT services market. With growth in cloud computing anticipated, Fujitsu will bring to bear its collective strength in networks, servers, storage solutions, middleware, applications and other high-quality products to deliver highly reliable cloud services.

In the server business, we continue to bolster sales promotion initiatives with a focus on the growing x86 server market. Indeed, our high-performance, energy-efficient, low-noise x86 server lineup is gaining market share. From this year, we plan to augment the lineup in areas of robust market growth, including a new micro-server for the smalland medium-size business market featuring a small physical footprint and energyefficient operation, and a high-density rack server for the datacenter market. Fujitsu is also expanding sales of its Cloud Ready Blocks, packaged hardware and software with everything a customer needs to get a private cloud up and running in minimum time. With a growing lineup of competitive products, we aim to maintain our top share of the Japanese server market.

In the network products business, our goal is to accelerate the spread of LTE and at the same time expand our business domain by developing new ICT products and solutions for the home and other markets which use high-speed networks like LTE and optical fiber access.

In the ICT services business, we are expanding our offerings around cloud computing. New services include a SaaS-based regional healthcare network, CAD and other engineering cloud services for manufacturers, traffic information services using data from moving taxis, and computational drug research services using supercomputers. We will continue to offer innovative new services that support our customers' business success.

In addition, we have launched cloud platform services commercially in markets around the world from Fujitsu datacenters. The FGCP/S5 service is based on proprietary Fujitsu technology, while the FGCP/A5 service utilizes Microsoft's Azure platform. Fujitsu also offers the cloud-based INTARFRM system development framework which enables companies to develop new systems efficiently.

As cloud computing becomes more prevalent, we are taking advantage of new opportunities by shifting SEs in charge of application development to operational services and business producer functions. This will enable us to increase interaction with customers and strengthen our ability to offer proposals which utilize ICT in innovative ways.

EMEA Europe, Middle East, Africa

Customer Solution Profile



TIANUAG

ETERNUS CS virtual tape

BBVA

Creating Innovative Storage Systems Tailored to BBVA's Needs

BBVA is a Spanish financial group that globally offers individual and corporate customers the most complete range of financial and non-financial products and services. The group employs 104,000 people in over 30 countries around the world and has more than 47 million customers. Since 1995 BBVA has been expanding its business network in the Americas, particularly in Latin America, making it the largest financial institution in Mexico. Fujitsu is implementing a large multi-layered storage solution with ETERNUS CS technology at BBVA, with the goal of setting up a disk-based data protection system that eliminates the need for physical tape technology and simplifies and automates data recovery tasks in the event of a disaster. One ETERNUS CS 4000 system and two ETERNUS DL 1500 systems maximize functionalities at minimal cost. A four-year, 24/7/365 services contract ensures the system's availability and reliability.

BBVA is making this investment in order to replicate its business data between México City and Monterrey in Mexico as part of the group's global strategy.

Fujitsu convincingly won this project from BBVA thanks to its flexibility on the bid: a unique model has been created tailored to the requirements of BBVA, combining an exclusive deduplication technology and an efficient compression, so each information can use the best way to be storaged. It will allow diverse capabilities and significant cost saving.

According to Carlos Redondo Prieto, Head of Storage Systems at BBVA's European data processing center, "this solution will eradicate physical failures in the mechanical parts of the system. It will also improve disk performance, thereby minimizing batch and backup times, and eliminate data reading errors on the cartridges as they will be replaced with disks."

Market Trends

GRAPH 1 Share of 2010 IT Services Market in the UK (Revenue Basis) 6 5% 1 Company A 2 Company B 5.8% 5 5% 3 Company C 4 Company D 4.9% 5 Fujitsu 4.3% 6 Company E 3.6% Others 69.4%

(Source: Gartner, "Market Share: IT Services, 2010" 31 March 2011) A continued recovery is forecast in the 2011 EMEA IT market, with 6.8% year-on-year growth buoyed by a mild economic recovery that began from 2010 in the wake of the financial crisis. → GRAPH 2 IT markets in Eastern Europe and Africa are projected to expand as economies in the regions continue to grow. In Western Europe, with the exception of Britain where spending cuts have been instituted to cope with the economic slump, robust IT markets are anticipated, particularly in Germany and other countries where higher exports have driven economic recovery. In Britain, a major market for the Fujitsu Group, the government's fiscal austerity measures are expected to continue over the long term, and even after 2011, IT investment is likely to be limited to a mild recovery. Growth is expected in areas linked to cost-cutting initiatives, including procurement systems, shared services, off-shoring, infrastructure outsourcing, and business process outsourcing (BPO).

GRAPH 2 IT Market Forecasts (EMEA)



(Source: IDC The Worldwide Black Book Q1 2011)

GRAPH 3

(Billions of yen) 1,200

900

600

300

0

-300 **2007**

Net sales (left scale)

* Including intersegment sales

Income Margin

Net Sales* and Operating

769 9

2008 2009

Operating income margin (right scale)

(Years ended March 31)

612.8

A slight recovery in the IT services market is expected, with year-on-year growth of 2.3% against the previous year. Market conditions remain uncertain however, with IT budget cuts by the UK government (the largest customer for Fujitsu's outsourcing business), and escalating price competition with rival companies.

The overall EMEA server market is forecast to remain mostly unchanged, with 0.2% year-on-year growth. Market expansion is forecast mainly for Eastern Europe and Africa. However, mature Western European markets are likely to contract slightly against a back-drop of increasingly severe price competition. The high-end server market is expected to continue its precipitous decline as customers shift to low-end servers. As a result of this shift, the markets for low-end x86 and mid-range servers, mainstay product areas for Fujitsu, are expected to grow to support demand for cloud and other advanced computing needs. The storage market is projected to follow similar trends as servers, with overall investment on par with last year. The PC market, meanwhile, is anticipated to grow 5.0% over the previous year on the back of continued strong demand in Eastern Europe and Africa, along with growth in Western Europe stimulated by economic recovery.

Initiatives Going Forward

(%)

12

0

-3

975.6

-0.3 -2.2

2010 2011

849.5

Fujitsu has promoted business expansion in EMEA with a focus on the infrastructure services market. The region's profitability, however, has declined due to several loss-generating projects. In order to eliminate such projects and boost the region's profitability, we are strengthening collaboration between the EMEA business units and our Assurance Group, which oversees assurance initiatives worldwide. We have also integrated the x86 server and storage functions previously split between Japan and Fujitsu Technology Solutions in Germany. We are taking the next step in developing truly global products by moving the x86 server headquarters to Germany. The establishment of a unified, global product and business foundation is an important step in the creation of a robust organizational structure which can strive for the same sustained level of high profits and growth achieved in Japan.

By geographic market, in the UK & Ireland region we are optimizing the organizational structure, previously focused on public-sector business, to support the expansion of our private-sector business. Additionally, we are strengthening the entire business structure by streamlining our infrastructure services business and promoting cloud computing. As we strive to expand our infrastructure services, which comprise about 70% of our business in the region, we are also advancing a comprehensive product and services portfolio featuring Fujitsu-brand servers and storage, as well as application and network solutions.

In continental Europe, we have created three sub-regions based on market size and maturity: Germany, Western Europe, and emerging markets. In each of these sub-regions, we are taking initiatives to bolster the sales structure through improved account management, exclusive sales organizations for each business, and the promotion of multi-channel sales. We are also leveraging the competitive edge of Fujitsu Technology Solutions in the x86 server and PC markets to reinforce such core businesses as products and maintenance services, with the aim of generating stable growth and greater profits.

In the Nordic region, we are improving profitability by merging procurement functions and service desk operations within the region. The sales function is also being enhanced with the creation of special sales teams targeting global companies. With these improvements, we expect to gain market share in the region.

The Americas

Customer Solution Profile



Photo by Jennifer Silverberg

STYLISTIC Q550 Slate PC

St. Louis College of Pharmacy

Dispensing Reliable PCs to Equip Students for College of Pharmacy

Founded in 1864, St. Louis College of Pharmacy is one of the oldest and largest colleges of pharmacy in America. The six-year curriculum integrates the liberal arts and sciences with a professional program leading to the doctor of pharmacy degree. Over 1,200 students from 25 states are currently enrolled.

St. Louis College of Pharmacy issues a PC to all incoming students, so they need rugged, highly reliable products that will last several years. A longtime Fujitsu customer, they standardized on the LIFEBOOK® T Series Tablet PC based on size, weight, full-sized keyboard and overall performance; solid construction; modular bay for second battery; price; and the Fujitsu reputation for quality and service.

"Because our students use their computers so extensively, we really needed reliable, state-of-the-art technology to keep up with the College's many demands," said F. Chad Shepherd, Vice President Information Technology, Chief Information Officer for St. Louis College of Pharmacy. "For the past several years, the Fujitsu tablet PCs have delivered this and more. We're also interested in the Windows-based STYLISTIC Q550 Slate PC; we haven't seen any other product with its impressive enterprise features. We're thrilled that it connects to the network with no changes to the network itself, has a removable eight-hour battery for marathon study periods, and includes advanced security features such as a biometric fingerprint sensor. These features enable us to optimally integrate computing into a productive, enjoyable college experience."

Market Trends

GRAPH 1

Next-Generation Metro WDM Market Share in North America (Revenue Basis)



The IT market in the Americas in 2011 is expected to grow at a comparatively high rate of 7.4% year on year. This represents a trend of continued growth, despite falling short of the considerable 10.1% growth rate in 2010. In the United States, the economy is improving in areas such as manufacturing, retail and transportation, but the pace of recovery in the labor market is sluggish, and the economic environment remains difficult, particularly for small and medium-sized enterprises. → GRAPH 2

In 2011, the IT services market in the Americas is expected to grow a gradual 4.6% year on year, following the 3.9% growth of the previous year. Corporate investment activities have begun to show vitality, and there are expectations of recovery focused on initiatives for virtualization and cloud computing. In addition, the growing use of smartphones has created a new market category, prompting existing vendors to redefine their market position. Consequently, the brisk corporate M&A activity in 2010 will likely continue during 2011.

GRAPH 2 IT Market Forecasts (Americas)



(Source: IDC The Worldwide Black Book Q1 2011) (Americas: North and South America)



Initiatives Going Forward

In April 2009, Fujitsu merged three of its North American subsidiaries to establish Fujitsu America. This has strengthened the core of our business operations in the Americas, and we plan to continue during 2011 to implement a range of measures aimed at transforming business operations in the United States.

In North America, by strengthening sales activities and revising incentive plans we will revitalize consulting and application services, while at the same time undertaking efforts to bolster sales structure and establish sales channels with the aim of expanding the products business. We also intend to laterally expand to other regions services provided mainly to the retail industry in North America, such as services for point-of-sale (POS) and self check-out systems. In the datacenter business, we are extending to the United States the cloud platform launched in Japan in October 2010, and began offering services in May 2011. Going forward, we will utilize our partnerships with companies such as salesforce.com and Microsoft in our efforts to expand the cloud business.

In South America, we will continue to develop businesses for system platforms and palm vein authentication systems, focusing on the Brazilian market. We will also extend our service business and other operations to countries in Central and South America to support the business expansion of customers in Europe and Japan.

In North America's optical transmission systems market, investments to enhance mobile backhaul and other backbone infrastructure to cope with LTE (Long Term Evolution) and the increase in data traffic are set to continue during 2011. Fujitsu aims to maintain its leading share through sales expansion centered on metro WDM devices. Another goal is to attract outsourcing projects from global carriers and business negotiations related to global development.

GRAPH 3 Net Sales* and Operating Income Margin (Billions of yen) 600

(%)



* Including intersegment sales

APAC, China

Customer Solution Profile



Victoria Police

Supporting policing operations through a full range of Fujitsu Australia's capabilities

Victoria Police provides law enforcement services to the Victorian community 24 hours a day, seven days a week, working from over 500 locations to keep over 5.4 million people safe.

Fujitsu Australia has been supporting Victoria Police operations for over 15 years with IT products, services and applications that draw upon the full range of Fujitsu capabilities.

Throughout the years, Victoria Police has looked to Fujitsu for support of policing applications as well as a number of additional corporate applications in a range of projects that have seen the core application support team steadily increase. Fujitsu has also supplied Victoria Police with managed services, hardware and software solutions and their associated service requirements.

Under these contracts Fujitsu has:

- Built and maintained Victoria Police's main data centre housing over 210 servers
- Developed and managed Victoria Police's main non-production (development/test) data centre incorporating a mix of both Unix and Wintel servers
- Designed and managed disaster recovery facilities for all key applications hosted within Victoria Police's main data centre
- Supplied Victoria Police with desktop PCs, laptops, servers, switches and SAN storage devices

In April 2010, Victoria Police commissioned a new human resources, payroll, and e-recruitment system based on SAP. Fujitsu Australia's Enterprise Services division is providing support and enhancements for this system.

Fujitsu Australia's Consulting Group was recently engaged by Victoria Police to recommend ways to reduce electricity consumption associated with their large fleet of desktop PCs.

There are now more than 150 Fujitsu Australia staff securities cleared to work on the police

account, with all divisions of Fujitsu Australia working as "One Fujitsu" to ensure the needs of Victoria Police are promptly and professionally met.



VICTORIA POLICE

GRAPH 1 IT Market Forecasts (China)



(Source: IDC The Worldwide Black Book Q1 2011) (China: Including Hong Kong)

Market Trends

China's IT market, despite a short-term economic impact from the Great East Japan Earthquake, is expected to grow around 18% in 2011, due mainly to the continuation of proactive fiscal policies by the Chinese government. The market is projected to continue to post strong growth of around 16% on average annually for the period from 2010 to 2014. \rightarrow GRAPH 1

China's 12th Five-Year Plan, which began in 2011, focuses on the strategic development and cultivation of new energy and materials, energy conservation and environment, bioscience and medicine, leading-edge manufacturing, and information networking fields. The plan calls for massive, government-directed investment in a wide range of social infrastructure projects in line with the "Internet of Things" concept, including environmental conservation, energy conservation, intelligent transport systems, remote medicine and smart grids.

GRAPH 2 IT Market Forecasts (APAC)



(Source: IDC The Worldwide Black Book Q1 2011) (APAC: Excludes Japan, China, and Hong Kong)





(%)

* Including intersegment sales

Growth in the IT market in the rest of Asia-Pacific (APAC), excluding China, is expected to be around 15% in 2011. \rightarrow GRAPH 2 There may be a temporary dip in component procurement and production activities as a result of the Great East Japan Earthquake, but over the medium to long term countries will continue to develop infrastructure in line with economic development, and growing companies will continue their IT investment. For the period from 2010 to 2014 the IT market for the region is projected to continue to post strong growth of around 12% annually.

In ASEAN countries, governments are planning large-scale infrastructure investments. With consumer spending and capital investment growing, there is continued expansion in necessary public and private-sector IT investment. In India, internal demand centered on public-works projects and consumer spending, along with external demand in areas such as software services as an export industry, are expected to bring about high economic growth. Against this backdrop the willingness to invest in IT is increasing, and growth is forecast to rise from around 5% in 2010 to roughly 13% in 2011, with a strong average annual growth rate of 12% between 2010 and 2014. In the Oceania region, IT investment is expected to slow in the short term as a result of the budget reduction policies of the new Australian government along with the flooding in that country, coupled with the impact from the earthquakes in New Zealand. Over the longer term, however, growth is expected to continue, centered on IT services.

Initiatives Going Forward

In China, Fujitsu will expand its core technology solutions business, and work to develop new businesses. Specifically, we will further grow our services business for both Japanese and foreign-capitalized companies, and develop local businesses in China–supporting customers' business expansion with superior ICT infrastructure. We will expand our platform products business around the lynchpins of x86 servers and storage, particularly for existing customers. At the same time, we will establish new businesses such as mobile phones, and expand sales to new customers. We will also seek to increase our share of the rapidly growing cloud computing market, and will make proactive investments in datacenters to develop a cloud-based solutions business.

In the ASEAN region, Fujitsu has up to now developed business for local customers and global Japanese corporations in parallel. Going forward, we also plan to develop business for global customers headquartered in the United States and Europe, and will create a special team to develop projects and approaches for new business. Furthermore, service-oriented platforms based on cloud services that began full operations in March 2011 and a new marketing division dedicated to cloud services will drive our cloud business at full speed to become a pillar of our growth strategy.

In East Asia, our business up to now has focused on platform products such as servers and POS systems. Going forward, we plan to make a definitive shift to promote cloud services to companies in areas such as food, logistics, health care and agriculture, in partnership with local companies.

In India, we intend to continue efforts to increase business from Europe and the United States by expanding our offshore resources. Fujitsu Technology Solutions will lead our ICT infrastructure business strategy and planning in India, and will work to improve businesses in terms of both scale and management quality. We will also aggressively expand our sales of system products such as x86 servers.

In the Oceania region, we will develop Fujitsu's cloud services across the entire market in an effort to further enhance our ICT competitiveness and expand market share. By industry type, Fujitsu currently holds a strong position in public sector business, and we also plan to expand our portfolio to include such sectors as networks and finance.