Częstochowa University of Technology
Faculty of Management
Institute of Production Engineering

Prof. n. techn. i n. ekonom. dr hab. inż. Stanisław Borkowski
Ing. Renata Stasiak-Betlejewska, PhD.

FORMS OF KNOWLEDGE SHARING IN THE WOODWORKING INDUSTRY ON THE POLISH EXAMPLE

One of the major challenges for contemporary civilization is to create **a knowledge-based economy**, which governs the scientific – **technical progress**. It is possible thanks to the continuous development of modern technologies and industrial areas, which are often initiated in the research centres.

The research findings that are the result of time-consuming process of research
(basic research, applied research and experimental development)
are the basis for the development of **innovations or inventions.**

Social bond: the sociological notion determining *the whole of social relations, lasting for the institution and binding individuals into groups and social circles and assuring them centres of the public inspection.*

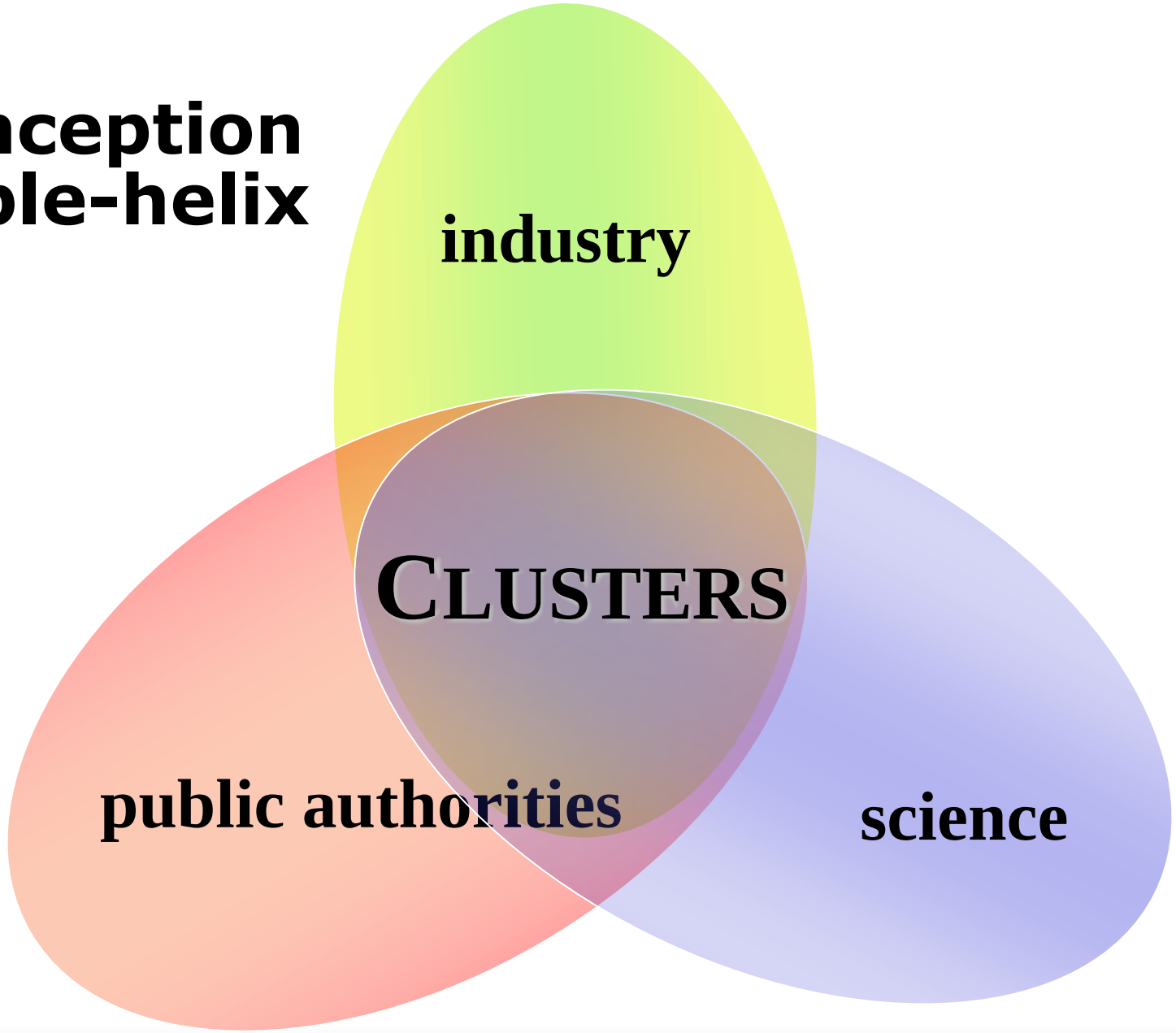
The cluster should be understood as the *spatial concentration of enterprises, institutions and organizations, an extensive network of interlocking relationships of formal and informal nature based on a common trajectory development* (e.g. technology, common target markets, etc.) simultaneously competing and cooperating in certain aspects of the action.[1]

According to the UNIDO, regional clusters and *territorial concentration of companies producing and selling similar or complementary products, and thus forced to overcome similar problems and challenges*. As a result, it can cause the formation of specialized suppliers machinery and raw materials and cause the development of specialist competencies and skills, as well as faster development of specialized and personalized services.[1]

[1] PORTER M.E.: *Porter o konkurencji*. Polskie Wydawnictwo ekonomiczne, Warszawa, 2001, p. 15.

[1] UNIDO: *SME Cluster and Network Development in Developing Countries: The experience of UNIDO*, Private Sector Development Branch, Working Paper no 2, 1999.

Conception Triple-helix



In accordance to OECD there are following **types of clusters** that can be identified:

•**Clusters based on the knowledge** (specific to the companies belonging to sectors with high *R&D intensity and the intensity of patenting*). Usually they arise around a strong public sector research institutions.

•**Clusters based on economies of scale** (typical for companies having own research on a very small scale, *focusing on production systems on a large scale*. It is characteristic for food processing and other materials processing mass.

•**Clusters depend on the supplier** (companies importing technology, mainly in the form of capital goods and intermediates, their innovative activity depends on a large extent on their *ability to interact with suppliers* and after-sales services. Found in agriculture, forestry and traditional processing industry).

•**Clusters of specialized suppliers** (*based on firms with high R&D intensity*, with emphasis on *product innovation and relationship with the user*. Typical of the companies producing complex production systems, such as equipment and computer software).

•**Intensive clusters in information** (*specific to companies managing complex information processing systems to provide services and goods to meet customer needs*. Typical for financial services, wholesale trade, publishers, travel companies, etc.).

NEW CHALLENGES for clusters:

- **Globalization and economical integration**
  => possible flow of resources and increased specialization in the value chain across national borders

- **European Alians of Clusters PRO INNO (*PRO INNO European Cluster Alliance*)**

  - BSR InnoNET (*Baltic Sea Region Innovation Network)*,
  - INNET => program Innovation Express,
  - CEE-ClusterNetwork.

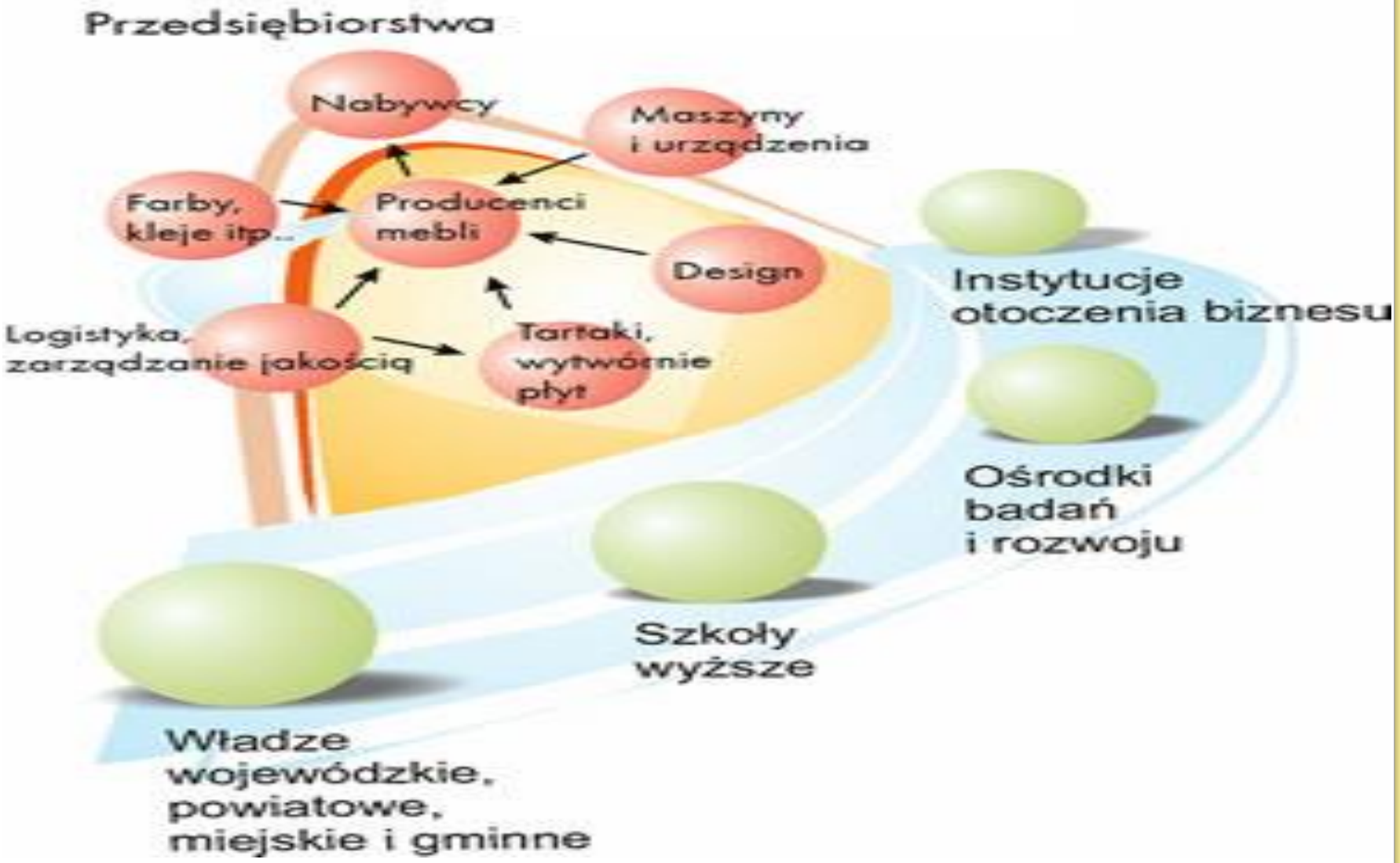


Fig. 2. Scheme of Wielkopolski Furniture Cluster.

Innovative plans of enterprises	indications percentage
New products	39.5%
New product brands	21.3%
Upgraded products produced previously	18.9%
New distribution channels	15.0%
New products being imitations of competitors products	14.3%
Entry into new market segments	14.0%
New production processes (technologies)	12.0%
Upgraded production processes	12.0%
Access to new resources, components and elements	12.0%
New post-sale services (guarantee, service etc)	10.6%
Entry to new geographical markets	6.6%
New packages	6.3%
New technologies being copy of the competitors production processes	5.6%
Patented inventions	5.3%
The organizational structure change	4.7%
Outsourcing	3.3%
Implementing of the resources planning system	2.0%
Implementing of the quality management system	1.7%
Reaching domestic strategic investor	1.7%
Implementing advanced information system supporting management system	1.3%
Implementing the system of result measurement	1.3%


Thank you for your attention...
renatastasiak@wp.pl