



#### Available online at www.sciencedirect.com

# **ScienceDirect**

**Procedia Engineering** 

Procedia Engineering 182 (2017) 755 - 762

www.elsevier.com/locate/procedia

7th International Conference on Engineering, Project, and Production Management

# Pro-innovative Prerequisites for Establishing the Cooperation between Companies (in the Perspective of Creation and Development of Clusters)

### Anna Wasiluk\*

Faculty of Management, Bialystok University of Technology, Wiejska 45A, 15-351 Bialystok, Poland

#### Abstract

The aim of the analysis carried out in this text was to identify the level of cooperation in the surveyed companies with the competition in the area of innovative activities as well as their readiness to strengthen it in the near future. Quantitative studies covered 381 companies. To interpret the results of the research, the following statistical measures were used: measures of dispersion - the coefficient of variation and measures of central tendency - dominant, mean, and median. There were no statistically significant differences in the assessments of respondents operating in three different industry sectors. It should be firmly stressed that the mere creation of a cluster does not release its innovative potential.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Peer-review under responsibility of the organizing committee of EPPM2016

Keywords: companies; cooperation; business cluster; networks of companies

#### 1. Introduction

In the modern world, innovation is no longer a choice, it has become a necessity. This is emphasized by the European Commission, which in the EU Strategy 2020 [1] gives priority to the issues related to broadly defined innovation, seeing it as a foundation for intelligent growth.

Companies' ability to introduce innovations depends increasingly on their ability to cooperate with other entities, including competing enterprises [2]. It is indeed understood that the modern economy is a network and the links of

E-mail address: a.wasiluk@pb.edu.pl

<sup>\*</sup> Corresponding author. Tel.: +4-885-746-9816; fax: +4-885-746-9820.

this type penetrate all spheres of economic life. Development of structures and network links is clearly visible in the socio-economic systems. A strong and widely developed network of internal and external entities is, beside the technical and social infrastructure and efficient strategic management, one of the factors determining their international competitiveness. Clusters, often defined just by the criterion of networking [3–6] or even referred to as innovation networks [7], is certainly a response to contemporary challenges. One of the necessary conditions for creation and development of these structures is the willingness to cooperate by companies operating in the same industry, competing with each other on every day basis.

In the subject literature, there are many writings devoted to conditions for the creation of clusters, while there is no analysis regarding identification of the degree of willingness to cooperate by competing companies, especially in regional and industrial terms. This text will contribute to filling the gap.

#### 2. Review of the literature

In the subject literature authors often indicate a pro-innovative character of clusters among the benefits of these structures [8–16] at different levels [17–21]:

- Macro (innovative stimulation at the level of the entire economy including: increasing the level of economy innovativeness, attracting direct foreign investment)
- Mezo (innovativeness increase at the regional level, among others, creation of the local culture of innovation and entrepreneurship and economic stimulation of the region, facilitating the transfer of knowledge and specialized know-how to the region's economy, attracting related innovative industries and other supporting institutions)
- Micro (greater ability of companies to innovate by improving the flow of information, knowledge and skills through both formal and informal contacts between the participants of cluster structures and exchange of experience between research institutions and entrepreneurs).

Therefore, there is no doubt that clusters are seen as carriers of innovation and competitive position improvement, not only in regard to companies, but also for entire regions. It is assumed, however, that social capital is a necessary condition for releasing innovation potential in a cluster. Sharing information, knowledge and ideas requires trust [22, 23] and without this element the cluster becomes dysfunctional, neither meeting expectations nor comply its tasks. Unfortunately, one of the biggest weaknesses of Polish economy is the low level of social capital and without trust an efficient and effective system of innovation cannot be built. This is because innovation is largely based on knowledge, but especially on so called tacit knowledge. Its role is much greater for innovative processes than for codified knowledge, which is easy to copy and retrace. However, it has its own specifics. Frequent interpersonal contacts are necessary for its creation, exchange, flow, absorption and accumulation. Physical and social proximity existing in the cluster creates favorable conditions for its creation and development [24].

Cooperation between the entities plays an important role in the creation and development of cluster structures. And it is about active cooperation between all actors in the cluster, including cooperation of businesses competing with each other every day. Without the entities willingness to cooperate, efforts to develop these structures are doomed to failure from the very beginning.

#### 3. Methodology of the research

The aim of the analysis carried out in this text was to identify the level of the surveyed companies' cooperation with competition in the area of innovative activities as well as their readiness to strengthen it in the near future. Analyses covered food, metal and machine industries, as well as wood and furniture industries. These industries, apart from construction industry, are among the priority areas of development in the region of Podlaskie Province. Picture of the current state and future perspectives should help largely in determining the prospects for creation and development of a variety of networking, including clusters. In fact at the root of clusters initiation and development are relationships between the various entities involved in their composition, including competing companies. The effectiveness of actions undertaken within the cluster depends on the intensity degree of these relationships. This text develops considerations presented in the text *Prerequisites for undertaking and developing cooperation by industrial* 

## Download English Version:

# https://daneshyari.com/en/article/5027673

Download Persian Version:

 $\underline{https://daneshyari.com/article/5027673}$ 

Daneshyari.com