



Abstract

The Fourth Industrial Revolution and Its Implications for Gyeonggi-Do

The Fourth Industrial Revolution is a concept applied to a group of rapid transformations in the design, manufacture, operation and service of manufacturing systems and products. The concept takes account of the increased digitalisation of manufacturing industries where physical objects are integrated into the information network, allowing for decentralised production and real-time adaptation in a smart factory. Automation of the production process, the transmission of data about a product as it passes through the manufacturing chain, and the use of configurable robots will encourage innovation, since prototypes or new products can be produced quickly without complicated retooling or the setup of new production lines.

This study first explains the Fourth Industrial Revolution based on the current industrial evolution and its impact. Then it looks into the details of Artificial Intelligence and Internet of Things relative to Industry 4.0. The report compares also the current initiatives led by Korea, the USA, Germany and Japan on advanced manufacturing technologies. Finally the policy implications for Gyeonggi-Province are outlined and recommendations are made.

Key Word

The Fourth Industrial Revolution, Industry 4.0, Smart Factory, Artificial Intelligence, Internet of Things