



Preface

A handwritten signature in black ink, appearing to read 'Shigeru Sasaki' in a stylized, cursive script.

Shigeru Sasaki
CEO, FUJITSU LABORATORIES LTD.
CTO, FUJITSU LTD.

Fujitsu Laboratories celebrates its 50th anniversary in November 2018, which was established in 1968 as an organization independent from Fujitsu Ltd. for conducting the world's top-level technological development in a free atmosphere for researchers. Since then, Fujitsu Laboratories has been leading the world in research and development by producing a succession of innovative results and providing new value to people, society, and businesses. This great achievement was brought by "the DNA of Fujitsu," which is a forward-looking attitude to keep trying to cause transformation. The growth of the Fujitsu Group has been driven by its corporate philosophy that respects new ideas never before conceived by anyone and the courage to realize those ideas.

Today, the world economy and society are changing at an unprecedented speed, and in this situation, the role of ICT is changing drastically. I feel that this trend is also shown in our research and development activities. We cannot make major breakthroughs if we only pursue high performance based on the extension of conventional technologies. Going forward, I think the role of ICT from now on is to solve various pressing societal problems by generating trail-blazing technologies. As an ICT company, Fujitsu has to keep creating new values that meet the needs of the times and the society, and keep transforming its mode of business. As such, cutting-edge technologies are key for achieving this goal.

The mission of Fujitsu Laboratories is to promote the research and development of cutting-edge technologies for solving societal problems based on the prediction of future and world trends. By deploying these technologies into the society, we will contribute to the advancement of society, and explore new business opportunities and drive the growth of the Fujitsu Group. To this end, Fujitsu Laboratories is strategically promoting research and development of eight emerging technologies that we have set up for leading the world.

The corporate philosophy of Fujitsu Laboratories is to empower people and enrich their lives by providing them with maximum support through ICT. While ICT is becoming more widely used in society and the range of its role is expanding, we cannot deny the fact that people are not only enjoying its convenience but are anxious about its unimaginable effects.

Consequently, it is necessary for us not to completely rely on ICT but to control these ICT-based societal systems at their center to make human-specific flexible decision-making or responsible judgment. We refer to this as the “Human-in-the-Loop” approach to empower people and their lives, which is the fundamental policy behind Fujitsu’s goal of providing human-centric cutting-edge technologies.

Solving diversified societal problems in the world requires Digital Co-creation from a cross-enterprise and cross-industry perspective. To achieve this, it is necessary that researchers perform research and development at actual sites while refining their sensitivity to societal needs together with field personnel. With this goal in mind, we are proceeding with global open innovation with universities, research institutions, and companies. We are ready to take up the challenge of solving difficult societal problems by combining the world’s outstanding insights and ideas with our technologies and experiences.

This issue presents the latest research and development results in eight emerging technologies with which Fujitsu Laboratories aims to lead the world, and introduces current activities in Digital Co-creation.

On the basis of Fujitsu Laboratories’ philosophy of “high goals, deep thinking, and great leaps,” each and every one of us will work tirelessly to generate innovations and explore new possibilities for the happiness of people and societal development around the world.