Technical Review Special Edition:
Digital Innovation

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Welcome to this special edition of our technical review featuring digital innovation.

For the realization of a sustainable, safe, secure and livable society, MHI Group is pursuing carbon neutrality from two perspectives: energy transition that leads to decarbonization, and smartification of social infrastructure for energy conservation, less labor-intensiveness and decarbonization. In order to enhance our corporate value through solving social issues and realize medium- to long-term growth, we identify key issues (materiality). Specifically, as contributions through our businesses, these include taking up energy challenges toward a decarbonized society, transforming society with AI and digitalization and building a safe and secure society. We are working toward the goals that we have set for ourselves.

Of these projects, 15 technologies/products featuring digital innovation are presented in this special edition. First comes smartification of social infrastructure. Introduced as technologies developed under the concept of "Get smarter and connect" of multi-function machine systems using the latest software are: making social infrastructure intelligent and realizing advanced maintenance and operation of critical infrastructure based on data analysis and AI technology. The next pertains to the technologies/products for transforming society with AI and digitalization. These include navigation technology enabled by man-machine cooperation, technology for efficient data generation of automated vehicle testing, virtualization technology for plant control systems, advanced technology for deep reinforcement learning, and use of digital transformation (DX) for better customer services and improved efficiency of on-site work and inspection.

We recently founded the "Digital Innovation Headquarters". Until now, our product competitiveness has been strengthened by combining with ICT solutions such as communication network technologies and information processing technologies, with a focus on developing new ICT solution businesses with more advanced features and providing such services. In order to further meet various customer needs promptly, we will expand our digital strategies, digital platforms and DX-promoting functions, and work on the development of technologies/products that can bring more intelligent systems for a safe and secure society. We appreciate your understanding and support.