



Fujitsu Technology and Service Vision

shaping tomorrow with you

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CONTENTS

Message from Management	2
Our Values: Working Together	3
The New Role of ICT	5
Our Vision: A Human Centric Intelligent Society	7
The Shape of Innovation in Business and Society	10
Fujitsu's ICT Value	24
Product Lineup	44

Message from Management

In recent years, we have seen tremendous upheaval in the business environment and society. Globalization has transformed economic activity, leading to seismic shifts in the market landscape, along with increasing uncertainty. Society as a whole has continued to face a host of important issues, such as food, water, resource, and energy problems associated with population growth. Other priorities include solving problems associated with the aging of our populations and preparing for various natural disasters.

In this context, information and communication technology (ICT) has been advancing dramatically in terms of performance. These phenomenal advances mean that ICT can now actually solve the issues facing business and society, rather than just improving productivity and making operations more efficient. Looking ahead, we believe that ICT will have the power to create new business value and transform social infrastructure.

Fujitsu's vision for a new society is a Human Centric Intelligent Society. We believe ICT will become human-centric and people will play a central role. By harnessing the new power of ICT together with Fujitsu's brand promise of "shaping tomorrow with you," Fujitsu will lead the way together with our customers and society.

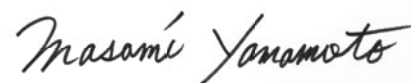
In this publication, Fujitsu Technology and Service Vision, we outline our perspectives on how ICT will contribute to business and society in the future. It will be updated regularly, based on our ongoing dialogue with customers and stakeholders.

I believe that ICT has the power to transform business and society.

I am also convinced Fujitsu has a pivotal role to play in harnessing the full power of ICT for the benefit of customers and society.

April, 2013

Masami Yamamoto
President, Fujitsu Limited





Our Values: Working Together

Together with our customers and society, we will create and share in a better future for all.

At Fujitsu, we are passionate about delivering technologies crucial to people and society, while harnessing ICT to help create value for our customers.

Fujitsu is the world's third largest IT services enterprise with 173,000 employees. As a global company originating in Japan, Fujitsu manages the Group with a respect for the different needs of our regional markets around the world, while valuing our unique Japanese qualities. The Fujitsu Way sets a common direction for the entire Fujitsu Group by articulating our philosophy, core values, and code of conduct.

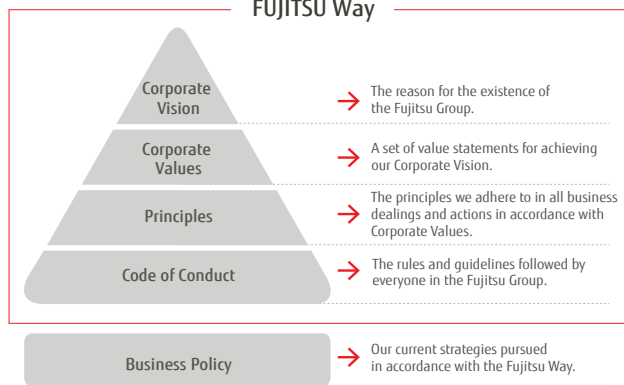
The Fujitsu Way represents our core values and culture, faithfully handed down through generations of Fujitsu personnel. This spirit is evident in the words of Fujitsu's leaders. Mr. Taiyu Kobayashi, the 8th Fujitsu president, said, "Unless you try, you have already failed!" Mr. Toshio Ikeda, a pioneering Fujitsu computer developer,

FUJITSU Way

Corporate Vision

Through our constant pursuit of innovation, the Fujitsu Group aims to contribute to the creation of a networked society that is rewarding and secure, bringing about a prosperous future that fulfills the dreams of people throughout the world.

FUJITSU Way



said, “Nothing is ‘impossible’ for the ambitious.” Mr. Takuma Yamamoto, the 9th president, said, “What mankind can dream, technology can achieve.” These phrases were underwritten by the actions they took on a daily basis. The Fujitsu Way is about a desire to realize dreams. It is about setting ambitious targets and seeing them through. One of Fujitsu’s fundamental strengths is that every employee shares this awareness and determination to succeed. Fujitsu’s many and varied achievements have been founded on the shared will of our people to succeed and deliver value.

“shaping tomorrow with you”

In 2010, Fujitsu created the new brand promise “shaping tomorrow with you” commemorating our 75th founding anniversary. The brand promise expresses the aspiration of Fujitsu, and articulates the importance we place on working together with customers and other stakeholders to create a prosperous future.

In formulating this new brand promise, Fujitsu surveyed our employees and customers around the world. We asked them to share their own thoughts on the essence of Fujitsu. Based on their feedback, we defined the essence of Fujitsu by three key attributes: Responsive – striving to deeply comprehend and flexibly meet the needs of customers and society; Ambitious – aiming to achieve high targets with innovative ideas; and Genuine – always working with integrity to deliver results. Every member of Fujitsu’s global workforce is committed to “shaping tomorrow with you”; this commitment underpins all aspects of their activities in product, service and support fields.

Fujitsu’s First Computer

Looking back over the past 60 years, it’s clear that Fujitsu would never have entered the computer business without the spirit of ambition and adventure.

In 1952, 80% of Fujitsu’s business was to supply Japan’s Telecommunications Ministry of the day. It was then that development section manager Taiyu Kobayashi learned that the Tokyo Stock Exchange was planning to automate the settlement operations of stock transactions. IBM and Remington Rand (currently Unisys) already held a dominant share of this market with their punch-card systems. Nevertheless, Fujitsu decided to develop a computer using relays, which were a component for switching systems at the time, and to participate in this opportunity. A special team of three was formed, with Toshio Ikeda as the leader and Takuma Yamamoto as one of the members, and development commenced in September that year.

Although they knew nothing about computers, the team used Fujitsu’s switching system technology as a starting point. They stayed for 20 days at the company’s dormitory to work on the design phase, working around the clock to develop the machine. With support from the manufacturing department and others, they succeeded in developing a working relay computer in just 6 months.

Unfortunately, they did not win the project. However, their efforts led to the completion in 1954 of a relay computer, the FACOM100. That breakthrough marked Fujitsu’s entry into the computer business, and the beginning of a long journey to become a global ICT company.

Acknowledgement

Along the way we have learned from many people inside and outside Fujitsu – to all we are truly grateful. In particular, we would like to thank Professor Emeritus Ikujiro Nonaka of Hitotsubashi University and Professor Clayton M. Christensen of Harvard Business School for making time for us and providing their intellectual insights.



The New Role of ICT

Against diverse challenges thrown by today's world, there are strong expectations on ICT to deliver business and social transformation to secure our future.

Intelligent Use of Information is the Key to Transform Society

The rapid development of ICT is making a huge impact on how people live their lives and run their businesses. Today, the entire world is interconnected through networks, generating massive amounts of data that accumulate day by day. With the rapid increase of smart devices, people are now able to access information anywhere, any time. Moreover, linked by networks, people are beginning to create new knowledge.

These developments have been supported by incredible technological advances in computing power and network speeds. We are now seeing the emergence of a new Internet of Things (IOT), where anything may potentially be connected via methods such as Machine-to-Machine (M2M) communications. This new network is realized by developments in the technology of embedding information sensors in home appliances, cars, machines, houses, and even social infrastructure such as energy and transportation systems. We are also witnessing unprecedented progress in technologies that find meaningful patterns from analyzing the vast and diverse flow of data from the Internet and this myriad of sensors. With these technologies continuing to advance with ever-increasing speed, society is now facing a major turning point.

Information is the key to bringing about this transformation. We will be able to exploit information as never before, managing a large amount and variety of information in real time through networks. People and businesses will have unique abilities to gather, process and organize all this information at their fingertips in a meaningful form. At Fujitsu, we believe that the intelligent use of information will transform people's lives, business, and society as a whole.

- Transforming people's lives:
It will be possible to comprehend a person's situation (location and scene) in real time and optimally deliver various services, bringing new experiences and insights.
- Transforming business:
Management will be able to monitor sales trends and related information from around the world in real time, and adjust production schedules for respective product lines.
- Transforming society:
City energy supply and demand, traffic conditions, or disaster status will be visualized in real time, enabling people to make better decisions.

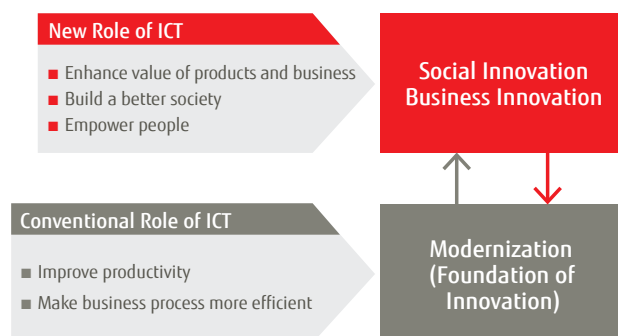
The Expanding Role of ICT

Until now, ICT has primarily contributed to enhancing productivity in the back offices of enterprises and public organizations, and increasing business process efficiency. However, burgeoning operation and maintenance costs for increasingly complex ICT assets have caused a common headache for our customers.

Today, Fujitsu is seeing significant interest from leaders in business and government in developing ICT to address a new set of business and social priorities. How can we engage better with customers? How can we increase the value of products? How can we deliver sustainable growth and further benefit society? Fujitsu recognizes a new opportunity to remove the complexity of conventional ICT systems, strengthen platforms, and combine these efforts with use of new intelligence to generate innovation.

We believe that rapidly advancing ICT has the power to meet these expectations, empowering people to transform business and society, and realize sustainable growth for everyone, across the world.

ICT's Changing Roles



Social Challenges

Technological innovation has paved the way for growth by dramatically transforming business and society. However, while global GDP has tripled in the past 20 years, this growth has not been without teething pains. Various negative aspects of economic growth are appearing in the form of increasingly acute problems. Population growth continues to degrade the global environment, while rapidly

driving up demand for food and energy. Continuing urbanization on a global scale has created the need to develop more efficient social infrastructure. Meanwhile, the world's aging populations are putting a strain on healthcare and elderly-care systems. Hence it has become more important that we look to new paradigms to solve these growing challenges.

Population growth and environmental impact

The world's current population of 7 billion has an environmental impact equivalent to roughly 1.5 times the Earth's capacity to absorb this impact. By 2020, it is estimated that the world's projected population of 7.7 billion will have an impact of 1.8 times the Earth's capacity. By 2030, the world's population will reach 8.3 billion pushing up the environmental impact to 2 times the Earth's ability to absorb it.

Source: WWF, OECD Environment Outlook, Worldometers

Burgeoning demand for food and energy

In the last 10 years, food and energy prices have increased precipitously, mainly as a result of supply-demand imbalances. During this time, food prices have doubled, while energy prices have tripled. As production of biofuels continues to increase, it is imperative that we increase food production by 50% by 2030. Meanwhile, 870 million people around the world today still suffer from malnutrition.

Source: IMF, FAO, IPS Japan

Urbanization issues

Currently, more than half the world's population lives in cities. In 2030, the urban population ratio is projected to increase to 60% creating serious problems, including environmental issues, as well as the proliferation of urban slums. Moreover, the number of megacities with a population of 10 million or more is projected to increase to 35 cities by 2020, compared with 26 cities today.

Source: United Nations, Newgeography

Aging of the world's population

Looking at the elderly population aged 60 and over around the world, the percentage is 30% in Japan, 20% on average in developed countries, and 9% in developing countries. By 2030, the percentages are projected to increase to 37%, 29% and 14%, respectively. Japan is at the forefront of a rapid aging of the world's population.

Source: United Nations

Our Vision: A Human Centric Intelligent Society

Fujitsu's goal is to use the power of ICT to achieve a better and more self-sustaining society.

Imagine a world where people and organizations are free to achieve their full potential and instinctively feel secure and in control. A world where knowledge is continually harnessed to drive new value and support sustainable growth.

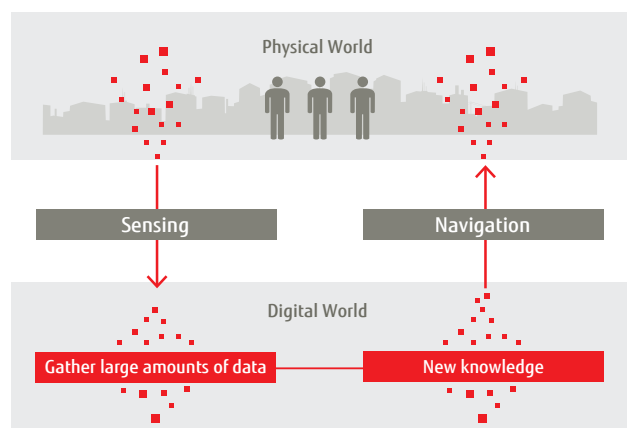
This is the world that Fujitsu aims to make a reality. We call it a Human Centric Intelligent Society.

Developments in ICT are bringing new capabilities within reach. We no longer see technology as simply a means of improving productivity, but as a rich capability that can deliver all sorts of new experiences and value.

The Internet has given rise to a digital world that exists in virtual space on computers and networks. Today, with the development of smart devices and high-speed mobile networks, the digital world is accessible wherever we are, whenever we want. Physical experiences – like shopping or socializing – can now be commonly replicated by digital experiences.

We believe that it is now important to drive the convergence of this digital world with the physical world that we live in. Diverse real-time information about our society is obtained through sensors and analyzed using the digital world's computing power. The new knowledge born of this process has tremendous value in supporting our decisions and actions.

Convergence of the Physical World and the Digital World



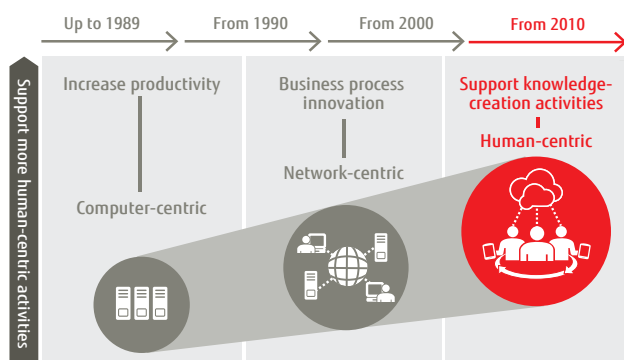
Human-centric ICT

Computing has transitioned from a computer-centric era based on mainframes in the early years, to a network-centric era based on systems like the client-server model. But with instant access to knowledge enabled through smart devices and the cloud, computing is now progressing into a new, human-centric era, where technology connects people, rather than the other way around.

The power of computing is embedded in our daily lives, our business activities, and social infrastructure. By being there alongside us, technology will help people to collaborate with others, make better decisions and create value. In the process, it will liberate and intelligently organize diverse information that has been previously tied to the silos of individual systems.

This will establish an intelligent society where people are able to exploit the benefits of new insights and knowledge. However, to use information confidently, need for security and privacy protection is paramount.

Transitions in Computing Models



Getting There: Our Vision in Three Actions

Our vision is not something that can be realized overnight. But this is a journey, and we can reach our destination by making steady progress. To build a Human Centric Intelligent Society, we will work with our customers and society to execute the following three actions that relate to people, information, and ICT.

1. Create Innovation through People

- Using the power of ICT that surrounds people unobtrusively, we will harness their creativity at the forefront of business and society.
- We will converge and harmonize physical experiences with digital capability to create innovative value.

2. Power Business and Society with Information

- We will support people's activities with knowledge obtained from analyzing diverse information.
- We will harness this information to increase the value of products and businesses and to build better social infrastructure.

3. Optimize ICT Systems from End to End

- We will optimize existing ICT assets of business and society to lay the foundations for innovation.
- Linking people, enterprises and society, we will build ICT systems that are optimized from end to end, converging computing and networking technologies.

Fujitsu has advanced technologies in cloud services, mobility, big data, as well as computing and network infrastructure. We also have expertise in overall system optimization. By combining these strengths we will offer technology solutions and services to realize a Human Centric Intelligent Society.

Three Actions

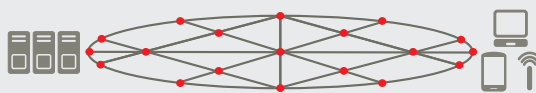
1. Create Innovation through People



2. Power Business and Society with Information



3. Optimize ICT Systems from End to End



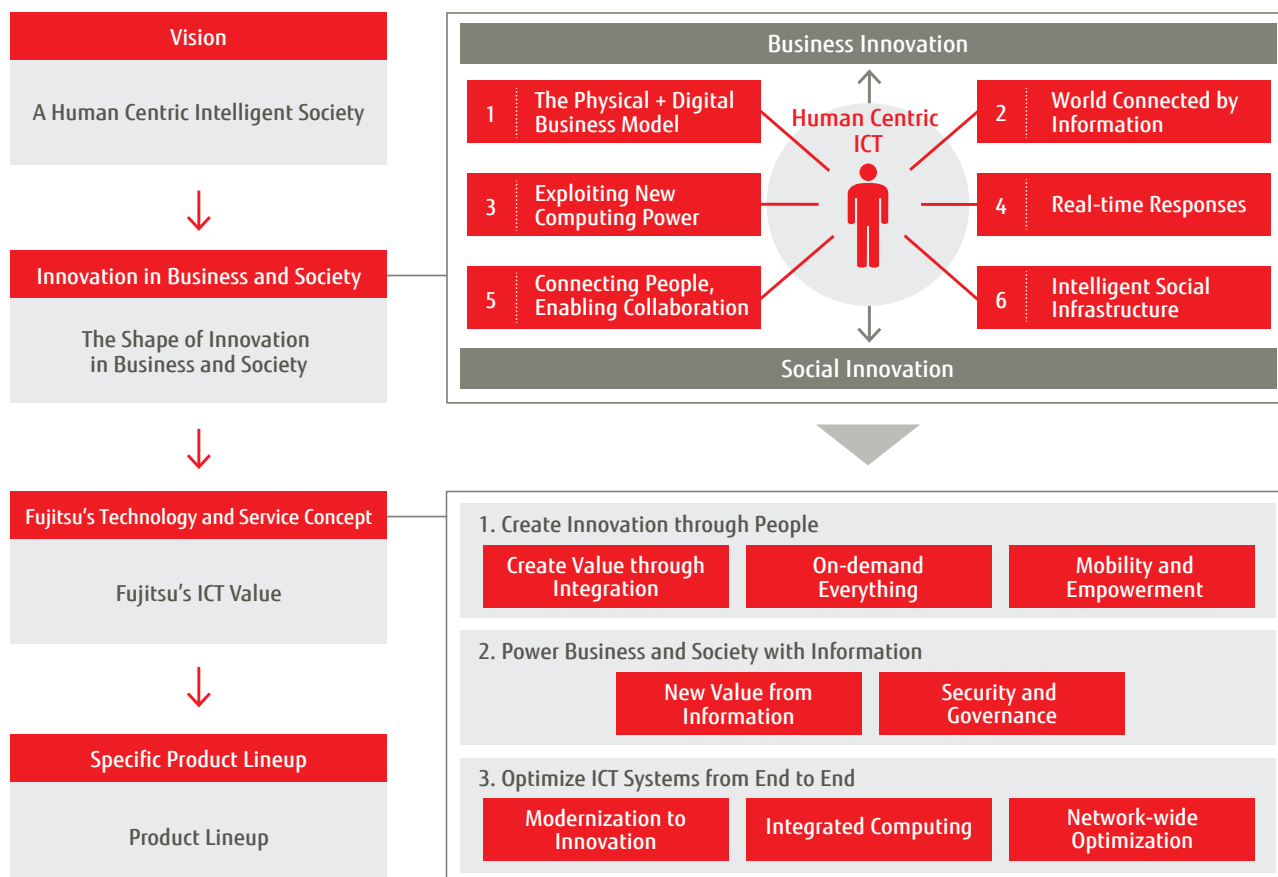
Structure of Fujitsu Technology and Service Vision

The following chapters look at how ICT will drive innovation in business and society and how Fujitsu intends to build our technologies and services to achieve a Human Centric Intelligent Society.

We begin by presenting some of our innovative steps towards a Human Centric Intelligent Society across six high impact innovation scenarios and associated cases.

This is followed by a summary of Fujitsu's technology and service concepts, explained in terms of the three actions for realizing our vision. The booklet closes with an overview of Fujitsu's product lineup based on the technology and service concepts.

Structure of Fujitsu Technology and Service Vision



The Shape of Innovation in Business and Society

This chapter investigates six high impact innovation scenarios. Each focuses on an aspect of how the intelligent use of information is transforming people's lives, business, and society, collectively driving Fujitsu's vision of a Human Centric Intelligent Society.

CONTENTS

1. The Physical+Digital Business Model	11
2. World Connected by Information	13
3. Exploiting New Computing Power	15
4. Real-time Responses	17
5. Connecting People, Enabling Collaboration	19
6. Intelligent Social Infrastructure	21

1. The Physical+Digital Business Model

Business models that integrate physical and digital elements are driving innovation.



Accelerated Convergence of Physical and Digital Worlds

The physical world of real things and the digital world have conventionally been separate entities. However, we are now seeing these two worlds rapidly converge. New experiences are becoming available, and digital-based services are delivered according to our physical context. Various new services offer optimal information based on the location of a smartphone, such as distributing coupons issued by the closest retail establishments to smartphone users. Machine to Machine (M2M) service and Internet of Things (IoT) will transform our experiences further. These connect a large and varied range of physical elements to the digital world.

New Relationships that Transform Business

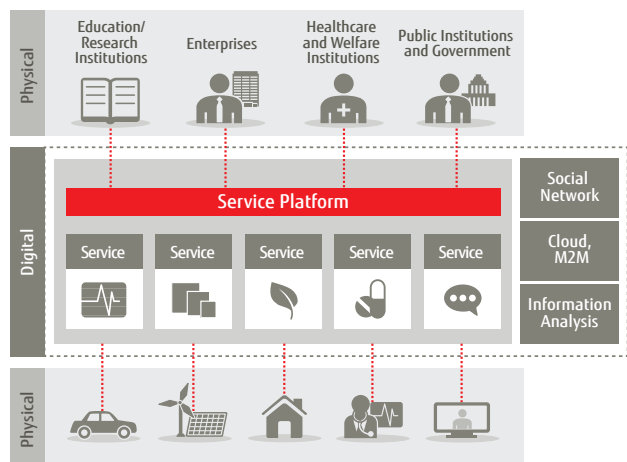
The convergence of the physical and the digital worlds is creating new business models. Here, the key to creating value lies in building new relationships among things, information and people. The things of the physical world are connected with the information of the digital world to provide innovative services for people.

- Combining the physical and digital worlds enables companies to shape different styles of engagements with individual customers. In the digital world, social media allows them to communicate with individual customers and gain sympathies about their business and products. This would lead to building trust, and improving their customers' purchase experience in the physical world. Meanwhile, new technologies that determine a customer's immediate environment through smart devices allow companies to offer optimized recommendations based on a profile elicited from analyzing various kinds of information. This enables them to directly connect with their individual customers in real time.
- By connecting products through M2M, companies can remotely monitor the state of their products in real time, even after they have been delivered to customers. This allows them to provide value-added services such as function updates and remote maintenance. Furthermore, intelligence embedded in products will enable them to interact with their customers or add new services.

- We are increasingly seeing business models that expand the ecosystems of complementary service providers who supply value-added services for products. End users can receive a wider range of services through service platforms. To date, such service platforms were available primarily for digital products; however, this type of business model is now covering diverse physical products, including consumer electronics and automobiles.

The optimal integration of M2M, cloud computing, mobility, social networks, and data analytics in a human-centric fashion serves as a foundation for companies to maximize the benefits of the physical and digital worlds in business models.

Service Platform



ICT Enhances Product Competitiveness via M2M

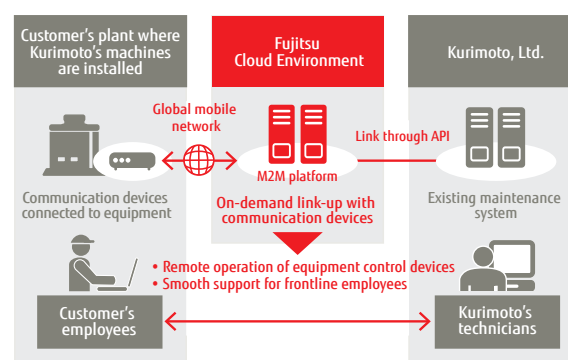
Kurimoto, Ltd.

Kurimoto, Ltd. provides a wide range of industrial equipment. Notably, Kurimoto installs hot and warm forging press machines at the main plants of its corporate customers in various industries, including automobiles and construction machinery, around the world. Maintaining productivity and stable operation are crucial for these sorts of industrial equipment. Speedy maintenance services are necessary, particularly when unexpected issues arise overseas.

For this reason, Kurimoto became interested in remote maintenance services delivered through networks and decided to introduce Fujitsu's FENICS II M2M service which collects machine operation data remotely. The following tasks are performed on Fujitsu's cloud platforms: communication with control devices embedded in steel press machines, storage of operation data, and ensuring the functional requirements for security of Kurimoto's remote maintenance service. Fujitsu and Kurimoto successfully launched the remote maintenance service within three months by providing all infrastructure, including wireless networks, communication devices, and closed networks dedicated to maintenance services, in addition to cloud platforms. Kurimoto has launched the Kurimoto Remote Maintenance Service utilizing the FENICS II M2M service. This service rapidly restores

machinery and reduces machine downtime by gathering data on their operating status remotely, giving customers who install Kurimoto's equipment overseas the same level of assurance as they would have in Japan. This has helped to make Kurimoto's products more competitive by facilitating new machinery sales overseas.

Kurimoto Remote Maintenance Service



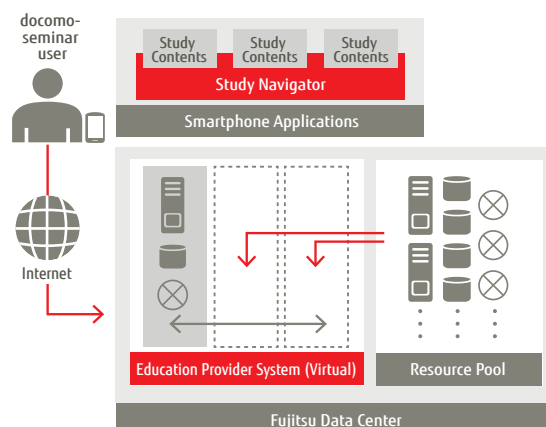
Combining Mobile and Study Programs Creating an Entirely New Way to Learn

NTT DOCOMO, INC.

For enterprises that seek to sustain growth, creating new businesses is a major challenge for management. Enterprises need to leverage their own strengths while promoting innovations. Mobile phone leader NTT DOCOMO has introduced a new learning service called "docomo-seminar" that utilizes smartphones and tablet PCs. The service provides contents for study and self-improvement that users can access during moments of their spare time. There are around 1,000 types of contents available, including courses for languages, qualifications, hobbies and skills. Combining mobile communications with study programs is one of the initiatives that NTT DOCOMO is taking to drive its business expansion into new fields and to transform itself from a telecommunications company to a comprehensive services provider. Fujitsu provides the infrastructure for the service in the form of the public cloud service "FUJITSU Cloud IaaS Trusted Public S5." In addition to flexible scalability allowing instant expansion, this cloud service also offers a way to shorten construction times and ensure reliability, and comes with its own built-in security system. NTT DOCOMO commended Fujitsu highly for this service package. Moreover, the Fujitsu Group companies also provide a wide scope of support, offering expert advice in many fields including smart device

application development, abundant experience in learning services, and specialist capabilities in design and construction of user experience. In this way, Fujitsu has contributed to making docomo-seminar a convenient and enjoyable service.

docomo-seminar



2. World Connected by Information

Information will connect people across the traditional boundaries of regions, companies and industries, while creating valuable insights and knowledge.



A Borderless World

Geographical distances are less relevant in a world with high-speed digital communications. Global markets, and the value chains arising from them, have provided companies all over the world with major opportunities, regardless of size. Yet, at the same time, it has exposed them to new business risks such as increased competition from abroad.

ICT is allowing industries, companies, and customers to connect across traditional boundaries. Companies across industries are now engaged in open collaboration with business partners and customers. In the past, this type of innovation was usually achieved internally, and in isolation.

The way to use information holds the key. Diverse information will be integrated and organized around people, and will help their decisions and actions.

Global Information Management

We can better manage global business if we are able to grasp the ever-changing business environments with an integrated view. For example, manufacturers must determine how to optimize value chains that encompass the home country's parent factory and the various satellite factories in different regions. Cloud services with global scale can effectively link the mother factories and their satellites, while data management systems integrate information from all the regions. Meanwhile, business intelligence (BI), and business analytics (BA) provided over the cloud can help optimize decisions in response to the current sales status of each region.

Harnessing Human-centric Information

Information about an individual's health and clinical data has been managed separately by each relevant medical institution. Going forward, a higher quality of medical care will be materialized as the doctors and nurses of hospitals and clinics will share common information about each client. Furthermore, individuals will be able to use the cloud to view their personalized health, clinical and other information in one stop.

Open Innovation Tied to Information

Open innovation will not be restricted to the development of open source software such as Linux. It will expand into a broader range of service domains. The key elements will be people, information and platform to make innovation happen. Information has the power to create new opportunities through open collaboration among companies, different business sectors and customers. The important step is to establish a platform that serves as an open forum or marketplace where participants can provide and use a diverse array of information. Protecting the private nature of personal information is crucial to such platforms. In this respect, ICT must provide adequate means of safeguarding personal information.

Borderless Printing Service

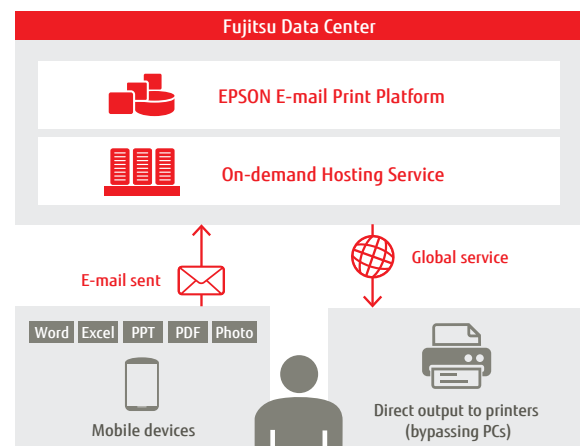
Seiko Epson Corporation

In ink-jet printers, Seiko Epson Corporation boasts one of the industry's highest printing resolutions and a large share of the Japanese market. As smart devices rapidly penetrate the market, Seiko Epson focused on new demand for a way to print photographs taken by smartphones and tablet PCs by sending them directly to a printer from remote locations outside the home or office without using a PC. For this demand, Seiko Epson launched the innovative EPSON E-mail Print Service. By assigning a unique e-mail address to each printer, the service enabled consumers to print their materials or photographs simply by attaching the data to an e-mail message and sending it to their printer's e-mail address. The service allows consumers to use devices such as smartphones to print "anytime, anywhere, and to any location" from Japan or overseas, regardless of where the printing takes place.

As the platform for this new business, Seiko Epson has adopted a private cloud-based, on-demand hosting service provided by Fujitsu. Seiko Epson determined that this service would provide an optimal platform for launching the new business because it is highly scalable and would enable the company to start the business small, yet expand it to a large scale. The decision resulted in approximately a 30% reduction in the design period needed to build and operate the system. Seiko Epson succeeded in rapidly creating a global service with an initial investment that was only one-third of the amount that would be required for a conventional platform. Since it was launched in September 2011, the EPSON E-mail Print Service has enabled consumers to print easily and flexibly in various

user situations, including business, and continues to make printing more convenient than ever before. Seiko Epson has positioned EPSON E-mail Print as the first initiative in a new business expansion drive, and is also planning second and third initiatives. Going forward, as it continues to drive business expansion, Seiko Epson has high expectations for Fujitsu's cloud services.

EPSON E-mail Print Service



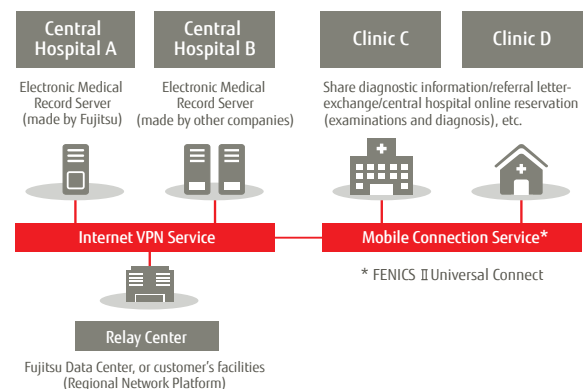
Borderless Healthcare Network

The NPO Nagasaki Regional Medical Collaboration Network System Council

The NPO Nagasaki Regional Medical Collaboration Network System Council (commonly known as "Ajisai Net") links a large number of medical facilities throughout Nagasaki Prefecture, allowing them to share diagnostic information with one another. In this way, Ajisai Net crosses the borders between clinics to build and operate a regional healthcare network. Networks built by three vendors including Fujitsu are linked to allow clinics, pharmacists and other participating medical facilities to freely access and view electronic medical records at central hospitals. Currently, 17 central hospitals and 174 participating medical facilities use the system, along with more than 25,200 registered patients (as of February 2013). Human Bridge is a solution for disclosing, sharing and combining patients' diagnostic information between networked regional healthcare institutions. Of the 17 central hospitals, 9 are using "Human Bridge." The networks of the other vendors used by the remaining 8 hospitals are linked through the Ajisai Portal Site to allow all users to browse one another's medical information. Sharing diagnostic information via the regional medical center network gives physicians a clear understanding of patients' conditions, enabling them to provide high quality healthcare services. At the same time, it eliminates overlapping tests and

diagnoses, so that healthcare can be more efficient. Ajisai Net continues to gain new member facilities, and the operators are now examining its potential use in delivering medical care in the home, too.

Human Bridge



3. Exploiting New Computing Power

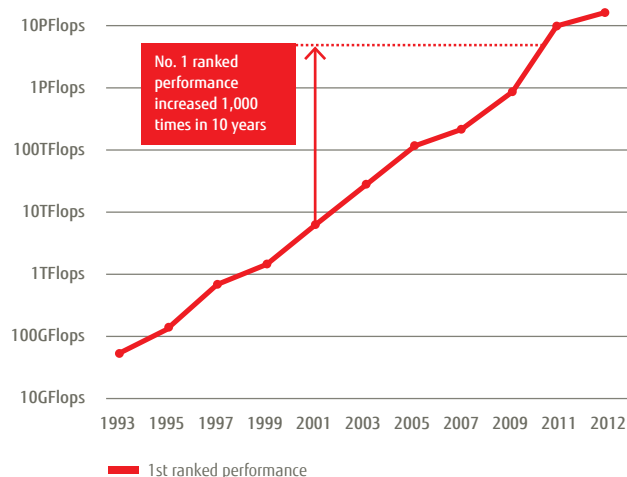
Radical improvements in computing power are breaking down the boundaries between science and engineering. Innovation in ultra high-speed simulation technology is empowering people to achieve unprecedented breakthroughs across fields such as medicine and drug discovery, and new product development.



Exponential Growth in Computing Power

Supercomputing has seen dramatic improvements in processing power. A chronological comparison of a list ranking the world's 500 fastest computer systems reveals that the processing speed of computers at the top of the list has increased exponentially by around 1,000 times in the space of ten years.

Increase in Supercomputer Performance



[Source: Created based on TOP 500 (<http://top500.org>) statistics (1993-2012)]

Making the Impossible Possible

Research and development activities generally have three limiting factors – time, cost and feasibility.

- The time hurdle:
A vast amount of time is required for development and testing, e.g. the process of developing new drugs from the research to clinical testing stage.
- The cost hurdle:
Testing will incur prohibitive costs.
- The feasibility hurdle:
The subjects are hard to observe or replicate, e.g. natural disasters and other complex phenomena.

The ultra high-speed simulations realized by supercomputers make it possible to overcome these hurdles.

We are now able to simulate and replicate phenomena in the digital world that were too time consuming and costly, or too far away or microscopic, to observe and test in the physical world. Applications include the safety testing of automobiles, wind tunnel experiments for large aircrafts, and the development and efficacy testing of new drug compounds. We can now investigate and reveal the way in which the universe was born and how pharmaceutical compounds act on cells at the atomic and molecular level.

In the near future we can expect there will be a quantum leap in the speed with which scientific discoveries and knowledge find their way into commercial application. In the manufacturing field, supercomputing will accelerate the pace of technological breakthroughs. Digital simulation will eliminate the need for many prototypes that once had to be built for pre-production testing.

Harnessing the power of supercomputers through cloud systems will enable many companies and researchers to make use of simulations at a reasonable cost. Fujitsu considers it crucial to provide platforms that can be easily shared. This kind of initiative will drive the creation of new knowledge and help invigorate not only companies, but also society and entire industries.

Supporting Economic Growth and Academic Excellence

HPC Wales

High Performance Computing (HPC) Wales is Wales' national supercomputing service, benefitting both public and related private sector institutions. As host to the UK's largest national distributed supercomputing network, it provides businesses and researchers with local access to world-class technology and the support to fully exploit it. With Welsh universities, Government and Fujitsu, it offers the supercomputing power, high level skills training and customized support necessary to help address global challenges.

Traditionally, universities in Wales, as in most of the world's academic institutions, operated in a standalone fashion, with each responsible for its own computing resources. The Welsh government and academic bodies, led by the Advanced Research Computing division at Cardiff University, realized that a broader, more inclusive and coherent method would enable it to deploy HPC capability across multiple organizations. Fujitsu demonstrated the best understanding of the project objectives while drawing on its extensive HPC experience in its Japanese and European laboratories.

Since 2010 Fujitsu has collaborated closely with HPC Wales to put the initial distributed infrastructure in place. It follows a hub and spoke model with Cardiff and Swansea universities acting as the main hubs while other universities, including Glamorgan, Aberystwyth and Bangor universities, are the tier one spokes. Currently, there are 6,000 Intel core processors at each of the hubs; by the time the project is fully deployed there will be 23,000 cores. At the heart of the infrastructure, Fujitsu's middleware is used to create the virtualized IT framework for the HPC cloud.

Most production is now being driven by academic researchers in collaboration with industry partners. Around forty projects have already been undertaken and this number is set to rise as the project matures. The core focus is on a number of different sectors including Life Sciences, Energy and Environment, Creative, Advanced Materials and Manufacturing and Financial and Professional Services. "Speed of innovation is critical to business growth and profitability but many SMEs don't understand the impact high performance computing can have. These projects are proving the value HPC can add to even the smallest SME," comments Professor Martyn Guest, Technical Director, HPC Wales. Fujitsu will continue to contribute to various communities by actively providing advantages in the field of supercomputing.



HPC Wales

The "K computer"

In November 2011 the "K computer," a supercomputer jointly developed by RIKEN and Fujitsu, became the fastest-ranked computer in the world with a record performance of 10.51 petaflops, signifying a speed of ten quadrillion floating-point operations per second. Rather than a machine designed for a specific use, the "K computer" is for application in a broad array of fields. It is expected to help solve problems not only in the scientific field, but for a wide range of business and social challenges.



"K computer"

4. Real-time Responses

Decisions based on real-time information will become the new standard.



A World of Uncertainty

Society faces a growing number of uncertainties.

- In a networked society where businesses are interconnected, the impact of an incident in one location may spread globally in an instant. The Lehman bankruptcy is a recent example of this. The scope of such impacts has also become more complex, making it difficult to judge accurately.
- Attacks in the digital world – such as data theft or system sabotage – can have very real effects in the physical world we live in.

Know the Present to Shape the Future

It is effective to predict and prepare for the future by analyzing trends and planning for various scenarios. However, in an uncertain world, it is more imperative than ever to monitor, analyze, and promptly respond to on-going situations in real time. Then, we can use the derived insights and knowledge to proactively shape the future.

- Simulation of ever-changing weather patterns is one example of this. If the power of supercomputers can be applied to visualizing these changes in miniscule geographic areas, people could receive better advice on weather conditions, including disaster alerts.
- Businesses can also minimize inventory and maximize sales by developing real-time capability for monitoring and analyzing big data on product sales trends. The results of the analysis can then be fed back into optimizing their production. Furthermore, precision can be enhanced by combining the knowledge taken from analyzing users' comments on social networks. Businesses could also act early to prevent customer complaints from escalating into major problems.

- If M2M is used to keep tabs on product conditions, companies can provide optimal maintenance to prevent these products from breaking down.
- Analyzing past diagnostic data against current vital data on a person's health status will enable doctors to identify signs of impending disease and advise the most appropriate preventative treatments.

We are now seeing substantial advances in computing technology, which can support human decision-making by extracting meaningful patterns from complex data. The real-time processing of massive and diverse information, gathered from the Internet and sensors, allows us to gain new insights and make the most accurate predictive judgments.

Until now, we have made decisions by drawing inferences based on historical information. However, new computing and networking technologies, along with technologies that identify meaning in big data, will transform the way we make decisions, enabling us to make judgments based on real-time facts.

Peaceful Life through More Accurate Weather Forecast Information

Central Weather Bureau of Taiwan

Established in 1941, Taiwan's Central Weather Bureau (CWB) is the governmental body tasked with monitoring and forecasting weather patterns, earthquakes, and tsunamis for all of Taiwan. In addition to daily weather forecasting, Taiwan also needs to improve its ability to monitor and forecast typhoons, tropical storms and other meteorological hazards. These are matters of particular importance for Taiwan, given its location on the border of tropical and subtropical climate zones.

The system should also enhance Taiwan's monitoring and analysis of long-term climate change. CWB built its first numerical weather prediction system in 1983, and since then has employed supercomputers to assist in weather forecasting. The center decided to adopt Fujitsu's PRIMEHPC FX10 to help improve forecasting accuracy and observation and analysis of long-term climate change.

The new, state-of-the-art system will ultimately have a theoretical peak performance exceeding one petaflop. This supercomputer system will deliver performance 100 times greater than the CWB's existing system, making it one of the world's fastest supercomputers to be applied in the field of meteorology. Fujitsu has been involved

in high-performance computing for over 30 years and has acquired a wide range of knowledge and experience in the field. Looking ahead, we will continue helping to build a society where people can live with peace of mind through our supercomputers.



Central Weather Bureau of Taiwan

5. Connecting People, Enabling Collaboration

Today's technologies enable services to be delivered directly to us, wherever we happen to be. The penetration of social networks into the business realm is giving birth to a new type of collaboration. Human-centric ICT is connecting, surrounding and supporting people in their activities.



Making New Connections

The development of ICT has set the creative process free from the conventional workplace. Today people can connect with one another from anywhere. Technologies such as cloud services enable us to be more productive and creative in our activities.

At the same time, social networks have expanded beyond friendships between individuals into the realms of business and other sectors of society. They now connect enterprise managers, employees, individual customers, and partners, to form spaces for joint creation that transcend traditional boundaries.

Now, collaboration is becoming the predominant work style. At companies, professionals with various skills and roles are coming together from many places – offices or home – and work as a team through the use of videoconferencing and other collaboration tools. This allows them to produce results while maintaining a healthy work-life balance. Furthermore, companies will be able to engage in creative collaborations with partners and end users. This is leading to new types of products and business models, comprising three different domains; proprietary, partner collaboration, and publicly shared.

The creativity of people is a significant factor for the growth of business and society. The competitiveness of a company or even a region will be greatly influenced by how they can foster foundations for open collaboration.

The Future of People and ICT

The ICT of the future will connect people, surrounding them and supporting them like an invisible suit. For example, ICT will enable delivery of optimally personalized services to each individual. These services will be determined based on contextual information like the location and status of individuals. The knowledge gained from analysis of massive volumes of information will soon give rise to a society where people collaborate and create new innovations together.

NPO and ICT Hand-in-hand for Supporting Disaster Victims

The Joint Project to Link Disaster Victims with NPOs for Support

The Joint Project to Link Disaster Victims with Non-profit Organizations (NPOs) for Support, also known as “Tsunapro,” was established shortly after the March 2011 earthquake and tsunami. Since then, the project has seen their representatives listen person-to-person to the needs of people forced to live in evacuation shelters, and worked to coordinate those needs with specialist NPOs.

The needs of minorities such as seniors, people requiring nursing care, children, foreign nationals, and people with disabilities tended to lie beyond the scope of support activities. Tsunapro worked to prevent such needs from growing into a secondary disaster at emergency shelters by conducting a detailed assessment to develop a better picture. The disaster zone was not suitable for information management, yet it was imperative that staff keep close tabs on people’s changing needs and statuses, in order to swiftly provide them with access to the support they required.

To address this need, Fujitsu provided the cloud-type information management system CRMate. These tools enabled multiple staff members to enter data simultaneously from different locations, even within a disaster zone. They also enabled integrated management of the information gathered. In addition, Fujitsu’s high-speed data aggregation system, “Shunsaku,” contributed immensely to matching people’s needs with NPOs faster. From March 28, 2011, when the system was brought online, to the end of April, 443 data entries on evacuation shelters and 996 data entries on people’s needs had been entered into the database. As a result, the database helped to streamline aggregation, analysis, sharing and projections of the diverse array of information obtained from people directly affected by the disaster. Thereafter, Fujitsu took steps

to ensure that a local NPO that took over the services of Tsunapro could match people’s needs with NPOs more easily. To this end, Fujitsu provided the “Social Networking Service (SNS) Knowledge Creation Space” to help other NPOs view and exchange information amongst themselves.

This initiative shows how combining the special technologies of the corporate sector with the activities of swift, agile NPOs resulted in maximizing the value they create. This method of using cloud computing to connect people, groups and enterprises through information and enable their collaboration set a precedent in Japan. As such, it has set the stage for a new role of ICT in social contribution activities.



Joint Project to Link Disaster Victims with NPOs for Support

6. Intelligent Social Infrastructure

The number of fields where ICT can be applied is growing. It is becoming practical to implement technology to support infrastructure like energy, transportation, healthcare, and education, or in primary industries such as agriculture and the environment. ICT holds the potential of enabling a sustainable society.



ICT Supports Society

Society is a dynamic process of complex elements. On a macro-level, demographics and industry dynamics provide the baseline for economic growth. Social infrastructure supports people in terms of energy, transportation, food, healthcare, welfare, the environment, and education.

Fujitsu believes that the intelligent use of information holds the key to achieving a sustainable society. It is crucial to integrate information managed by individual social infrastructure systems, and provide public services for the people living there.

ICT is a means to this end. Previously, ICT did not play a significant role at the forefront of social infrastructure or primary industries such as agriculture. However, ICT can help people make decisions by combining information from sensors embedded in social infrastructure, leveraging wide-area coverage by cloud services, as well as from social networks and other sources.

- We can, for example, combine data on the real-time state of transportation infrastructure and disaster information, and visualize them altogether. This will efficiently provide people with the most relevant information about evacuation routes.
- It is possible to visualize the supply-demand dynamics of energy for businesses, households and a whole region. ICT will provide the intelligence to find the optimal balance between green renewable sources of energy and conventional sources of energy.
- In an aging society, development of in-home healthcare and aged care services is a pressing priority. With the support of ICT, a community can build a home care environment where teams of related professionals are formed to look after elderly people, delivering healthcare and other care services. ICT can also provide overall support to help build and maintain ties between elderly people and their communities.

Solving social problems requires more than just one simple answer. Each region has different issues to resolve, and its own expectations of ICT. Fujitsu is committed to working with people, governments, and enterprises in each region to face their local issues together for creating a sustainable future.

Intelligent Social Infrastructure

Energy, Smart Cities	Automobile, Transport	Food, Retail, Primary Industry	Healthcare, Welfare	Environment	Education

New Cloud Service Uses Location Information

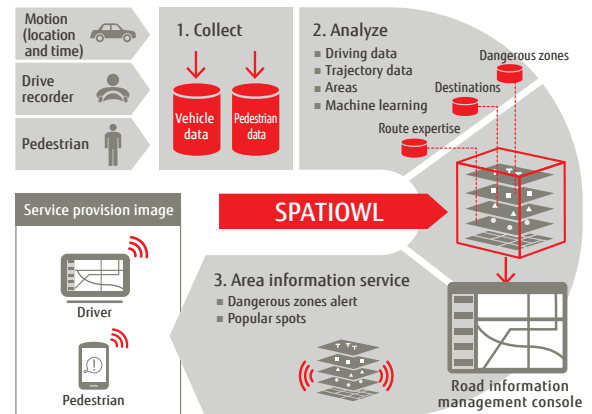
SPATIOWL

Fujitsu has enabled mutual referencing and mutual complementing of location data, leveraging the know-how cultivated in our mobile information service. The technology achieves this by handling the vast amount of diverse location information in an integrated way, while it had been handled separately before. The SPATIOWL service matches these location data with customers' needs, and provides them as services.

The Area Information Service, for example, gathers and analyzes the huge quantity of probe data that is generated by people and vehicles in motion. The service compiles it using Fujitsu's knowledge and expertise, and then sends push-type information to people and vehicles that have entered a certain area according to their locations. It allows people and vehicles, entering an area or spot for the first time, to receive timely information that they need to act on in that place. These functions operate on the SPATIOWL platform, and can be provided as SaaS-type services.

Fujitsu will continue to contribute to building a more prosperous society by supporting people through new services that utilize location information.

SPATIOWL



From Environment Management System toward Intelligent Social Infrastructure for Future Smart Industrial Cities

Saudi Industrial Property Authority (MODON)

Saudi Arabia sees industrialization and industrial diversification as its key national strategies. Accordingly, the kingdom is vigorously promoting development of industrial cities, and has achieved continuous economic growth. Therefore environmental preservation actions are becoming an important issue for sustainable development. Fujitsu, jointly collaborating with MODON, conducted two onsite environmental surveys at the Dammam 2nd and the Riyadh 2nd Industrial Cities in fiscal 2011, and both agreed urgent actions were required. In response to MODON's strong commitment to early settlement, Fujitsu is tackling the agile installation of an environment management system covering three major industrial cities (Dammam 2nd, Riyadh 2nd, and Jeddah 1st), in order to start operation within 2013. The system, equipped with sensors, will implement centralized and integrated monitoring of 10 air and 6 water properties at each city. In addition, scientific data analysis and environmental consultation based on experience and know-how in Japan are expected to contribute to environmental improvement.

Looking ahead, Fujitsu will continue taking steps to expand into intelligent social infrastructure for establishing smart industrial cities across the kingdom.



On-site survey

Innovation in Enterprise-style Agricultural Production

Shinpukuseika (Agricultural Corporation)

Agriculture in Japan is mainly carried out by small sole proprietorships. The aging of farmers and the difficulty of finding successors have become problems for Japanese society. To strengthen agriculture as a growth industry for the future, we believe enterprise-style agriculture needs to be established, transforming the traditional method that relies on the individual expertise and tacit knowledge. This means incorporating an industrial production and management method that collects, analyzes and utilizes diverse data of operations, as well as weather and soil data.

In 2008, Fujitsu began cooperating with agricultural producers on field testing to promote innovation in agriculture in the form of enterprise-style agricultural management. In Miyazaki Prefecture, we teamed up with agricultural corporation Shinpukuseika with the goal of achieving a stable harvest, increased yields, lower production costs, and improved production skills. Using location from GPS-enabled mobile devices carried by the workers, we compiled their work hours and had them use a tablet PC or desktop PC to enter other data, such as work descriptions, usage of fertilizer, agrichemicals, and so forth. In addition, we automatically gathered data such as air temperature, humidity, soil temperature, soil moisture, sunlight hours, and image data of crop growth from a sensor network installed in the fields. We accumulated all this data on Fujitsu cloud system, analyzed it, and used the results to formulate operation plans and to manage operation results. This enabled us to tackle waste, overwork, and inconsistencies from an

organizational perspective. The field test was a success: returning a harvest that was 30% higher than the previous year.

Fujitsu also received cooperation from other producers, and in October 2012 launched the industry's first food and agriculture cloud service, called "Akisai." The Akisai Food and Agriculture Cloud helps to achieve better production and management in various aspects of agriculture, including outdoor and indoor cultivation, and livestock rearing. By bringing together data from producers as well as food and agriculture-related enterprises, the system is also supporting greater abundance in this sector.



Cloud Computing enables High-level Healthcare and Virtual General Clinics for Pets

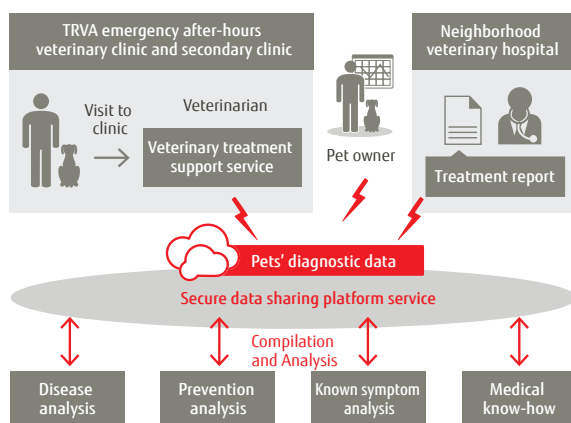
Tokyo Jonan Regional Veterinary Medicine Promotional Association (TRVA)

As companion animals become part of our families, many people want to give their pets the same high level of healthcare that is provided for human family members. Fujitsu has teamed up with the Tokyo Jonan Regional Veterinary Medicine Promotional Association (TRVA) to conduct a field trial using a cloud system for pet healthcare information management (Pet Healthcare Cloud).

The Pet Healthcare Cloud enables central management and sharing of pet treatment records between veterinary clinics. The information includes items such as test, diagnosis, and treatment records. By allowing veterinarians to see and use the diagnostic information they need at any time, the Pet Healthcare Cloud promotes efficient healthcare collaboration and enables a higher quality of service. As a result, the system allows pets to receive the optimal treatment as quickly as possible in an emergency. Future goals for the system include long-term health management, disease prevention, and analysis of diseases and known symptoms.

In this way, the local veterinary clinics and the TRVA can coordinate day services, night services, and secondary care, with the goal of effectively creating a virtual general clinic.

The Pet Healthcare Cloud



Fujitsu's ICT Value

This chapter presents the concepts and future course of the technologies and services that Fujitsu will develop and provide over the medium term. These will play a pivotal role in the execution of the three actions aimed at realizing a Human Centric Intelligent Society.

CONTENTS

Our Concept of Technology and Service	25
1. Create Innovation through People	
Create Value through Integration	27
On-demand Everything	29
Mobility and Empowerment	31
2. Power Business and Society with Information	
New Value from Information	33
Security and Governance	35
3. Optimize ICT Systems from End to End	
Modernization to Innovation	37
Integrated Computing	39
Network-wide Optimization	41
Common Foundation	43

Our Concept of Technology and Service

Under the vision of a Human Centric Intelligent Society, Fujitsu will provide an integrated portfolio of technologies and services.

Enabling Three Actions

In order to achieve a Human Centric Intelligent Society, Fujitsu will focus on the following three core actions: 1. Create Innovation through People; 2. Power Business and Society with Information; and 3. Optimize ICT Systems from End to End.

To fulfill the aforementioned three actions, and meet customers' expectations for innovation, we have grouped our technologies and services into eight concepts. By optimally integrating and combining them, we aim to help our customers to create value in their businesses.

1. Create Innovation through People

- The rapid advance of cloud services ("On-demand Everything") and mobile services ("Mobility and Empowerment") enables people to achieve innovations at the forefront of business and society.
- Fujitsu helps customers maximize their business values by optimally integrating new technologies and services with conventional ICT systems ("Create Value through Integration").

2. Power Business and Society with Information

- In order to enable people, Fujitsu powers business and society with information, applying big data technologies ("New Value from Information").
- In response to increasingly complex risks, Fujitsu provides security measures and privacy protection ("Security and Governance").

3. Optimize ICT Systems from End to End

- The aforementioned actions require optimized ICT systems to set the foundation. Fujitsu helps customers to remove the complexity of their ICT systems and build platforms for promoting innovation ("Modernization to Innovation").
- Fujitsu provides vertically integrated computing systems, combining hardware, software and expertise in integration and operation ("Integrated Computing").
- To support the intelligent use of information, Fujitsu develops next-generation network-wide distributed computing, optimally managing vast ICT infrastructure including computing, networks and smart devices by intelligent software ("Network-wide Optimization").

Fujitsu is committed to developing and strengthening the technologies and services depicted in this chapter across the company. As an ICT service vendor with technology excellence, Fujitsu will provide optimally integrated solutions and services, contributing to our customers' innovations at the forefront of business and society.

In addition, Fujitsu will advance ICT by pursuing technological expertise, quality, reliability and environmental friendliness.

Achieving a Human Centric Intelligent Society

1. Create Innovation through People

Create Value through Integration

- Create value for business and society by integrating current ICT systems with cloud computing, mobility, big data and other technologies
- Optimize core business systems by linking them with innovative technologies such as big data

On-demand Everything

- Accelerate innovation at the forefront of business and society using cloud services
- Enable agile integration of various cloud services and provide consistent operations and management
- Deploy highly reliable cloud services globally

Mobility and Empowerment

- Deliver the convenience of smart devices for consumers in a secure business setting
- Support people's activities through human centric mobility technology

2. Power Business and Society with Information

New Value from Information

- Enhance business competitiveness by utilizing big data
- Provide new value by analyzing a wide variety of information obtained from sensors, social media, etc.
- Create platforms for securely exchanging information

Security and Governance

- Implement multiple layers of security and business continuity measures
- Enhance authentication platform and establish security intelligence
- Strengthen privacy protection measures

3. Optimize ICT Systems from End to End

Modernization to Innovation

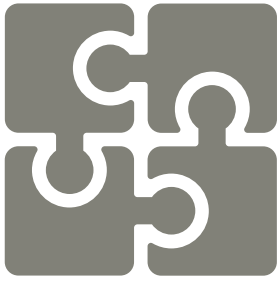
- Reduce operation and maintenance costs through modernization of ICT, with a view to accelerating investment in innovation

Integrated Computing

- Deliver high performance through vertical integration of hardware and software
- Achieve rapid integration, autonomous operation, and total cost optimization by incorporating systems integration and operations expertise

Network-wide Optimization

- Manage the three areas of computing, networks, and smart devices by intelligent software
- Execute distributed computing over the entire networks by flexibly deploying and controlling ICT infrastructure



Create Value through Integration

In keeping with the brand promise of “shaping tomorrow with you,” Fujitsu works with customers to create value and strengthen their business. We further look ahead to delivering business innovation as well as building a better society. By integrating conventional ICT systems with new technologies and services, we will enhance the value of our customers’ businesses.

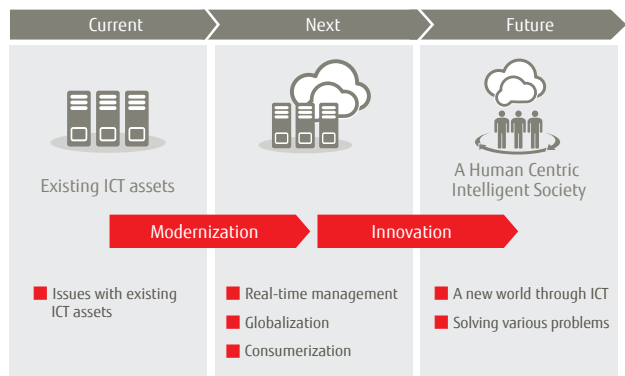
From Building Systems to Creating Value

Fujitsu has implemented many different ICT system integration projects for our customers. Beginning with core business systems development in the early years of mainframe computers, we have gone on to develop increasingly complex solutions. Fujitsu has also developed large-scale ICT systems for social infrastructure, such as transaction systems for stock exchanges, which require an extreme performance and a high degree of reliability. Today, we are beginning to see that the flexible integration of conventional systems with new solutions such as cloud services and mobility will create new value for our customers. Fujitsu has made this a reality through many decades of outstanding system integration experience, implementation know-how, and technology, as well as a strong team of engineers and professionals with highly sophisticated skills.

Linking Modernization and Innovation

A common problem for our customers is the complexity and volume of their existing ICT assets. This issue prevents them from making investments in new technologies to gain greater market competitiveness. Through modernization of our customers’ ICT assets, Fujitsu helps them improve the efficiency of their existing systems and reduce their overall operation and maintenance costs.

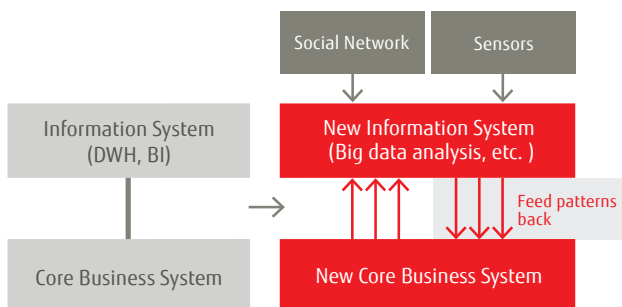
We support our customers’ efforts to strengthen business competitiveness. To this end, Fujitsu proposes new technologies to meet their priorities, such as more agile real-time business management, as well as globalization and new systems for customer engagement. Fujitsu’s approach is building a framework that can flexibly embody the logic of customers’ businesses as their business expands, rather than developing each system from scratch.



- For example, Fujitsu enables swift revision of business rules for mobile phone payment plans. This is achieved by carving out the software module, related to business rules for setting payment plans, from the application program. Through this business rule management (BRM) technology, Fujitsu can help our customers to respond to continuously changing business environments.
- Through business operation platform (BOP) software technology, Fujitsu is able to quickly integrate our customers’ business operations. Business operations are integrated in accordance with people’s activities, rather than forcing them to adjust their work styles to suit ICT systems. With BOP, we can flexibly configure decision-making support systems by rapidly gathering, as well as analyzing, internal and external information from individual ICT systems.
- Customers’ purchasing experiences can be further enhanced by providing optimal real-time information. An example of this is generating recommendations based on a composite analysis of their purchase history, location information and other data. This can help drive sales growth and foster customer loyalty.

Now, the era of big data is beginning. Insights will be drawn from the analysis of diverse and wide ranging information. Fujitsu believes that one important way to help customers to transform their businesses is to link innovative big data analysis technologies with their existing core business systems. For example, consumer product companies can perform comprehensive analysis of an array of information. This information may vary from product sales data generated by their core business systems, and customer comments from social networks, to information obtained from sensors installed at stores. Based on this complex analysis, they will be able to identify the characteristic patterns of product sales. Feeding these patterns back into their core business systems will enable them to optimize production and delivery plans, leading to the maximization of sales and profits. Fujitsu comprehensively considers our customers' business innovation via new technologies and the modernization of their existing core business systems, to help create new value for their businesses.

Linking Innovative Technologies and Core Business Operations

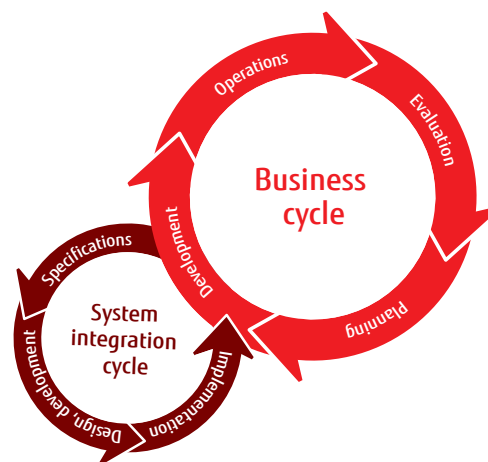


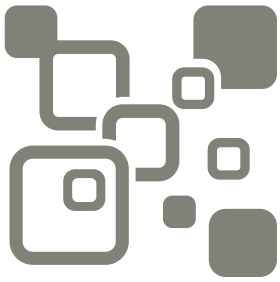
Joint Value Creation through Total Service Management

The advanced use of ICT is essential for customers and society to achieve innovation. ICT will have a direct bearing on transforming the value of customers' products and enabling swift responses to changes in the business environment. ICT will also act as neural networks for social infrastructure.

In a human-centric era, ICT systems should be integrated in a way that synchronizes with companies' business cycles. Fujitsu provides total service management to achieve this objective. We do not merely emphasize the optimal development and operation of their ICT assets. Fujitsu aims to further provide total service management to support our customers' entire businesses, encompassing their business processes and the people who implement them. In this way, Fujitsu makes every effort to jointly create value with our customers.

Joint Value Creation through Total Service Management





On-demand Everything

Cloud services enable people to make maximum use of information, and further penetrate into social infrastructure. In keeping with the concept of On-demand Everything, Fujitsu will globally provide agile integration of highly reliable cloud services to flexibly meet our customers' objectives.

Cloud Services Penetrate into a Growing Range of Fields

The significance of cloud services lies in giving customers flexible options for using ICT over networks. Cloud services help companies to achieve rapid deployment of the ICT systems when they launch new businesses. Cloud services also facilitate integration of business systems within corporate groups and enhance business continuity. In addition, Fujitsu proactively utilizes cloud services as a foundation for creating innovative services. Some examples of this include connecting smart devices or various types of sensors over networks and analyzing massive amounts of data in Fujitsu's cloud data centers. As cloud services penetrate, we are seeing ICT applied in a growing range of fields, from enterprise back offices to a variety of business scenes as well as social infrastructure.

There are also issues that companies face when using cloud services. In their core business operations, for example, they must ensure a high degree of confidentiality and availability. Companies have to choose the best solution suited for their particular business need. However, complexity arises with the numerous options of public cloud and private cloud systems, or even a hybrid cloud, integrating multiple cloud systems with their on-premise systems. This is a truly daunting task for many customers.

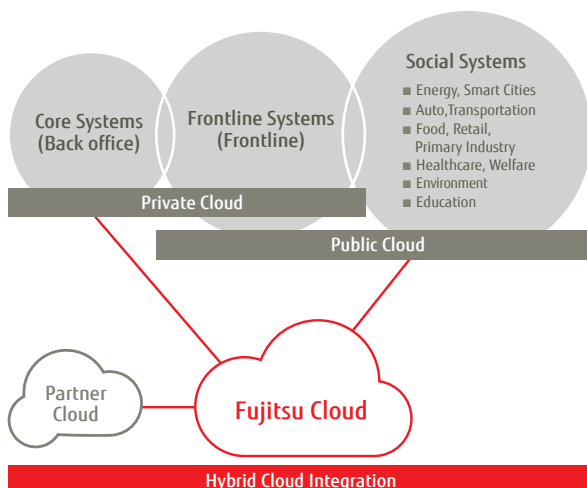
On-demand Cloud Service Integration

Under the concept of On-demand Everything, Fujitsu is committed to providing agile integration of cloud services that flexibly meet our customers' objectives.

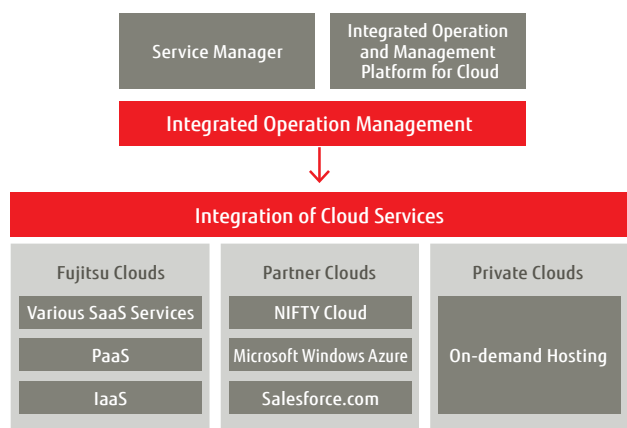
Through Fujitsu's cloud service integration, our customers will be able to quickly procure optimal cloud systems in one stop which combine a diverse range of services. Fujitsu's cloud technology specialists, called cloud integrators, thoroughly assess their requirements and assure the optimal integration. Following the deployment, if required, Fujitsu will also provide consistent operation management services in a holistic manner. The following examples illustrate how companies will be able to benefit from the agility provided by our cloud service integration.

- A private cloud suits mission-critical operations where confidentiality is a must. Meanwhile, a public cloud best serves requirements of operations where usage of computing power will significantly vary over time, for example in executing marketing campaigns for a certain period. Seamless integration of these cloud systems, together with holistic operation management services, provides greater agility and flexibility to our customers' businesses and eases their operating burden.
- An internet shopping site can be built in a short lead time at a minimal cost by integrating a variety of partner services, such as online payment, and Fujitsu's extensive SaaS (Software as a Service) lineup.

Expanded Use of Cloud Systems



Cloud Service Integration



Fujitsu will strengthen service platform technology for integrating cloud services and on-premise systems in a rapid and flexible manner and optimize them for our customers' business objectives. Fujitsu works closely with our ecosystem partners, including a diverse range of technology vendors, application vendors, and cloud service providers. We will also enhance our platform on which application vendors can easily develop their applications.

Trusted Cloud Services on a Global Scale

Fujitsu has deployed a common global cloud service platform in Japan, Australia, Singapore, the U.S., the U.K. and Germany. Applying our superior technologies and operations expertise, we achieved an availability rate of more than 99.9998% globally for fiscal year 2012, successfully delivering world-class reliability in cloud services.

Fujitsu's cloud services ensure high reliability on three fronts: systems, security, and facilities.

■ Systems

Fujitsu's cloud systems are tightly integrated with our highly reliable hardware and software, while incorporating integration technology and operations expertise used for our mission critical systems.

■ Security

Fujitsu provides worldwide, 24-hour, year-round security management services through Cloud CERT (Computer Emergency Response Team) – the world's first specialist cloud security team.

■ Data Center Facilities

Fujitsu has built its cloud platform at data centers that satisfy the world's highest standards in terms of earthquake resistance, security and energy efficiency.

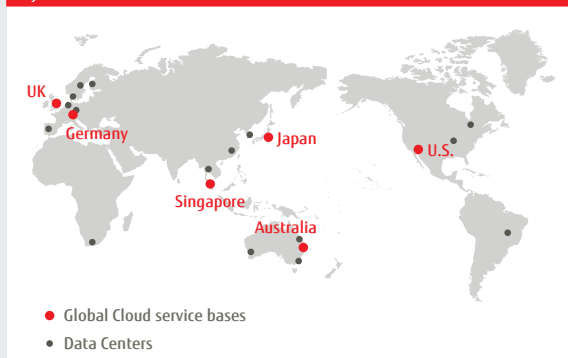
Fujitsu's global cloud service platforms are integrated over a high-speed, highly secure network, ensuring optimal support for our customers' global business expansion. We also provide a large range of services, such as application hosting, from our worldwide network of data centers and service desks. Based on a solid understanding of both global and local conditions, Fujitsu is working to answer the needs of our customers.

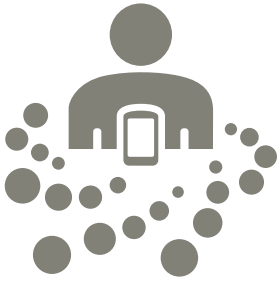
Fujitsu's cloud services are a key building block for achieving a Human Centric Intelligent Society.

Fujitsu's Global Data Centers

A highly reliable, global ICT infrastructure is essential to support the growing cross-border activities of people and companies. Fujitsu has established more than 100 data centers in various countries around the world. These facilities provide customers in each region with high-quality services including cloud and hosting services to meet their needs. They are protected by advanced security features, such as room access control using surveillance and biometric authentication. Fujitsu also operates a global network of 24-hour service desks to help customers solve any issues. Multi-lingual support is available in more than 30 languages.

Fujitsu Global Data Centers





Mobility and Empowerment

With the rapid increase of smart devices, a new model is penetrating into the business world; one where users have fast, easy access to a wide range of services. Fujitsu is providing highly reliable mobility solutions and services for business, while leveraging the strengths of human-centric ICT to support people.

Consumerization of ICT

Consumers are now able to easily download and use the applications they require, along with the rapid increase of smart mobile devices. Standard APIs (application program interface) have enabled just about anyone to take part in developing applications, greatly proliferating the scope of applications at consumers' disposal. This phenomenon of consumers gaining access to an expanding range of services is also beginning to catch on in the business world. As these events unfold, a growing number of companies have adopted BYOD (bring your own device) policies in their workplaces.

Business Mobility Services

In order to enable enterprise customers to take full advantage of smart devices, it is necessary to establish a service platform specifically tailored for their needs. Such platforms must not only give these companies access to all sorts of business applications but provide sophisticated authentication and security functions beyond what is required in a consumer setting.

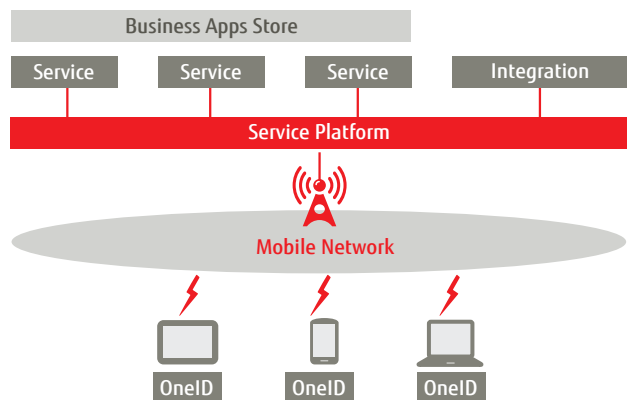
Having launched "My Cloud," a cloud computing service for consumers in Japan, Fujitsu plans to develop a new business targeting corporate clients with a highly reliable mobile service platform. Looking ahead, we will actively expand our open collaboration with partner companies supplying applications and services, with a view to enhancing the platform's benefits to corporate customers.

This new service platform will enable business users to access various applications from a single ID (OneID) in the same convenient way consumers are linked with services through their mobile devices.

This platform will offer secure services, based on Fujitsu's trusted cloud platforms and packed with sophisticated security and systems management technology. For example, we envisage a function that automatically deletes unused applications from mobile devices. This platform will also enable users to flexibly configure back-office business applications and data analytic capabilities using mobile applications in the front line. In this way, we will support activities of business users and professionals in a variety of fields, such as marketing, maintenance and healthcare. Our extensive knowledge of business operations and ICT systems of various industries will be indispensable in developing this platform for housing such highly reliable services integrated with customers' businesses.

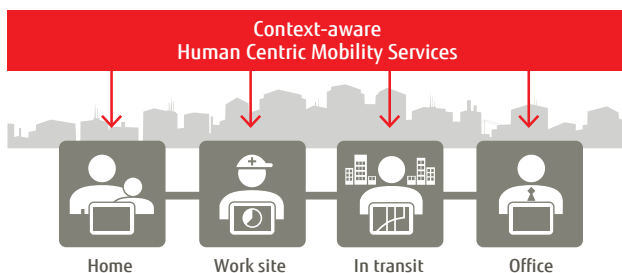
Fujitsu will also globally enhance its solutions and services for corporate customers, for example a versatile device management system responding to BYOD policies.

Service Platform for Business



Empowerment through Human-centric ICT

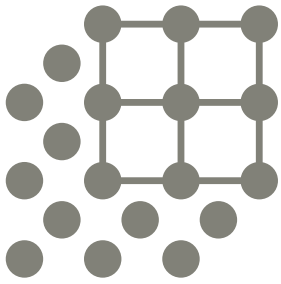
Powered by the continuing convergence of the physical and digital worlds, smart devices will deliver intelligent services that make all aspects of our lives more convenient. For example, service manuals of specific products will be automatically dispatched to the smart devices of technical maintenance staff. Here, AR (augmented reality) technology will help them work more efficiently by transposing maintenance procedures and precautions over live video images of the products they are servicing. The same technology can be applied to deliver the best knowledge in a timely manner in all sorts of frontline situations like sales or healthcare. Fujitsu strives to enable people to maximize their potential by the power of human-centric ICT.



There is a growing need for people-friendly interfaces that use this kind of technology. As a technology leader in mobile phones for senior citizens in Japan, Fujitsu is at the forefront of developing smartphones designed for the elderly. Our dedicated approach to making smartphones that are easy for older people to use has led to unique breakthroughs. In audio technology, we have enhanced these smartphones with a technology that delivers conversations easily distinguished in a noisy environment, and a function that slows down the speech of the person on the other end without altering the pitch. These technologies are mounted on our specially designed single LSI chip.



Smartphone for the Senior Market: STYLISTIC S01



New Value from Information

Intelligent use of information holds the key to transformation. In order to power businesses and society, Fujitsu is providing both cloud services and on-premise software products to maximize knowledge extracted from big data.

Information as a Management Resource

We encounter enormous amounts of data in our daily lives and digital sources are proliferating. For instance, corporate financial and commercial information, as well as e-mail, social networks or blogs are all dramatically multiplying. Going forward, even more data will be transmitted by the electronic sensors embedded in products such as cars and electrical appliances, and in our social infrastructure. All this data can be analyzed, and the insights we discover can be put to good use to benefit business and society.

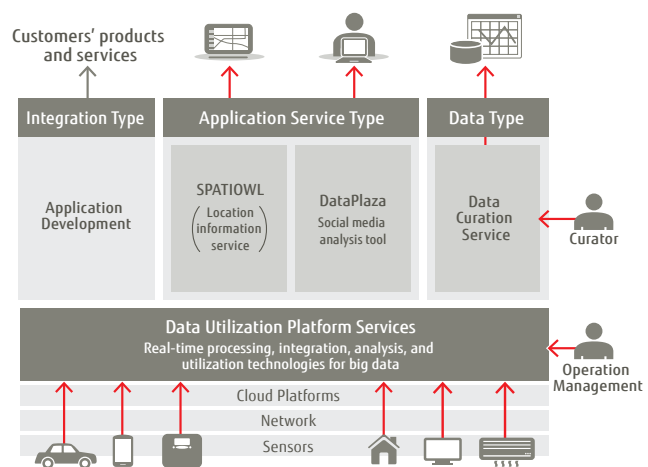
This raises the question: what is the value of this information? From the perspective of companies, information is a vital resource for fact-based, real-time management.

- **Improvement of core business process**
Companies can sharpen business competitiveness by processing big data at high speeds. For instance, large-scale retail chains can optimize their product lineups now that it is possible to visualize concurrent sales trends at each store by crunching several hundred million sales data entries per day.
- **Data mining and analysis**
Businesses can now proactively detect signs of problems by analyzing customer complaints on social media.
- **Real-time use**
Businesses can send customers the most relevant coupons on the spot based on a composite analysis of customers' location, membership status, and purchasing history.

Furthermore, new sets of data can generate new insights into the behavior of customers that businesses could not see before. For example, POS data can be used to analyze customers who make purchases but cannot shed any light on customers who do not. By analyzing POS data in conjunction with other data from sensors and social networks, businesses can develop greater insight into their behavior and identify new opportunities.

Fujitsu will help customers to effectively utilize big data through both cloud services and on-premise software products. Fujitsu has deployed a cloud-based data utilization platform service that incorporates comprehensive technologies necessary to utilize big data in an integrated manner. Customers can use the service on an as needed basis in accordance with their particular needs and data volumes. Fujitsu has also commercialized software products that reflect the technologies and expertise gained through our extensive experience in the above service. Fujitsu will also offer vertically integrated systems that pre-install our big data software products.

Cloud-based Data Utilization Platform



Data Utilization Software Products

By linking a distributed file system and the legacy programming language COBOL, Fujitsu has realized parallel distributed processing middleware that has more readiness to integrate with customers' core systems

An analysis and visualization middleware for more accurate text analysis in social media that leverages automatic translation technology refined by Fujitsu over many years

Middleware for high-speed real time processing (over 5 million items per second)

Information Integrating People, Business, and Society

Information is flowing between companies and bringing society together. Through dialogue with our customers, Fujitsu has been jointly exploring the real issues facing various industry sectors, and how the intelligent use of information can help them solve their issues. However, generating true value from information is no easy task. Simply analyzing various types of information does not always lead immediately to the answers. In many cases, the validity of a piece of information can only be determined by trial and error. Fujitsu values facts and firsthand, practical knowledge in any situation. Our employees spent many hours on farms or in the sites of social infrastructure, accumulating valid data and building effective models one by one. Based on this experience, we commercialized "Akisai," an ICT solution for improving productivity on the farm. Another achievement was SPATIOWL, a new service that visualizes the dynamic status of a city.

Sophisticated data analysis technology is vital for finding useful insights hidden in large volumes of information. To help customers accelerate data analysis, Fujitsu provides data curation consulting services. In addition, we are developing technology for automatically recommending best-case analysis scenarios in light of content and characteristics of data. This will be realized by accumulating the sophisticated knowledge and expertise of specialists in data analysis and in various business operations.

ICT Embedded in Various Products

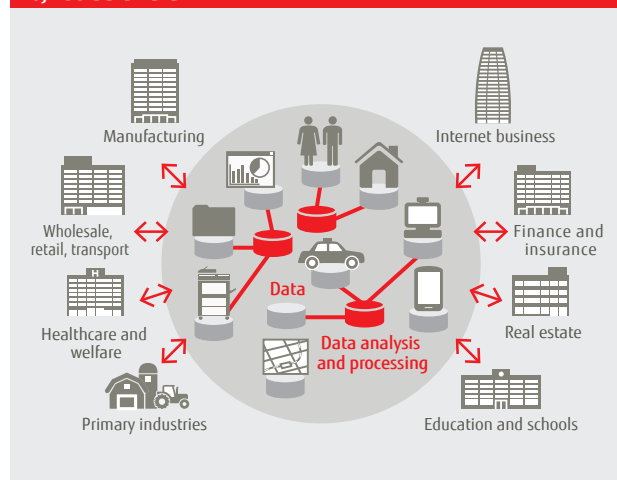
Now, sensors and wireless communication functions are being built into more and more products and social infrastructure. They will be linked with the digital world via M2M. An example of this is the WisReed ad hoc communication technology, developed by Fujitsu. WisReed immediately and automatically configures networks without requiring any setting operations, and can automatically self-heal when faults occur. This new technology is applicable to a wide range of situations, and has already been used for commercialized smart meters. Fujitsu continues to lead in development of state-of-the-art sensor, mobility and network technologies, as well as software to manage the end-to-end systems.

Outlook on Data Utilization

Fujitsu will harness the power of human-centric ICT to utilize information for supporting people. One of the services that will help make this a reality is DataPlaza.* Fujitsu envisions a DataPlaza, which will provide a forum or marketplace for data utilization, and accumulate a diverse range of data and expertise. This service will link companies that seek to utilize data with those that possess data. In this way, we aim to energize data utilization and create a new open marketplace. As a data utilization expert, Fujitsu will meet the needs of our customers with the most advanced services.

* Eyeing a new world of data utilization in the future, Fujitsu Laboratories is exploring ways to utilize open data through joint research with the National University of Ireland, Galway Digital Enterprise Research Institute (DERI).

FUJITSU DataPlaza





Security and Governance

Use of smart devices, cloud services and big data has presented enormous opportunities for growth. However, business and society are facing increasingly complex risks, such as cyber-attacks and infringements on personal privacy. Fujitsu comprehensively considers information security, governance and privacy protection, and provides optimal solutions and services.

Assuming a Degree of Risk

As globalization continues, we live amid growing uncertainty. It is realistic to assume information leaks, cyber-attacks, and unexpected natural disasters will happen. Conventionally, information security has been implemented at the boundary between a company's external and internal environments. While in the past a single layer defense approach was adequate, now and in the future, a multiple layered defense scheme will be essential. These will include countermeasures such as preventing malicious codes that have broken through a firewall.

A key defense in response to the diversification of devices is the authentication platform. To provide more robust authentication platforms, Fujitsu can combine various technologies, for example our world-leading biometric technologies, like palm-vein authentication, and near field communication (NFC) technology. Another area we will strengthen is centralized management encompassing device asset management, application and information management and support services for loss and theft. These services will work with all smart devices regardless of model or network carrier, and will suit the "bring your own device" (BYOD) policy of using personal smart devices for work.

Fujitsu will also strive to realize a safe, secure society by providing public security solutions (physical security) based on advanced technologies such as monitoring sensors and networks.

Security Intelligence Based on Prediction

Fujitsu will focus on providing customers with prediction-based Security Intelligence. This security solution is designed to protect a Human Centric Intelligent Society from the increasingly complex risks. The system will visualize a vast array of information about people's workflows, devices, ICT systems, and other items, determine the vulnerabilities, discover irregular patterns and raise alarms in real-time to prompt immediate responses.

Through synergies with our security management framework, including the Cloud CERT (Computer Emergency Response Team) initiative, Fujitsu will support the security of our customers' ICT environments.

One-stop Solutions for Business Continuity

Businesses will also need to ensure operations will seamlessly continue even in the event of a major accident or an unexpected disaster. Distributing and sharing ICT assets is a principal measure for this objective. Companies will be able to back up their data by distributing ICT assets across multiple data centers, as well as by sharing them via cloud computing. Fujitsu operates robust data centers and cloud services all over the world, helping our customers to enhance their business continuity and total ICT governance.

Protecting Privacy

With the sharp rise in use of information from sensors and social networks, there are rising concerns over potential infringements of privacy. Privacy protection regulations differ by country and industry, and are expected to be tightened in the EU and elsewhere.

Under these circumstances, Fujitsu has developed a variety of technologies to allow both protection and use of information. These include the anonymization of personal information and techniques for processing information while it is still encrypted. For example, Fujitsu has developed Cloud Information Gateway Technology to enable enterprise customers to use external services without transferring the actual data to them. This is achieved by concealing confidential information of the customer's internal data at the Gateway and the anonymized data on the cloud. These new technologies will promote the use of cloud as a platform for collaboration among different business sectors.

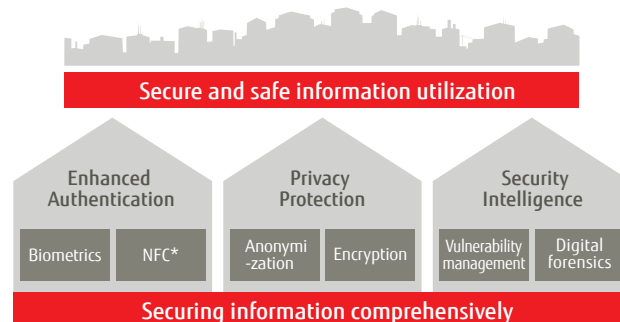
In addition to supplying our customers with various security products and services, Fujitsu is implementing strict security practices across our whole group. We have established our internal information security policy, and explain our activities in our annual Information Security Report. We trust that our experience will prove useful for our customers' practices.

Reference:
<http://www.fujitsu.com/global/about/responsibility/management/security/reports/>

Fujitsu has also taken early steps to protect the privacy of sensor data. This technology makes it possible to mask part of the data while maintaining the encryption of sensor data. It enables users to access services without revealing their actual user ID to the service provider.

Information is a source of value. Fujitsu is dedicated to developing technologies for information protection and utilization. We aim at realizing a safe and secure ICT environment from three key perspectives: (1) enhanced authentication platforms, responding to a diverse range of devices; (2) privacy protection, realizing safe use of information through encryption and anonymization; and (3) security intelligence, an anticipation and prediction-based defense technology against cyber-attacks.

Total Security and Privacy Protection



* Near Field Communication

Case Studies

Highly Reliable ATM Security through a New Biometric Authentication

Banco Bradesco S. A.

In Brazil, fraudulent ATM use had become a major social issue. For this reason, in addition to providing their bank ATM cards, ATM users were required to enter complex passcodes when making withdrawals at ATMs. This created a need for reliable authentication systems that are easy for all people to use.

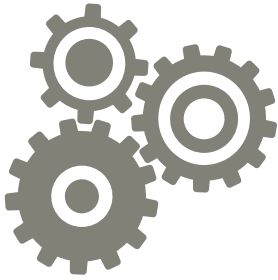
After considering multiple authentication systems, Bradesco, one of Latin America's largest private-sector banks, decided to roll out Fujitsu's PalmSecure palm vein authentication device for its ATMs.

Its decision was based on a strong evaluation of the device's features, notably its high authentication accuracy, the robustness of palm veins to external influence, and the device's clean and hygienic non-contact authentication. Additionally, the introduction of PalmSecure has made it possible for ATM users to confirm their living status via biometric authentication at ATMs. This has rendered submission of proof-of-living certificates unnecessary for pension beneficiaries, helping to streamline pension payment procedures. Since the system entered service, PalmSecure has been fitted to more than 32,500 ATMs, and the number of registered users has reached around 10.5 million. (As of December 31, 2012)

Besides the field of financial security, PalmSecure has been introduced in a broad range of fields globally, including PC logins, room access control in buildings, and attendance management for employees. Through highly reliable security solutions, Fujitsu will continue to support public safety and security.



ATM equipped with PalmSecure



Modernization to Innovation

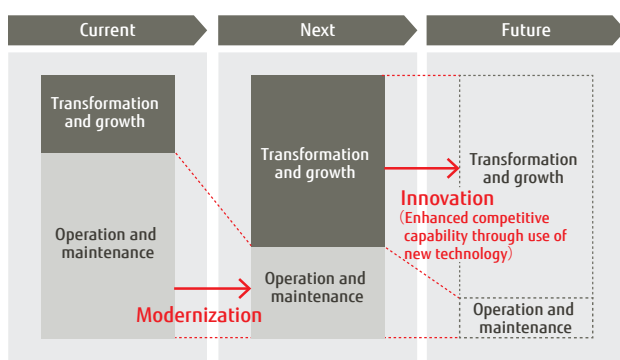
The ICT systems of tomorrow need to be designed around human activity. All aspects of ICT infrastructure, applications, and their operation and maintenance should be optimized in this way. Fujitsu helps customers to reduce the operation and maintenance costs, and to build platforms enhanced for promoting innovation.

Reducing the Burden of ICT Operation and Maintenance, Expediting Investment in Innovation

The most important concern of every business management team is how to strengthen the competitiveness of their organization. To this end, various ICT infrastructure and business applications have been introduced with the goal of increasing productivity and improving work processes. This has ultimately led to a rise in operation and maintenance costs, as the accumulation of individual ICT systems has expanded in both size and complexity. Companies are forced to devote a significant part of their resources into running their assets, while squeezing the funds available to invest in innovation. ICT system operation and maintenance accounted for 65% of corporate ICT expenditures on average globally in 2012. In Japan, the figure was even higher at 78% (Gartner Inc. survey*).

To help our customers focus more on innovation, Fujitsu will work to reduce the operation and maintenance costs of their existing ICT assets and build a platform for growth through the modernization of these assets.

Reducing the Operation and Maintenance Costs that Dominate ICT Expenditures



* Gartner – “IT Demand Research Bulletin Issue 45” (January 28, 2013) and “IT Key Metrics Data 2013: Key Industry Measures: Cross Industry Analysis: Multiyear” (Jamie K. Guevara, et al.; December 14, 2012)

Three-way Optimization

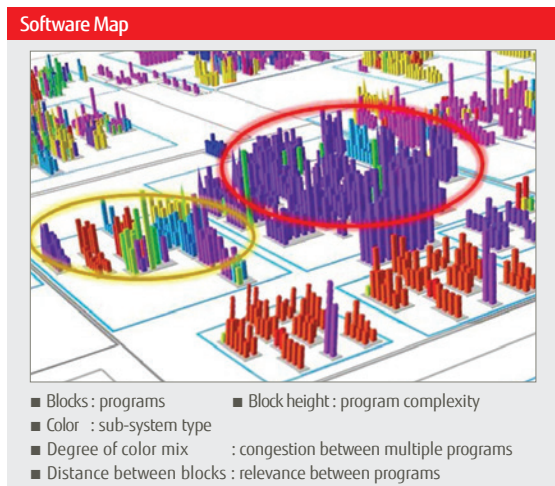
Optimization of ICT systems targets three areas: applications, ICT operation, and ICT infrastructure. Fujitsu’s approach is to tackle all three areas to achieve overall optimization.

Three Areas of Modernization

Modernization	Applications	SaaS, SOA, BRMS, etc.
	ICT Operation	Data Center Integration, Outsourcing, Standardization, etc.
	ICT Infrastructure	New Hardware & Software, Dynamic Integrated Systems, Cloud, etc.

- In the area of applications, Fujitsu starts by visualizing the complicated status of applications, allowing unused assets to be streamlined and the system to be simplified. To assist with the visualization, Fujitsu developed the world’s first “Software Map” – a technology that allows users to identify problematic areas among application assets at a single glance. This technology enables users to literally “see” how difficult a system is to maintain, and which applications are likely to require time to conduct an influence survey.
- In the area of ICT operation, Fujitsu offers high-quality outsourcing services globally, based on ITIL/ISO standards. The services cover a wide range from facilities to applications and business process operations.
- In ICT infrastructure, Fujitsu proposes ways to enhance performance and reduce costs using an optimal selection of the latest technologies, based on a thorough understanding of the customer’s ICT assets. These include integration of various cloud services (p 29), vertically integrated systems that optimize hardware and software from an operation perspective (p 39), and provision of virtualized platforms across the entire network (p 41).

An important step in reducing the complexity of ICT assets is to understand how people are using ICT in the workplace. Fujitsu will work to comprehensively streamline customers' ICT systems from the perspective of their business processes.



Case Studies

SAP Core System Optimized for Global Operation

MITSUI & CO., LTD.

Mitsui & Co., Ltd. creates new added value in the spirit of Challenge and Innovation, working to serve the diverse needs of today's customers all over the world. With 151 bases in 67 countries/regions around the globe (as of March 1, 2013), Mitsui & Co., Ltd. is making a dedicated effort to expand its businesses and contribute to society. Fujitsu has earned a strong reputation for its initiatives in cutting-edge technology, global response capability, and its stance on valuing the trust of its customers. Mitsui & Co., Ltd. selected Fujitsu to help it use ICT effectively in multiple ways to support its business operations worldwide.

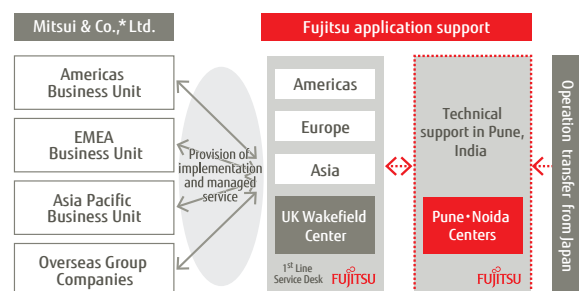
The SAP core system used by major overseas subsidiaries and some of overseas Mitsui & Co.'s Group Companies to support its international business has traditionally been developed, operated, and maintained in Japan. Now, however, all of the operation aspects of the system were transferred to the UK. The move enabled Mitsui & Co., Ltd. to take advantage of the Fujitsu Group's global expertise and resources for core system evolution and higher levels of systems support for overseas bases. Adopting a unified English-language system environment has improved the service level for end users, while offshoring the support operation to India has realized significant cost savings.

Fujitsu has supported every aspect of this project through the efforts of Fujitsu UK & Ireland, extensive use of the offshoring functions of

Fujitsu's Global Delivery Center in India. We have leveraged our proprietary expertise in SAP operation to effectively optimize operation procedures by standardizing them.

For over 130 years, Mitsui & Co., Ltd. has worked constantly to meet the needs of the times by reshaping its role and functions, continuously and flexibly evolving its business format. Fujitsu will continue to support Mitsui & Co., Ltd.'s on-going development through its global response capabilities, technologies and expertise.

SAP Core System Optimized for Global Operation



* Former Mitsui & Co. established in 1876. Legally speaking, there has been no continuation between the former Mitsui & Co. and the current Mitsui & Co.



Integrated Computing

Fujitsu provides computing systems designed to specific business requirements, leveraging our hardware and software technologies and our expertise in systems integration and operation. Fujitsu's "Dynamic Integrated Systems" converge these technologies and expertise, to strengthen our customers' competitiveness.

Value Created by Vertically Integrated Systems

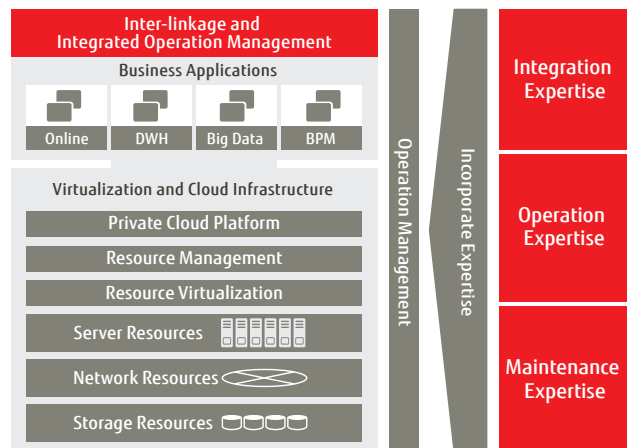
Faced with intensified competition, business leaders are now seeking ways to bolster competitiveness by cutting overall costs, strengthening their customer facing capabilities, and creating new businesses. Fujitsu's Dynamic Integrated Systems achieve the optimal integration of hardware and software and embody our systems integration and operation expertise. These computing systems can address business leaders' dual priorities of reducing ICT operation and maintenance costs through modernization, while driving business expansion through innovation.

Dynamic Integrated Systems provide value to customers by (1) increasing the agility of their business operations; (2) reducing the overall integration, operation and maintenance costs by immediate deployment and advanced operation and maintenance features; and (3) assuring high performance through the optimal combination of hardware and software.

Fujitsu will roll out a family of Dynamic Integrated Systems products, leveraging our cutting-edge hardware and software technologies. These will be tailored to deliver optimum performance for our customers' various purposes, including virtualization, cloud

platforms, high-speed databases, and big data analytics. Our customers can use these vertically integrated systems standalone, and also easily integrate them to perform more complicated tasks. Our framework for seamlessly linking these systems allows customers to perform integrated operation and maintenance.

Dynamic Integrated Systems



Dynamic Integrated Systems

Dynamic Integrated Systems collectively refers to Fujitsu's vertically integrated system products. While keeping the advantages of open standards, Dynamic Integrated Systems use advanced integration technologies developed by Fujitsu to optimally incorporate high-performance hardware and software offering superior reliability and operability.

Fujitsu Integrated System HA Database Ready, the first of these products, is a new vertically integrated database system platform launched in January 2013. This system enables our customers to start using the database system immediately on the installation

date. In contrast, database systems usually require 2.5 months from database design to the start of operation. In addition, we have increased the transaction processing speed to up to 20 times the conventional one by optimally configuring the hardware and the software. On the operations front, the system incorporates a framework and expertise managing its operational status. Along with functions such as automatic recovery in the event of problems, the system ensures a very high availability during operation.

Fujitsu will expand the circle of ecosystem partners who supply software to run on these vertically integrated systems, with the aim of enhancing overall value for customers.

Optimization of Computing Systems

The core of vertically integrated systems is intelligent software that automatically configures and autonomously scales hardware and software resources. Fujitsu will also strengthen technological research to holistically streamline data centers including the efficiency of systems and facilities, as well as energy conservation.

Pursuit of Technology and Manufacturing Excellence

Fujitsu pursues cutting-edge technology and superb expertise of manufacturing. We have supplied a full line of computing systems over many years. Our passion has fueled our continuous quest to develop core technologies, such as development of cutting-edge CPUs and scalable interconnect architecture designed to realize ultra-large scale parallel processing. This heritage has enabled us to achieve breakthroughs in high-performance computing, including the supercomputer "K computer." The IA servers and storage systems that comprise our highly reliable cloud platforms are equally a result of our pursuit of technology excellence.

In collaboration with Oracle, Fujitsu launched Fujitsu M10, the latest model in the revolutionary SPARC series of servers, in January 2013. Fujitsu M10 achieves the world's highest-level business application processing capacity by dramatically increasing software processing speed. Behind this achievement is our groundbreaking Software on Chip technology, which performs a part of software processing on the CPU.

Articulating a technology roadmap for the next 10 years, Fujitsu strives to develop next generation packaging technologies for advanced components. In terms of CPU development, Fujitsu is focusing on achieving low power consumption using highly condensed multiple cores. The data transfer between processors

will be performed by optical induction circuits leveraging silicon photonics technologies, instead of using electronic transmission, which is approaching speed limitations. To target exaflops-grade supercomputers*, Fujitsu is developing 10 Tbps-grade optical interconnect technologies. Fujitsu will support the development of society through these cutting-edge R&D achievements.

* A supercomputer that can perform a quintillion (10^{18}) floating point operations per second.



Fujitsu M10-4S





Network-wide Optimization

To support the advanced use of information through networks, Fujitsu will provide ICT infrastructure that is optimized on a network-wide basis. This will be achieved by combining our technologies in computing, networks and mobility, based on the concept of Software Defined Networking (SDN).

Advances in Computing and Networks

The rapid proliferation of smart devices and the massive increase in data transmitted through the Internet has driven increases in the size of data centers as well as the speed and capacity of wide-area wireless and optical networks. Looking ahead, a variety of things and social infrastructure will soon be connected over networks, and a vast and diverse array of information will be processed in real time. Sticking to centralizing all computing resources in data centers could result in slower response times, and even, service stoppages in the near future.

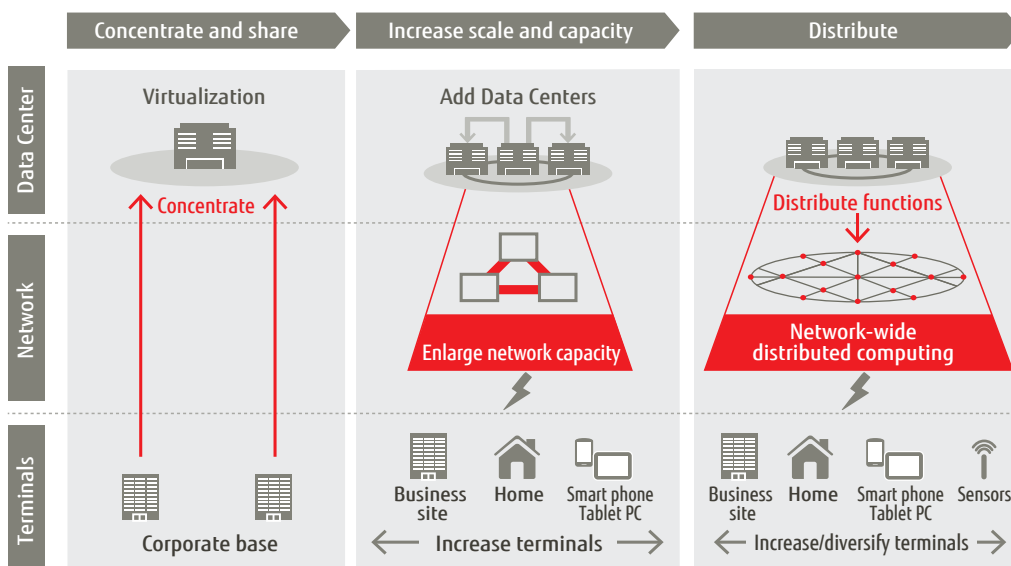
To solve this problem, the dynamic linkage of many distributed systems will be required. Fujitsu considers that the next generation of ICT infrastructure will evolve into network-wide distributed computing, where computing resources will be allocated and seamlessly connected over networks. A precursor of this model is hybrid clouds, where on-premise enterprise systems and public cloud systems are smoothly integrated to run distributed computing in virtualized environments.

Fujitsu's Approach to Optimization

To cope with this situation, Fujitsu has newly formulated Fujitsu Intelligent Networking and Computing Architecture as a new architecture for next-generation ICT infrastructure. This architecture aims to enable the total optimization of computing, wide-area networks, and the smart devices employed by end users. Applying this architecture, we will provide customers with consistent solutions and services.

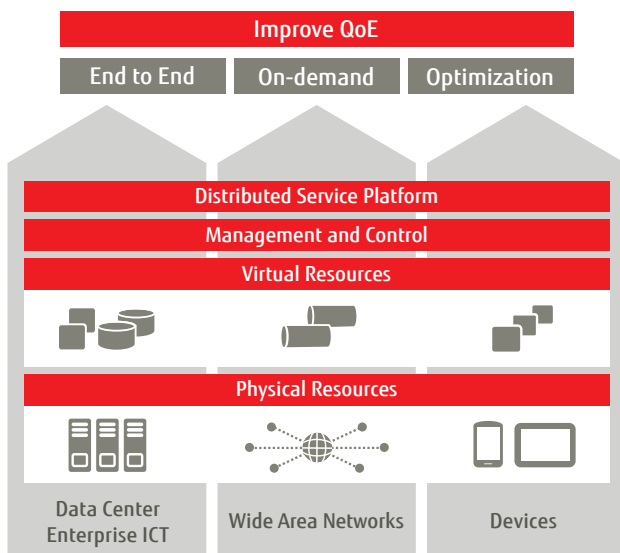
The key objective of this architecture is to flexibly deploy and control all ICT resources, including computing, networks, and smart devices, to best meet the business and operational objectives of enterprises and services providers. This architecture also enables ICT infrastructure to dynamically respond to changes in the flow of data from smart devices and sensors. In this way, the architecture is designed to enhance their operations and services, making them more competitive.

Distributed Computing through the Fusion of Computing and Networks



In order to achieve these objectives, Fujitsu will use intelligent software to achieve flexible, optimal control of the three distinctly different ICT areas; data centers, wide-area networks, and smart devices. This approach applies the concept of Software Defined Networking not just to networks, but across the entire ICT infrastructure from end to end.

Schematic Drawing of Architecture



One salient advantage for our customers is an enhanced Quality of Experience (QoE) for end users who employ smart devices. For example, in situations like stock trading and shopping using mobile devices, service response time has a direct influence on sales results. End users will be able to access services anytime, anywhere, instantly, allowing customers to maximize the value of their businesses and operations. In addition, it will be possible to provide the required computing and networking resources when needed throughout the ICT infrastructure. This will allow our customers to optimize their total costs, including operating costs. In the area of operations, the platform will realize highly reliable services by enabling visualization of service quality and performance. Moreover it will enable preventive problem identification across all areas from devices to data centers.

Fujitsu's Unique Capabilities

Fujitsu is uniquely qualified to provide network-wide ICT infrastructure optimization because we possess expertise and experience in all the necessary fields; data centers, wide-area networks, and smart devices. We will make sure our solutions will provide seamless connectivity with customers' existing IT environments, by conforming to open virtualization standards. Looking ahead, we plan to introduce various products that comply with Fujitsu Intelligent Networking and Computing Architecture.

Fujitsu's Network Technologies

With experience in network technologies amassed since its founding, Fujitsu possesses extensive expertise in all relevant areas, including data centers, internal enterprise networks and wide-area networks. For example, Fujitsu is one of the world's largest vendors of the optical networks that link our information-driven society. Fujitsu has been highly commended by customers worldwide for the innovation

and reliability of its technologies, such as 100/400 Gb/s optical transmission. Above all, Fujitsu has been praised highly by these customers for providing consistent services. In the field of wireless base station equipment that underpins smart devices, Fujitsu also possesses the world's leading-edge Long Term Evolution (LTE) technology.

Common Foundation

A common foundation underpins all of the above 3 actions and 8 means of fulfilling them. Fujitsu will advance ICT by pursuing technologies, quality and reliability, and consideration for the environment.

Technologies

Fujitsu has a long history of developing core ICT technologies that supported the development of society. It began in 1954 when Fujitsu put Japan's first relay-based computer in commercial use and continues now with the supercomputer "K computer." Fujitsu has also developed telecommunication technologies since the inception of our company. In 1979, Fujitsu invented the HEMT (High Electron Mobility Transistor), which contributed to the explosive growth of satellite broadcasting. The length of submarine cable Fujitsu has laid under the sea is equivalent to circling the globe five times, making a sizable contribution to globalization.

Fujitsu places a high value on solving our customers' problems by the power of technology. Fujitsu aims to contribute to our global customers through services underwritten by technology excellence. We strive to understand differing regional situations and leverage global knowledge. At our R&D centers in the U.S., Europe, China and Japan, as well as our other premises, Fujitsu is engaged in cutting-edge R&D and tackling complex global issues.

Quality and Reliability

The relentless pursuit of quality and reliability is part of Fujitsu's DNA.

The "K computer," a supercomputer with one of the world's highest levels of computing power, delivers exceptional quality not just in terms of measured high performance, but also stable, continuous operation. During the measurement by TOP500 in November 2011, the "K computer" ran continuously without a single failure for 29 hours and 28 minutes, far outstripping the average run time of 2 hours for other supercomputers. This achievement was the result of Fujitsu's earnest efforts to ensure high quality and reliability. We believe three elements are indispensable for achieving high quality and reliability; (1) advanced product development technologies; (2) processes from development to manufacturing, implementation, and operations; and (3) human skill sets.

We share this heritage of ensuring high quality and reliability in the fields of systems integration and services. Fujitsu's products and services are used in mission-critical social infrastructure systems.

Consideration for the Environment

The Fujitsu Group has endeavored to operate in harmony with nature, positioning environmental protection as one of our highest priorities. We have been incorporating advanced environmental technologies in our products and services. These include environmentally friendly products, designed to conserve resources and energy, as well as environmental solutions such as biodiversity preservation using small sensors, wireless networks and cloud technology. In addition, we have been taking a multi-faceted approach to solve society's environmental problems. We have taken environmental measures at our own manufacturing facilities, and established a global environmental management system based on ISO 14001.

Leveraging environmental technologies and expertise accumulated over the past 75 years, Fujitsu has continuously reduced our own environmental impact. We have also been promoting the Green Policy Innovation project to help our customers and society reduce environmental impacts and solve new environmental issues. By harnessing ICT, we strive to solve society's environmental problems and help the growth of our customers' businesses.

Consideration for the environment is a common theme underpinning all Fujitsu Group's business activities. This applies not only in the fields directly involved with the environment, but also in solutions focused on smart cities, transportation, agriculture, forestry, the water industry, energy, and healthcare. Our environmental technologies have a broad scope of application, ranging from devices to data centers, hardware to software and services, as well as integration of diverse technologies and big data utilization. We have positioned low-carbon, resource recycling and harmony with nature as environmental priorities for society as a whole. By working closely with our customers and society, we aim to take the necessary steps to help make the world a more sustainable, greener place.

Product Lineup

This chapter introduces Fujitsu's product lineup grouped by the 8 concepts of our technologies and services.

CONTENTS

Create Value through Integration	45
On-demand Everything	47
Mobility and Empowerment	49
New Value from Information	50
Security and Governance	51
Modernization to Innovation	52
Integrated Computing	53
Network-wide Optimization	54



Create Value through Integration

Services

Business Services

Fujitsu's portfolio encompasses capabilities from IT Optimization and Sustainability consulting services, which confront real business issues including cost, efficiency and the environment.

Business Consulting

Fujitsu's Business Consulting enables clients to achieve greater operational efficiencies, performance and maximize ROI of current existing and planned IT implementations and business strategies.

IT Consulting

Fujitsu's IT Effectiveness services ensure customers' current and future investments in IT are maximized and support business objectives. Fujitsu uses a consulting led approach, aided by robust assessment tools. Services include; IT Strategy and Effectiveness, Application Value Assessment, Legacy Modernization, Flexible Work Environment, Data Center Assessment, IT Service Management.

Application Services

Fujitsu provides a full range of application services to support the development, integration, testing, deployment and on-going management of both custom developed and packaged applications. The services focus on delivering business and productivity improvements for organizations. Solutions frequently involve the integration of external and existing internal systems to deliver benefits across business processes. The services cover both project based activity and on-going management; they leverage cloud services for effective delivery where appropriate; and address the challenges of migrating and modernizing application assets as well as new applications.

Enterprise Applications

Fujitsu's Enterprise Applications services cover the design, development, configuration, implementation, rollout and on-going management of solutions based on packaged ERP applications. Fujitsu provides scalable services for market leading software products such as SAP and Oracle, covering core business functions including finance, HR and supply chain management.

Application Development and Integration

Application Development and Integration Services help customers respond to change by defining and delivering application transformation projects. Fujitsu's experience in dealing with complex multi-vendor environments and emerging trends/technologies, ensures that projects are managed professionally and on budget. Offerings include; Package Implementation Services, Custom Application Development, Systems Integration, Application Modernization and Migration, Test and Validation Services.

■ Legacy Modernization

A comprehensive set of Legacy Modernization services that enable customers to more easily migrate or modernize Legacy applications to reap the benefits of Cloud Services, minimizing the risks and costs – and giving them greater flexibility for the future. Legacy Modernization comprises:

- Application Value Assessment: identifying which applications would benefit from legacy modernization and cloud deployment.
- Application Modernization: utilizing the cloud without moving the entire application to the cloud – for instance, moving the front end or database.
- Application Migration: migrating entire applications to the cloud.

Services

Managed Infrastructure Services

Fujitsu's Managed Infrastructure services provide a cost effective, reliable and flexible ICT infrastructure to customers. This infrastructure may be owned by the customer or Fujitsu on their behalf. Our services comprise Data Center Services, End User Services, Service Desk, Technical & Maintenance Services and Network Services.

Data Center Services

Fujitsu's Data Center Services provide our customers with the complete range of services to ensure their IT systems are fully operational for their users as well as to improve their IT flexibility, efficiency, performance and to reduce their costs. Our operational Datacenter Services comprise Datacenter Hosting (facilities); IT Infrastructure Management for servers, storage and other DC hosted infrastructure; backup and recovery services as well as DC network services. In addition Fujitsu has technical consultancy and project services that enable us to undertake assessment, advisory, migration and transformation projects for our customers – either as part of a wider outsource or as part of the customer's journey towards cloud infrastructure. As part of the transformation of customer infrastructure we may include IaaS on Fujitsu Cloud.

End User Services

Fujitsu's End User Services are for organizations who want to securely access their workplace data and services on any device in any location. EUS underpins business agility and delivers business value while reducing the costs to business, and improving the user experience. EUS is a superset of a number of offerings and services that enables Fujitsu to offer a blend of traditional and cloud based services to meet their needs. EUS encompasses: Desktop Managed Service, Virtual Client Services, Managed Mobile, Productivity Suite, Service Desk, Managed Maintenance and Service Delivery Management.

Technical and Maintenance Service

Fujitsu has a proven track record in delivering technical and maintenance services on a global scale. Expert Fujitsu teams have the capability and capacity to deliver all services locally – anywhere around the world. Our standardized offering can be adapted and expanded to meet your individual needs. Our services fall into three main categories:

- Specialist maintenance services: provide break-fix services for infrastructure
- End User related services: typically as part of a broader outsource service
- Project Services: we undertake projects around deploying new infrastructure or applications

Service Desk

We can offer multi-lingual service desk support in 41 languages globally and our local service desks are enhanced by our 5 global service desks in Costa Rica, Malaysia, Poland, Portugal, and the Philippines. Fujitsu's service desk agents are committed to delivering exemplary service quality that enhances user experiences. They are empowered to go beyond fixing problems and to identify root causes. Our focus is on the value we can create for our clients and the quality of the customer experience we deliver. By applying Sense and Respond® – our approach to implementing lean principles in a service environment, we seek to fix users' problems quickly and easily, and to see how these problems can be eliminated permanently – eradicating waste from the IT service. Through TRIOLE for Services, all our global service desks work to the same processes and standards, compliant with the ISO 20000 international standard, operating to best practice principles and delivering exemplary service quality.

Product Support Services

Fujitsu offers a wide variety of sophisticated products with the latest technology as well as comprehensive services to supplement the standard warranty including support for customers to get started. The Fujitsu approach ensures prompt, smooth installation for rollouts all around the world. Fujitsu employs standardized support building blocks enabling responsive support around the clock. The standard warranty can be extended for a pre-defined response or recovery time, with a wide range of offerings.

Solutions

Industry Solutions

Fujitsu's long and comprehensive global experience means we have been able to develop expertise across a number of industries. Working together with customers we drive value by utilizing industry specific know-how.

Healthcare
Retail
Financial Services
Manufacturing
Telecommunications

Education
Defense and National Security
Public Sector
Energy and Utilities
...



Services

Application Services

Software as a Service

Fujitsu offers a wide range of packaged applications as subscription-based services – supported by implementation, customization and integration services – including on-demand apps for office productivity, customer relationship management, IT management and other key industry and enterprise applications.

■ Fujitsu Cloud End User Protect

Fujitsu and Symantec have formed a Global Strategic Relationship to deliver customers competitive advantage, flexibility and protection. Fujitsu Cloud End User Protect is a product of this relationship that makes it easier to protect a business and its employees from the ever-changing threats to IT security. Fujitsu's information security know-how and cloud expertise come together to deliver an end-to-end service, in partnership with Symantec, that helps keep the organization secure. The service fully protects the organization from new and emerging security threats; as a result allowing more flexible working, embracing IT consumerization and cloud-based services, while safeguarding the business. Fujitsu reduces the cost and complexity of keeping the business ahead, wherever the next threat comes from.

■ Messaging as a Service

Fujitsu's Messaging as a Service (MaaS) provides a complete Microsoft Exchange 2010 environment. MaaS is part of Fujitsu's Productivity Suite, ideal for organizations looking to refresh their email environment, reduce IT TCO, or for organizations that need to contend with a fluctuating workforce.

■ IT Management as a Service

Fujitsu's IT Management as a Service (ITMaaS) is a suite of SaaS based applications that provide monitoring and service desk capabilities needed for efficient and cost-effective IT Management.

Platform as a Service

Fujitsu's Platform as a Service provides the application platform for cloud based applications. The Fujitsu Cloud Store allows independent software vendors to offer their IP to market as SaaS. This will soon be extended to other areas such as application integration or big data platforms.

■ FUJITSU Cloud PaaS A5 powered by Windows Azure™

Fujitsu works with other cloud providers to ensure the optimal mix of private, public, on-premise and hosted cloud solutions is achieved. Fujitsu is the world's first Microsoft partner to be able to deliver Microsoft Azure as a cloud service. Fujitsu Hybrid Cloud Services links Microsoft Windows Azure-based components to Windows Server-based components, running either on premises or on a Fujitsu cloud platform.

Services

Managed Infrastructure Services

Data Center Services

Fujitsu's Data Center Services provide our customers with the complete range of services to ensure their IT systems are fully operational for their users as well as to improve their IT flexibility, efficiency, performance and to reduce their costs. (For a full description please see the "Create Value through Integration" section.)

End User Services

Fujitsu's End User Services are for organizations who want to securely access their workplace data and services on any device in any location. EUS underpins business agility and delivers business value while reducing the costs to business, and improving the user experience. (For a full description please see the "Create Value through Integration" section.)

■ Virtual Client Services

Fujitsu's proven approach to exploiting desktop virtualization to help organizations looking to transform their desktop service to provide a more flexible solution that will reduce both business and IT costs while improving the user experience.

■ Managed Mobile

Fujitsu can help manage the growing complexity of non-standard, geographically dispersed mobile infrastructure environments, while safeguarding corporate data and protecting privacy. Our managed mobile offering is an enterprise-class, cloud-based, modular service for managing, securing and supporting mobile devices, applications and End User Services.

Network and Communication

Fujitsu's network services for inter-site communications, deliver a carrier-class network infrastructure combining cost competitiveness and security with high performance. An innovative alternative to traditional networks, our cloud connectivity services are based on an aggregate bandwidth pricing model. While cloud communication services offer consumption-based voice and unified communication applications hosted in the cloud, including Hosted Voice over IP, Collaboration, Contact Center and Mobile Device Management.

Infrastructure as a Service

Fujitsu cloud infrastructure solutions deliver flexibility and value with the necessary high level of security and service quality expected from enterprise-class IT. To fulfill different requirements, Fujitsu has a comprehensive range of IaaS solutions.

■ FUJITSU Cloud IaaS Trusted Public S5

The Fujitsu Global Cloud Platform provides a pool of scalable, robust, secure and customizable, virtual IT resources, available on demand on a pay-per-use basis. The FGCP/S5 trusted public cloud platform is delivered via our global network of data centers – in Japan, Australia, USA, Singapore, UK and Europe – to provide cost-effective and secure access to IT IaaS.

■ FUJITSU Cloud IaaS Private Hosted Custom

In accordance with geographical regulations governing where data is stored and processed, as well as a need for organizations to consider local consumer/customer sentiment, Fujitsu offers the Local Cloud. This IaaS platform provides tailored services specific to regional needs.

Solutions

Infrastructure Solutions

Private Cloud Solution

Fujitsu's Private Cloud solutions are the most complete way of leveraging IT to help your organization boost its agility, efficiency and quality of service. They combine server, storage, network and virtualization technology with dynamic resource and cloud service management software to deliver powerful automated pools of IT infrastructure resources that can be flexibly provisioned within minutes.

■ DI Blocks

Fujitsu's DI Blocks are available as scalable and modular building blocks, configurable to meet different capacity and performance requirements. All components of the Fujitsu's DI Blocks appliance come pre-integrated. In combination with life-cycle management and integration services, this reduces implementation risk and delivers faster time to production. In addition, Fujitsu's DI Blocks are complemented by operational support services for easy maintenance of the complete solution. Outstanding consulting services complete the offer.



Services

Managed Infrastructure Services

End User Services

Fujitsu's End User Services are for organizations who want to securely access their workplace data and services on any device in any location. EUS underpins business agility and delivers business value while reducing the costs to business, and improving the user experience. (For a full description please see the "Create Value through Integration" section.)

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Fujitsu can help manage the growing complexity of non-standard, geographically dispersed mobile infrastructure environments, while safeguarding corporate data and protecting privacy. (For a full description please see the "On-demand Everything" section.)

Network and Communications

Fujitsu's network services for inter-site communications deliver a carrier-class network infrastructure combining cost competitiveness and security with high performance. (For a full description please see the "On-demand Everything" section.)

■ Global WAN Services

Fujitsu Wide Area Network (WAN) provides global connectivity. This includes Managed WAN, Managed Virtual Private Networks, Managed Wavelength and Managed Firewall Services together with Campus LAN and Distributed LAN services.

Solutions

Infrastructure Solutions

Virtual Client Computing

Desktop virtualization helps improve service quality and security, increase flexibility, and reduce costs. Fujitsu provides desktop virtualization solutions based on best-in-class virtualization technologies, proven infrastructure products, and end-to-end lifecycle services from a single source. Customers benefit from rapid implementation and reduced risk resulting from Fujitsu's extensive project experience.

Products

Workplace Devices

Fujitsu is a leading provider of Tablet PCs, Slate PCs, Notebooks and Servers for businesses and consumers. Fujitsu Tablet PCs have become the standard in a wide variety of environments including Government, Healthcare, Sales Force Automation, and Education. In addition, customers have come to depend on the reliability, quality, innovation and human-centric technology of Fujitsu products. Furthermore, Fujitsu offers a complete range of environmentally conscious products and uses environmentally friendly technologies and processes throughout the entire product lifecycle.

PC

Fujitsu answers ICT needs in business settings of all kinds with an expansive lineup of PC products ranging from tablet, notebook and desktop PCs, workstations and thin clients to displays and peripherals. Fujitsu also helps to enhance corporate value by reducing security risks faced by customers through a broad range of security technologies, covering everything from biometric authentication to anti-theft measures.

Smart Device

Fujitsu offers a diverse lineup of smart devices that can be tailored to customer needs. Fujitsu's smartphones are fitted with proprietary human-centric technology that enables sensor-driven life and behavior support functions, intuitive touch-panel operation, and other features. Through smart devices, we help users to innovate their work styles not only in the office, but also when visiting their clients and working on the frontlines.



Services	<div data-bbox="352 277 557 309">Application Services</div> <div data-bbox="352 333 555 360">Software as a Service</div> <div data-bbox="352 367 882 542"><p>Fujitsu offers a wide range of packaged applications as subscription-based services — supported by implementation, customization and integration services — including on-demand apps for office productivity, customer relationship management, IT management and other key industry and enterprise applications.</p></div> <div data-bbox="946 333 1147 360">Platform as a Service</div> <div data-bbox="946 367 1501 515"><p>Fujitsu's Platform as a Service provides the application platform for cloud based applications. The Fujitsu Cloud Store allows Independent Software Vendors to offer their IP to market as SaaS. This will soon be extended to other areas such as application integration or big data platforms.</p></div> <div data-bbox="352 600 676 631">Managed Infrastructure Services</div> <div data-bbox="352 654 549 680">Data Center Services</div> <div data-bbox="352 687 885 864"><p>Fujitsu's Data Center Services provide our customers with the complete range of services to ensure their IT systems are fully operational for their users as well as to improve their IT flexibility, efficiency, performance and to reduce their costs. (For a full description please see the "Create Value through Integration" section.)</p></div>
Solutions	<div data-bbox="352 922 703 954">Business and Technology Solutions</div> <div data-bbox="352 976 587 1005">Intelligent Data Services</div> <div data-bbox="352 1010 892 1332"><p>Intelligent Data Services collectively refers to services designed to establish a cycle of combining knowledge obtained from gathering, storing, and analyzing large volumes of sensor data. Then combining this with knowledge to guide people. These services harness Fujitsu's comprehensive technological capabilities, along with customer business expertise and customer channels developed over many years. By embedding ICT devices into objects of all kinds in the physical world (real world), Fujitsu will catalyze innovation to help achieve a prosperous human-centric society.</p></div> <div data-bbox="970 1010 1501 1301"><ul style="list-style-type: none">– Cloud Services as a Platform for Big Data: platform services for data utilization– SPATIOWL: new location data cloud services– Data Curation Service: creating new value for customers by fusing various kinds of big data– Skin Memory: a service that enables people to easily check their own skin condition using smartphones– DataPlaza: social media analysis tool for supporting the analysis of consumer feedback from social media data</div> <div data-bbox="352 1393 588 1422">Infrastructure Solutions</div> <div data-bbox="352 1444 480 1471">Private Cloud</div> <div data-bbox="352 1478 892 1597"><p>Fujitsu's Private Cloud solutions are the most complete way of leveraging IT to help your organization boost its agility, efficiency and quality of service. (For a full description please see the "On-demand Everything" section.)</p></div> <div data-bbox="970 1471 1501 1684"><div data-bbox="970 1471 1083 1500">DI Blocks</div><div data-bbox="970 1507 1501 1684"><p>Fujitsu's DI Blocks are available as scalable and modular building blocks, configurable to meet different capacity and performance requirements. All components of the Fujitsu's DI Blocks appliance come pre-integrated. (For a full description please see the "On-demand Everything" section.)</p></div></div>
Products	<div data-bbox="352 1742 443 1771">Software</div> <div data-bbox="352 1800 892 2092"><p>Fujitsu provides a systematic lineup of software products designed to facilitate the use of big data. This lineup features software products that customers can easily use on-site. Fujitsu has developed, through implementation of Platform Services for Data Utilization, a cloud service for utilizing big data. In addition, we have helped customers to utilize big data by making it simple to install and operate, and by providing an ecosystem that makes it easy for customers to combine the software with other products including OSS.</p></div> <div data-bbox="946 1796 1059 1823">Middleware</div> <div data-bbox="970 1830 1484 1946"><ul style="list-style-type: none">– Interstage Big Data Parallel Processing Server– Interstage Big Data Complex Event Processing Server– Interstage eXtreme Transaction Processing Server– Symfoware Server</div>



Services

Application Services

Information Management

Fujitsu provides services for the management and exploitation of information throughout its lifecycle. These services cover:

- User Experience solutions for users to access, locate, exploit and input information. Including portals, search, web content management, business insight/ analytics, forms and mobile.
- Enterprise Collaboration enabling knowledge workers to share and draw on information enterprise-wide whilst making the most of the latest mobile and communications tools
- Enterprise Process support focused on defining, improving and orchestrating key business processes using Business Process Management technologies to increase efficiency and improve service delivery
- Enterprise Lifecycle Management solutions to capture and secure information and make it available across the business in compliance with regulatory requirements. Including electronic document and records management (EDRM), eDiscovery, lifecycle management and archiving.

Enterprise Applications

Fujitsu's Enterprise Applications services cover the design, development, configuration, implementation, rollout and on-going management of solutions based on packaged ERP applications. (For a full description please see the "Create Value through Integration" section.)

Software as a Service

Fujitsu offers a wide range of packaged applications as subscription-based services – supported by implementation, customization and integration services – including on-demand apps for office productivity, customer relationship management, IT management and other key industry and enterprise applications.

■ Fujitsu Cloud End User Protect

Fujitsu and Symantec have formed a Global Strategic Relationship to deliver customers competitive advantage, flexibility and protection. Fujitsu Cloud End User Protect is a product of this relationship that makes it easier to protect a business and its employees from the ever-changing threats to IT security. (For a full description please see the "On-demand Everything" section.)

Managed Infrastructure Services

Data Center Services

Fujitsu's Data Center Services provide our customers with the complete range of services to ensure their IT systems are fully operational for their users as well as to improve their IT flexibility, efficiency, performance and to reduce their costs. (For a full description please see the "Create Value through Integration" section.)

End User Services

Fujitsu's End User Services are for organizations who want to securely access their workplace data and services on any device in any location. EUS underpins business agility and delivers business value while reducing the costs to business, and improving the user experience. (For a full description please see the "Create Value through Integration" section.)

Solutions

Business and Technology Solutions

Security Solutions

The importance of having a secure IT environment is becoming more and more important. With continual advancements in technology and innovation, confidential business information is at a higher risk of exposure. Understanding that mobility and connectivity are a part of today's business environment, Fujitsu takes a focused approach to ensuring security around all of our solutions. The combination of Fujitsu's user security expertise and partnerships with leading security vendors, ensures superior security is standard. Fujitsu's extensive range of user security products and solutions are easy to integrate and can be enhanced with complementary software and hardware offerings to meet unique user security requirements.



Services

Application Services

Application Management and Outsourcing

Fujitsu provides customer services for end-to-end management of applications, underpinned by strong governance ensuring delivery of quality and value from the application portfolio. The services cover everything from transition and management, to application value assessments and development or integration. Based on these services the customer can lower risks, optimize the IT environment and support strategic IT planning, including re-architecture and transformation projects.

■ Global Enterprise Management Services for SAP

Fujitsu's Global Enterprise Management Services for SAP leverages best practices, proven capabilities, SAP Tool suite, mature Support Standard Operating Procedures (SOPs), as well as a highly scalable 'Enterprise Cloud'. Our dedicated IaaS solution guarantees security, visualization of service levels, and batch processing that meets your needs. Receive all the benefits of a 'private cloud' – using resources only as required, virtually unlimited computing capability, and easy service administration.

Application Development and Integration

Application Development and Integration Services help customers respond to change by defining and delivering application transformation projects. Fujitsu's experience in dealing with complex multi-vendor environments and emerging trends/technologies, ensure that projects are managed professionally and on budget. (For a full description please see the "Create Value through Integration" section.)

■ Legacy Modernization

A comprehensive set of Legacy Modernization services that enable customers to more easily migrate or modernize Legacy applications to reap the benefits of Cloud Services, minimizing the risks and costs – and giving them greater flexibility for the future. (For a full description please see the "Create Value through Integration" section.)

Managed Infrastructure Services

Data Center Services

Fujitsu's Data Center Services provide our customers with the complete range of services to ensure their IT systems are fully operational for their users as well as to improve their IT flexibility, efficiency, performance and to reduce their costs. (For a full description please see the "Create Value through Integration" section.)



Products

Integrated System

Fujitsu provides vertically integrated platforms that are “Integrated,” meaning that they are optimally integrated to maximize the benefits of hardware and software components; “Ready,” meaning that they can be used immediately and are easy to operate; and “Dynamic,” meaning that they can adapt to changes as customers tackle the challenge of innovation while reducing the burden of building and operating ICT infrastructure.

DI Blocks

Software

Fujitsu is the only Japanese vendor with a systematic software product lineup. Fujitsu integrates optimal systems according to customer needs and objectives, based on a core lineup of proprietary technologies and products combined with supplementary partner software products and OSS.

BPM / SOA / XBRL	– Interstage
Operation Management	– Systemwalker
Database	– Symfaware
	– Oracle
	– Microsoft
Resource Management	– ServerView Resource Orchestrator
Hypervisor	– Microsoft Hyper-V
	– VMWare vSphere

Server

Fujitsu has assembled an extensive lineup for server products that caters to the diversifying ICT needs of customers in step with shifts in the business environment. Fujitsu also provides a globally standardized lineup of server products to address global business expansion by customers.

Mainframe	– GS21
	– BS2000
	– VME
UNIX Server	– Fujitsu M10
	– SPARC Enterprise
Mission Critical IA Server	– PRIMEQUEST
Industry Standard Server	– PRIMERGY
Supercomputer	– PRIMEHPC FX10

Network

Along with in-house development of products that facilitate business continuity, security measures, and operation and management, Fujitsu can evaluate and verify third-party products. By embedding these products in networks, Fujitsu supplies optimal networks for each customer to rapidly meet their diversifying needs.

Router
LAN Switch
Security
Bandwidth Control
Load Balancer
IP Telephony
Unified Communication

Storage

ETERNUS is a highly reliable storage system that efficiently uses and securely protects data, which has been increasing exponentially. ETERNUS can be used in conjunction with ETERNUS SF storage platform software to enhance storage utilization efficiency by reducing implementation and operation costs.

Disk Storage System	– ETERNUS DX series
Tape System	– ETERNUS LT series
Data Protection Appliance	– ETERNUS CS800
	– ETERNUS CS High End
Storage Software	– ETERNUS SF Storage Cruiser
	– ETERNUS SF AdvancedCopy Manager



Network-wide Optimization

Services

Managed Infrastructure Services

Network and Communications

Fujitsu's network services for inter-site communications, deliver a carrier-class network infrastructure combining cost competitiveness and security with high performance. (For a full description please see the "On-demand Everything" section.)

■ Global WAN Services

Fujitsu Wide Area Network (WAN) provides global connectivity. This includes Managed WAN, Managed Virtual Private Networks, Managed Wavelength and Managed Firewall Services together with Campus LAN and Distributed LAN services.

Products

Software

The penetration of broadband networks has led to an increase of digitized data flowing through networks. As a result, a variety of services are now provided over networks, such as IP telephony and video distribution services. As next-generation networks become increasingly important to society, network infrastructure has become large and complex. This has created a host of crucial issues for service providers. Issues include network operation and management and problem resolution methods, in addition to quality assurance for network services and infrastructure operation and management. To solve these issues, Fujitsu provides network service management software that enables operation and management and quality assurance for next-generation networks.

Network Management Software

Dynamic Resource Management Software

- ServerView Resource Orchestrator

Network Operation and Management Software

- Systemwalker Network Manager
- Systemwalker Network Assist

Network Service Management Software

- Systemwalker Service Quality Coordinator

Network

Fujitsu supplies a comprehensive range of network products, including communications systems for carriers and network devices for enterprises. The former constitutes the backbone of our ICT-driven society, such as core networks, metro networks, and access networks. The latter is used to integrate internal networks within enterprises.

Network System

Network Access

Network Transport

Network Service Platform

Network Service Node

Router

LAN Switch

Security

Bandwidth Control

Load Balancer

IP Telephony

Unified Communication

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A Note Concerning Future Projections, Forecasts and Plans

This publication contains forward-looking statements in addition to statements of fact regarding the Fujitsu Group's past and current situation. These forward-looking statements are based on information available at the time of publication and thus contain uncertainties. Therefore, the actual results of future business activities and future events could differ from the forward-looking statements shown in this publication. Please be advised that the Fujitsu Group shall bear no responsibility for any of these differences.

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November, 2013

FV0003-3