

# **A Case Study on the Change of Industrial Ecosystem According to the National Policy for Growth Engines - Focused on government R&D Projects in South Korea**

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In light of the level of development of the Korean economy, it is necessary to create a new growth engine and industrialization strategy in order to shift from the past pursuit economy to the leading economy. The Korean government has been pursuing a growth engine policy at the government level in order to ensure the sustainable economic growth and industrial competitiveness of the nation in response to the changing internal and external environment. A similar case of overseas growth is the network of national manufacturing innovation research institutes (NNMI) in the United States, the core infrastructure technology project in the EU, and the high-tech strategy in Germany.

The growth engine at the actual policy or business promotion stage refers to technologies, products, and services that are expected to play an important role in future economic growth by creating new markets and industries as they are widely spread in the mid- to long-term and widely applied to various fields. 'Technology' as a growth engine is selected from among the so-called hi-technology, new emerging technology, or key enabling technology. As of 2019, there are 13 areas including AI, Big Data, intelligent robots, and Drones.

With the importance of companies' role as the main player of growth engines in creating new markets and industries, this study aims to look at changes in how much the Korean government's support for growth engine policies has affected the corporate ecosystem based on government R&D data.

To this end, I will identify the beneficiaries of the government R&D project, focusing on the areas supporting growth engines, and conduct network analysis to find out how much impact they had on the growth of the companies compared to before the policy support. In order to understand the growth potential of the company. Data such as the company's sales and operating profit will be used to identify the company's growth potential. In addition, this study will also identify the R&D cooperation method of the beneficiary companies.

This study can contribute to the policy implications of the direction and strategy of the Korean government's support for innovative growth policies.

## **References**

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