

# Overview



Author: *Toshiya Kaihara\**

## A New Production Paradigm in a “Society 5.0” Era

The fifth Science and Technology Basic Plan suggests the concept of a “super-smart society (Society 5.0)” and positions a “new manufacturing system” as one of the preliminary 11 systems supporting the concept. In contrast, looking at overseas trends, there is a rapid movement toward new manufacturing systems using IoT such as Industry 4.0 in Germany and the Industrial Internet Consortium (IIC) in the United States.

As domestic and overseas trends indicate, it is essential for manufacturing in the future to analyze and use the enormous quantities of data obtained from the IoT environment and to have secure domestic and overseas linkages of plant systems. The role of FA technology, which is the focus of this issue, will become greater than ever. In addition, in order to provide highly value-added products and services, it will be important not only to seek high function, high quality and low price as before, but also to shift the paradigm to service-led values for manufacturing that are required by users.

In the Cross-ministerial Strategic Innovation Promotion Program (SIP), we are researching and developing a new manufacturing system whereby creators and users of products and services jointly create value by working closely together, as well as by integrating plant equipment and products under the IoT environment. The proposed concept of value co-creation spiral will play a key role in the new smart manufacturing system which supports the super-smart society of the future.