FUJITSU'S COMPETITIVE EDGE

Technology Strategy with an Eye to the Future

Fujitsu conducts R&D on cutting-edge technologies necessary to achieve "Trust and Co-Creation" in a new digital era. Looking to the future, Fujitsu seeks to contribute to a sustainable society and economic development together with our customers.

Trust and Co-Creation in the Digital Era

Since Fujitsu presented its slogan of "Reliability and Creativity" in 1976, we have strived to achieve reliability in our products and services and foster creativity as a company, and as a result, have established a solid presence as an ICT company. The current role of ICT is to streamline customers' operations by developing information systems, and to operate and manage such systems. In addition to this, moving forward into the digital age, ICT will also spur innovation that can help customers expand their core businesses and create new ones. Moreover, ICT will also provide a greater contribution to realizing the Sustainable Development Goals (SDGs).

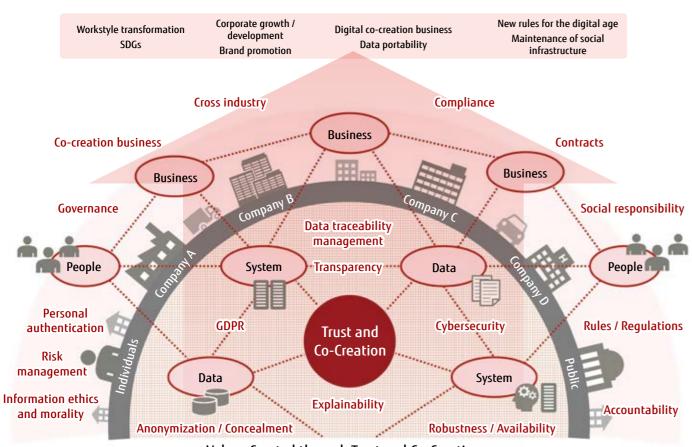
One major change brought on by the digital era is the infinite connections between companies, individuals, business activities, systems, and data created through the fusion of physical space and cyberspace. These connections are becoming ever-more complex and immense. Accordingly, a new kind of trust is needed to ensure the quality, accuracy, and transparency of all elements involved in these connections, as characteristics of these components are becoming more difficult to judge.

For example, in the physical space, it is essential to have trust.

For companies this means compliance, governance and accountability, and for society, this refers to rules, regulations and privacy protection. Moreover, in cyberspace, technology is necessary to earn trust with regard to robustness, availability, and cybersecurity as well as traceability, anonymization, and selective concealing of information.

To this end, Fujitsu actively conducts R&D that provides the trust that addresses the various elements and demands associated with these two spaces. Of course, establishing trust is not an easy task, and one moment of carelessness will result in the loss of trust. Maintaining this trust is precisely why our technology strategy plays such a significant role. On top of this, Fujitsu is building upon corporate creativity, and working to go beyond the conventional relationship an ICT vendor has with its customers. Being creative together with our customers, "co-creation," in other words, will strengthen and expand their core businesses and realize mutual growth.

Going forward, we will contribute to a sustainable society and economic development by spurring innovation through trust and co-creation in the new digital era.



Values Created through Trust and Co-Creation

Digital Annealer





Digital Co-Creation



Digital Annealer is a quantum-inspired architecture that solves intractable combinatorial optimization problems which cannot be easily solved with current computers. Finding the best solution among large numbers of combination elements in the form of data, insight, or knowledge, the architecture can handle a wide range of societal issues at high speed. Digital Annealer supports quick decision making and human judgment, helping people make unprecedented discoveries. It is expected to be a computing technology that can open up possibilities for new AI learning. At the moment, we are putting Digital Annealer to use to solve practical societal problems by optimizing processes in the fields of finance, drug discovery, logistics, and cutting-edge radiotherapy for cancer.

Reliability, safety, and accountability are key factors in providing artificial intelligence products and services. We have combined Deep Tensor, our unique deep learning technology for handling graph data consisting of multiple interconnected data, and our original Knowledge Graph, a database of integrated knowledge using original technologies, to develop explainable AI–a technology that clarifies the reasoning and basis of the judgments made by AI. We are currently aiming to leverage explainable AI to support specialists working in such fields as medicine, finance, and business management. We are also developing Wide Learning, a machine learning technology that can explore all types of possibilities from a broad perspective, using only a small amount of learned data in order to resolve daily issues and make ethical judgments.

Leveraging our cutting-edge technologies and other core competencies, we aim to create a variety of digital businesses through cocreation with our customers that go beyond conventional operations as an ICT vendor. To this end, we are creating new business models through the novel application of ICT and taking steps to enhance our customers' management in the supply chain, the product lifecycle, and business continuity. In the course of these activities, we are implementing innovative solutions that transform business practices and systems while developing a new kind of business that, on a global basis, transcends industrial boundaries and meets the needs of each country. We are currently working with our customers, undertaking co-creation in such fields as healthcare, drug discovery, social infrastructure, manufacturing, regional revitalization, and sports.