



Preface

Special Issue on Cutting-Edge R&D: Building a Resilient and Human-Centric Intelligent Society

A handwritten signature in black ink that reads "Tatsuo Tomita". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tatsuo Tomita
President
Fujitsu Laboratories Ltd.

Just over a year has passed since the Great East Japan Earthquake that struck Japan. We wish to extend our heartfelt sympathy to all those who were affected, and in many cases who are still compelled to live inconvenient lives even now. The road to recovery remains long, and this makes us realize anew the depth of the scars left.

What we had previously believed to be safe and secure, and what we had built upon to deliver such safety and security, proved fragile in the face of Mother Nature. Our prior assumptions were in many cases very far off the mark, and the experience has forced us to reexamine our values. Each of us should bear firmly in mind that the same tragedy must not be repeated, and that man-made disasters following in the wake of a natural disaster must be avoided.

Information and communications technology (ICT) has made extraordinary advances, widening the scope of contributions it can make in ever broader areas. However, it cannot be said that ICT lived up to its potential in the wake of the disaster that Japan experienced last year. After the unprecedented massive earthquake and tsunami, instantaneous communications for networks usually characterized by their speed—such as mobile telephony and landline telephony—often could not connect and were difficult to access. Contrastingly, asynchronous networks tolerant of a delay, such as the Internet, enabled people to communicate via e-mail and online forums, including

social networking services (SNS) and bulletin board systems (BBS).

Yet, it can be said that ICT can play a much greater role, if its potential is maximized: we need to have social infrastructures in place that ensure that the safety of those we care about can be easily confirmed, even for individuals who escape with nothing but the clothes on their backs, and to safeguard things that are important to us, including important documents or medicines and personal items of strong sentimental value. If it is unfeasible to construct residences that will not collapse even in extreme natural disasters, or to build unbreakable seawalls and systems, then we have learned that rather than focusing on safeguarding such encasings, that we need to build systems that safeguard the contents that were meant to be protected by those encasings. Another valuable lesson we learned is the importance of addressing various risks, by developing and leveraging a wide range of complementary technologies that can respond to a multitude of risks, rather than focusing our energies on pinpoint technological breakthroughs.

As Fujitsu, we have a vision of realizing a Human-Centric Intelligent Society, and we feel we have a vital role to fulfill in society, with extremely substantial social obligations. We do not see our role as merely making life more convenient through ICT—rather, we have a duty to pave the way to create and realize new value for society by fully leveraging and maximizing ICT's potential. Wherever people are, by creating an iterative cycle in which we capture information that arises in the course of human activity, and by converting via ICT that information to value and knowledge that is channeled back to people, we can bring about a Human-Centric Intelligent Society that can respond to a variety of risks—we believe this is what we are called upon to accomplish.

At Fujitsu Laboratories, in order to actualize such a society, we aim to offer technologies that are truly beneficial to people, by conducting a wide variety of R&D ranging from solutions and services to systems, networks, ubiquitous products, as well as devices and materials. This special issue introduces some of our R&D initiatives to help realize a Human-Centric Intelligent Society.