



Preface

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In recent years, the business world has been incorporating advanced digital technologies, such as cloud computing, mobile communications, IoT, analytics, and AI. These technologies are accelerating a digital innovation focused on creating new customer value. In particular, the appearance of new technologies such as deep learning is raising expectations of AI as part of a so-called third-generation AI boom, and value creation leveraging those technologies is becoming a reality.

In the consumer market, AI technologies are being used in smartphones, home appliances, and other products, and even AI speakers are being commercialized. In the world of business, hardly a day goes by without the appearance of new articles about new uses for AI such as improving the accuracy of replies to customers at call centers, analyzing creditworthiness in finance, performing image diagnosis and gene analysis in medical treatment, and facilitating drug discovery.

Fujitsu has been researching and developing AI with a view to practical applications for over 30 years. In November 2015, it announced the systematizing of its AI technologies under the brand “FUJITSU Human Centric AI Zinrai” to better respond to the rapidly increasing demand for AI. Zinrai aims for a “human-centric AI that can work together with people.” Fujitsu seeks to evolve its system integration activities that apply ICT to its customers’ on-site operations by creating new value through the application of AI to its customers’ data and systems.

Specific examples of using AI include quality and safety assurance in social infrastructures, reliability assurance in finance, efficiency improvement in distribution, and productivity improvement through work-style reform in the corporate workplace. To facilitate the implementation of such applications, Fujitsu announced “Zinrai Platform Service” in November 2016 to provide application programming interfaces (APIs) that utilize functions and knowledge to simplify the use of AI in a customer’s business. It is also providing “Zinrai Deep Learning” as a service that incorporates technologies pioneered in the area of high performance computing (HPC) including the supercomputer known as the “K computer” (developed by RIKEN and Fujitsu). In addition, Fujitsu has developed “Deep Learning Unit (DLU)” proprietary hardware

architecture as an AI-specific processor for deep learning. Fujitsu has also begun to provide "Digital Annealer," a novel architecture inspired by quantum computing for solving combinatorial optimization problems at high speed.

Through activities such as these, Fujitsu seeks to create new value at its customers' business sites through the use of AI technologies and to contribute to the creation of a prosperous and dream-inspiring society.