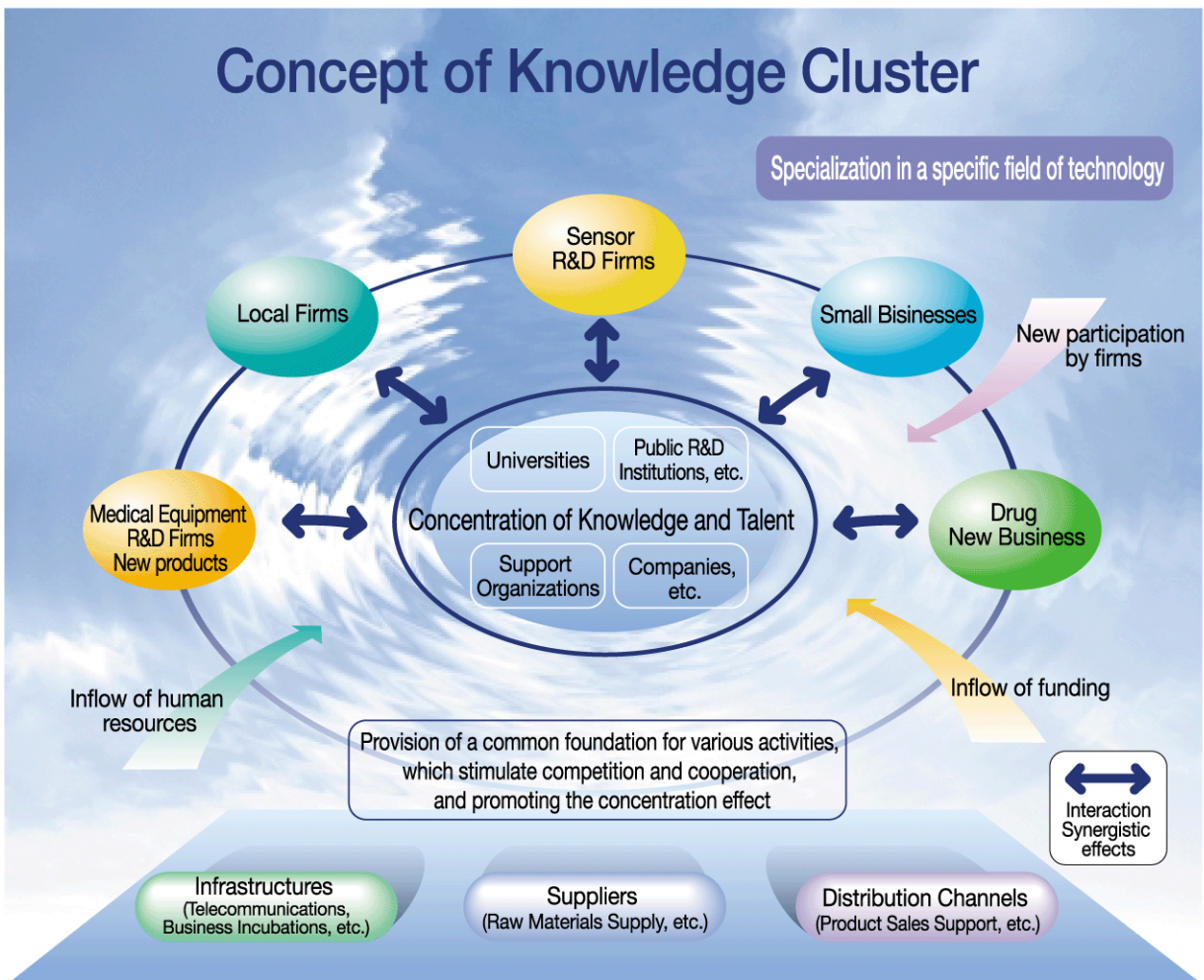# *W*hat is a Knowledge Cluster ?

KNOWLEDGE CLUSTER INITIATIVE

In the Second Science and Technology Basic Plan established by a Cabinet Decision in March 2001, the creation of Knowledge Clusters in regions was advocated.

A "Knowledge Cluster" is a local technological innovation system organized around universities and other public research institutions which have unique R&D themes and potentialities. Business companies inside and outside the regions are also expected to come into it.

More specifically, it is a system which successively drives technological innovation and creates new industries through mutual stimulation between technological seeds in research institutions and practical needs in the real business world. Human networks and joint research entities are also expected to be established in this process. Setting up these kinds of knowledge bases, we will advantageously continue to develop technological innovation in the worldwide competition.

The Ministry of Education, Culture, Sports, Science and Technology (MEXT), has launched the "Knowledge Cluster Initiative" since 2002, with the aim of creating Knowledge Clusters and vitalizing regional economies.

Concept of Knowledge Cluster

Specialization in a specific field of technology

Sensor R&D Firms

Local Firms

Small Bisinesses

New participation by firms

Medical Equipment R&D Firms New products

Universities

Public R&D Institutions, etc.

Concentration of Knowledge and Talent

Support Organizations

Companies, etc.

Drug New Business

Inflow of human resources

Inflow of funding

Provision of a common foundation for various activities, which stimulate competition and cooperation, and promoting the concentration effect

Interaction Synergistic effects

Infrastructures (Telecommunications, Business Incubations, etc.)

Suppliers (Raw Materials Supply, etc.)

Distribution Channels (Product Sales Support, etc.)

※example of a bio cluster