**Priority 1**

Providing Opportunities and Security Through ICT

ICT functions as a common language, linking people across the world together, and enabling them to unlock their potential.
Fujitsu will contribute to the creation of a society where ICT connects and supports the world's 7 billion people, providing them with security and opportunities to pursue their dreams.
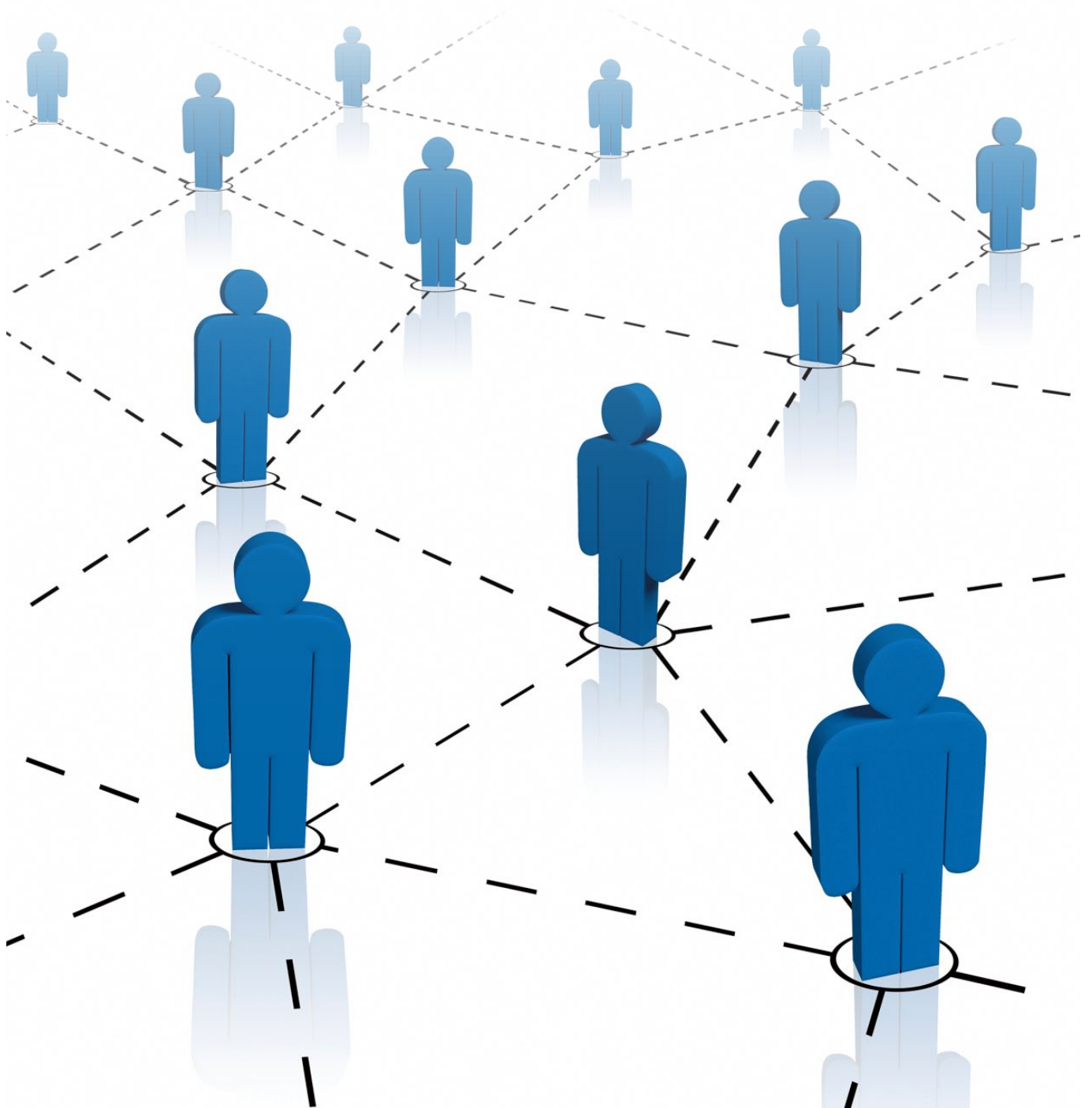
Providing New Values Through ICT

We will Solve Social Issues with Innovation.

Fujitsu jointly developed the K computer[*1], ranked as the world's fastest supercomputer in 2011, and is globally deploying a secure cloud platform with world-class reliability. Fujitsu is offering solutions to intractable problems in a variety of fields, from medicine and food to disaster preparedness, through the provision of advanced, easy-to-use technology. We will keep meeting the challenge of realizing a better future through computing.

*1 The K computer:
K computer is a registered trademark of RIKEN

Key Examples from FY 2011

Collaborative Research with Stockholm University Using Supercomputers to Accelerate International IT-based Drug Discovery

Cancer is becoming the main cause of death globally, due in part to aging societies and modern lifestyles. With the number of cancer patients estimated to increase by 75% by 2030, the need is urgent to develop effective treatments. However, experimental drugs have only a 0.01% chance of making it to market. Raising development success rates is a pressing issue. In collaboration with the University of Tokyo's Research Center for Advanced Science and Technology and Sweden's Stockholm University, Fujitsu is working to leverage IT-based drug discovery technologies to reduce the cost and time spent on animal testing and clinical trials.

Fujitsu will keep striving to contribute to the development and improvement of effective medicines against intractable diseases like cancer by performing highly accurate simulations utilizing the computational power of supercomputers.
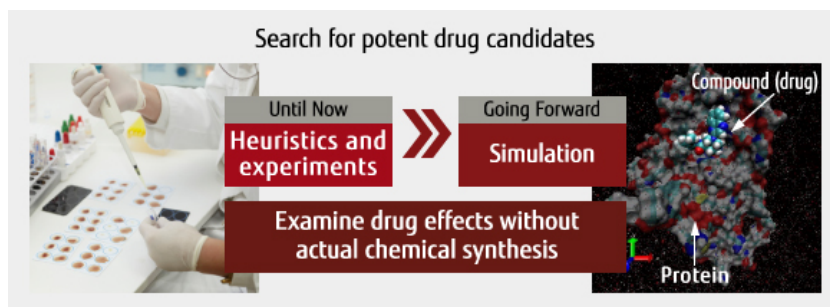
New drug development support via highly accurate simulation to predict binding activity

Fujitsu's Cloud-enabled ICT System Supporting a Stable Supply of Safe and Fresh Produce is Deployed at AEON Co., Ltd.'s Directly Operated Farms

Japanese agriculture faces the crucial tasks of bolstering its competitiveness as an industry and steadily delivering safe and fresh produce to consumers.

AEON AGRI CREATE Co., Ltd. manages and handles produce production at Aeon Co., Ltd.'s directly operated farms. It employs Fujitsu's cloud to make all aspects of operations visible-from production to sales of produce-at eight of its farms in the six prefectures of Ibaraki, Tochigi, Chiba, Saitama, Oita, and Shimane across Japan.

This makes it possible to assess factors such as costs for each crop, facilitating profit improvement via cost analysis. The system is also expected to support the supply of safe produce to consumers through the collection and analysis of information on production processes, including records of farm work and agrochemical and fertilizer use.

Multifaceted measures encompassing management, production, and quality are key to making farming more sophisticated. Fujitsu will offer cloud services to help usher in next-generation farming.

Photographs are taken of crop conditions, shared on the cloud, and then analyzed


Crops grown on AEON Co., Ltd.'s directly operated farms

Collaboration with Tohoku University on Tsunami Simulation Research Using High-precision 3D Tsunami Simulations to Achieve a Disaster-resilient Asia

Total fatalities due to natural disasters around the world from 2001 to 2010 were 2.3 times greater than in the previous decade. Two thirds of the fatalities were concentrated in Asia, where many earthquakes, tsunamis, and other catastrophes occur, making disaster risk reduction a key issue in the region.

Research using simulations to mitigate tsunami risks is nothing new, but these projections were limited to calculating tsunami heights and arrival times at coastal areas. It was not possible to project tsunami damage from inundation in urban areas and rivers.

In collaboration with Tohoku University, Fujitsu has begun high-precision 3D tsunami simulation research leveraging the K computer. This technique enables realistic 3D recreations of tsunami impacts on levees bordering coastal areas and buildings in urban areas, which hold promise for helping realize highly reliable disaster preparedness and mitigation measures.
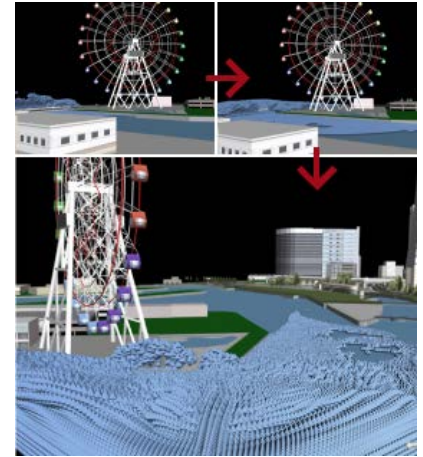
3D tsunami simulation

Fujitsu will employ this technique to assist in alleviating damage from natural disasters in Asia, starting with recovery and revitalization efforts in areas hit by the Great East Japan Earthquake.

Supercomputer, the "K computer"

Increasing ICT Accessibility

Providing Opportunities to as Many People as Possible

ICT brings people around the world together, and is a common language in the pursuit of one's own possibilities. To open the doors of cyber society so that as many people as possible can reap the benefits of ICT, Fujitsu will offer intuitive devices that everyone can understand and use, and provide systems to support ICT deployment in developing countries.

Key Examples from FY 2011

The Fujitsu Group's ICT Platform to Handle Sharp Rise in Communications Traffic from Sophisticated Mobile Phone Services in Morocco

The Kingdom of Morocco is a constitutional monarchy located in northwest Africa, with a population of roughly 32 million people. With the country's mobile phone market continuing to grow rapidly, Méditel, the second-largest domestic mobile telecommunications provider, needed to quickly manage increasing communications traffic from the provision of increasingly sophisticated services to ever more users. Fujitsu joined forces with partner company PTI (Portugal Telecom Inovação, SA) to offer an ICT platform with high processing capacity, enabling Méditel to roll out new services for its 10 million users and handle feature expansion.

Moroccans using mobile phone services

The Fujitsu Group's ICT platforms will support globalization in Morocco and other developing countries around the world.

Use of the STYLISTIC Q550 Slate PC in U.S. and Japanese Classrooms

Digital education leveraging ICT has started making its way into classrooms in the United States and Japan. In the U.S., Charlottesville City Schools had been exploring introducing tablets as a learning tool but could not find one that met their criteria. Fujitsu's STYLISTIC Q550 tablet changed that, with durability, operability, portability, and other specs that beat the competition, spurring Charlottesville City Schools to put over 2,000 of the tablets into use. This model is also being used at the three schools below participating in the Ministry of Internal Affairs and Communications of Japan's "Future School Promotion Project."

Tablets put to work in the classroom

- Shouei Junior High School in Shinchi Town, Fukushima Prefecture
- Joto Junior High School in Wakayama City, Wakayama Prefecture
- Takeo Seiryo Junior High School, Saga Prefecture

The Fujitsu Group will keep proposing ICT solutions to support digital education for children worldwide.

Fujitsu Group's Universal Design (UD)

The Fujitsu Group develops and provides products and services that facilitate greater social inclusion by being easy for everyone to use, irrespective of gender, age, and disabilities; ICT inexperience; or educational opportunities. We will also contribute to our customers' businesses by developing ICT equipment that encourages people to engage in society and raises social productivity. We incorporate feedback from customers and third parties gleaned from interviews, questionnaires, and user tests into development to offer ICT with better usability for a wider user base.

Offering Intuitive ICT Devices Everyone Can Use

Raku-Raku (Easy-to-Use) Phones

We follow a policy of Human Centered Design, delivering products and services attuned to human characteristics so that everyone can use ICT safely, securely, effectively, and comfortably.

The Raku-Raku Phone handsets that Fujitsu started supplying to NTT DOCOMO, INC. in 2001 have become a hit, thanks to innovations that make diverse functions simple to use. In March 2012, the cumulative sales volume topped 20 million handsets. In May 2012, NTT DOCOMO announced the release of a Raku-Raku smartphone, for which Fujitsu has devised an interface that is easy to use for everyone.

Raku-Raku
Smartphone

- Comprehensive mobile phone website (in Japanese)

Raku-Raku (Easy-to-Use) PCs

We also released the Raku-Raku PC series in 2008. These PCs include a Raku-Raku keyboard that allows users less familiar with the often complex layout of Japanese-style keyboards to recognize at a glance the characters they want to input, and feature the Raku-Raku menu, which allows the user to start work immediately. These products strive for ease of use, simplicity, and user confidence and are optimal as products for senior citizens and beginners.

Raku-Raku PC

- FMV Raku-Raku PC (in Japanese)

User-Friendly ICT Means Greater Uptake

Developing ATMs with an Eye to Intuitive Operations and Color Universal Design
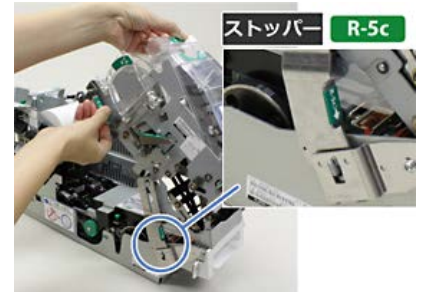

FACT-V X200

CUD certification mark

Fujitsu's ATM FACT-V X200 offers enhanced color contrast so that people who see colors differently from the general public or have a reduced ability to sense color due to eye disorders, advanced age or other reasons have an easier time making distinctions. This ATM model has received certification[*1] from the NPO Color Universal Design Organization for user operability, particularly with regard to individual differences in color perception.

The FACT-V X200 is also designed to facilitate maintenance operations. In addition to a userfriendly screen design, it has levers and labels to make navigating operational components a breeze. Visual guidance enabling on-site verification of operational procedures makes operation easier for all maintenance attendants.

- FACT-V X200 (in Japanese)

*1 :
For hardware and software (Fujitsu standard specifications) used by customers to operate the ATM

Easy-to-operate internal unit

Rendering Visible the Deployment of Services Fusing Social Infrastructure and ICT

FUJITSU Design Award 2011

As an ICT product and service provider, the Fujitsu Group aims to shape a new society that contributes to people's daily lives. To this end, we pursue the development of products that bring computing technology closer to end users, and can be comfortably and conveniently used by more people.

As part of this commitment, we held the FUJITSU Design Award 2011. Open to designers worldwide, this genuine international design competition spotlighted PC-related designs that bring innovation to everyday life. The winning designs illustrate how ICT devices can be useful in daily living and render visible the deployment of services that are integrated with social infrastructure.

- FUJITSU Design Award 2011

Grand Prize Submission: a cane designed with embedded ICT, enabling users with mobility challenges to take an active part in society

Major Awards Received in FY 2011

- GOOD DESIGN AWARD (Japan)
    - ARROWS X LTE F-05D
    - REGZA Phone T-01D
    - Windows Phone IS12T
    - AARROWS Tab LTE F-01D
    - Raku-Raku walking diary
    - HumanBridge - a SaaS-based medical network solution
    - GLOVIA Smart Kirara OCR
    - Mobile Phone Application to Support Children with Special Needs
    - ScanSnap S1100
    - Wall-mounted air conditioners for the global market LT/LU series

- KIDS DESIGN AWARD (Japan)
    - Industry's first design internship for junior high school students
    Kids Consumer Support Prize (Minister of State for Consumer Affairs Award)
    - Self-checkout machines that contribute to children's growth
    Excellence Award (Category: Kids Consumer Support) (Kids Design Association Chairman Award)
    - Exciting Design Method

- universal design award (Germany)
    - Mobile Phone Application to Support Children with Special Needs

- reddot design award (Germany)
    - Professional LED-Display Series

Providing Reliable and Secure ICT Infrastructure

We want to keep life safe.

ICT penetrates every corner of our lives. Embedded in a wide array of social infrastructure, it helps to raise the safety of public, transportation and other services. Further, ICT enables high-security environments to protect personal and proprietary information by providing biometric authentication solutions and similar safeguards.

Key Examples from FY 2011

Provision of a New Cloud Service to Support Water and Sewer Operations

Amid rising food demand and more severe water shortages due to climate change, roughly 13% of the world's population does not have access to safe drinking water, and nearly half of households lack running water. Meanwhile, Japan's water and sewerage infrastructure is aging, with nationwide upgrades called for in 2015. This is problematic for many local governments that manage water and sewer operations due, in part, to a lack of financial resources and experienced engineers.

To address these issues, top-tier water treatment player METAWATER Co., Ltd. teamed up with Fujitsu to build a water business cloud (WBC). This ICT infrastructure enables remote monitoring of facilities spanning a wide geographic area. The WBC makes it possible for local governments and other water and sewer business operators to use shared ICT infrastructure. This framework is projected to reduce life cycle costs, including system installation and running costs, by at least 30% compared with conventional wide-area water and sewerage surveillance.

Fujitsu will utilize cloud computing technologies to support sustainable water and sewerage operations in the future.

WBC remote support services   Operation management

Attaining Higher Maintenance Work Efficiency in the Airline Industry through Collaboration with Boeing

Management issues in the still rapidly growing global airline industry are numerous and cover extensive ground, from ensuring safe operations to adhering to flight schedules and cutting costs.

Fujitsu teamed up with Boeing to develop its new aircraft maintenance service utilizing automated identification technology (AIT). Coined "RFID Integrated Solutions", the service employs radio frequency identification device (RFID) technology to instantly provide information like manufacture date, maintenance history, and inventory status. In field tests conducted jointly with Alaska Airlines, oxygen generator[1] inspection time was dramatically reduced to 15 minutes from the 6.5 hours for the traditional visual, paper-based inspections. The new method also eliminates data input by hand to provide accurate data that increases maintenance reliability.

The Fujitsu Group will deliver ICT to help airline companies ensure safety and security and reduce operating costs.

*1 Oxygen generator:
A type of emergency equipment, along with items like flotation devices, found on airplanes.

Maintenance work on an aircraft equipped with RFID

Group photograph after the three firm's joint operational tests

World's First Contactless Security Access System for Thousands of People

The Swiss company Richemont is one of the three biggest luxury goods holding companies in the world, with brands like Cartier, Montblanc International GmbH, and Alfred Dunhill, Ltd. Richemont had employed a system using fingerprint authentication technology to guard against unauthorized access to work areas, but experienced problems with authentication accuracy, including verification failures due to dry or rough skin.

Fujitsu worked with this Swiss partner to develop the world's first contactless security access system capable of providing rapid, highly precise authentication for several thousand people, shoring up its security framework. This system ensures that unauthorized people do not enter offices and enables swift responsiveness in the event of theft.

Fujitsu will continue to contribute to customers' security, safety, and brand value enhancement by providing security solutions utilizing PalmSecure™ palm vein authentication.

Security access system using PalmSecure(TM) palm vein authentication

PalmSecure(TM) technology applied to a computer mouse