

IDENTIFICATION OF POTENTIAL INDUSTRIAL CLUSTER IN THE REGION

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Abstract: *This paper deals with potentials identification model building up analysis for a cluster development and clustering model development by using the well-known theoretical and practical developed countries experience where clusters have become a basic stronghold for contemporary industrial and overall economic development. Moreover, it offers a simplified model for key competent authorities identification in the regional economy based on selected criteria. Based on defined competent authorities we can identify potential cluster development. The identification model described in this paper deals with the principles and other supporting measures needed for cluster development.*

Key words: cluster, regional development, core business

1. INTRODUCTION

In a globalize world, regional economy and companies have to be adjusted to new requirements, which can lead to an increased investment risk. At the same time there is an increased opportunity that a country or a region participates in a joint product. It is obvious that the competitiveness of a regional company can be stimulated by different measures and, consequently, the living standard of the population in the region will be enhanced.

Here are some of the global tendencies (Porter, 1990):

- Companies will focus on their core business.
- In a global market, there will be the companies focused on design and research of a specific product, the manufacturing companies will be concerned with its production and the commercial companies will be concerned with selling of the product.
- In order to guarantee the quality, the safety and the traceability, companies will establish strict manufacturing rules for their subcontractors.
- The sharing of the works among several companies will require networking models at a global level.
- Specialization and networking skills will be the key to SME success.
- Networking requires a permanent connection between the automatic centralized managing systems of the enterprises.

It is certain that innovations have an impact on the increase of productivity within a company. By increasing its competitiveness, a company can increase its economic effect, and, regarded from a global point of view, the employment opportunities and the standard of living will be also increased. Only innovations can ensure new jobs and, as such, they are basic prerequisite for regional and overall national economic development.

2. IDENTIFICATION OF POTENTIAL INDUSTRIAL CLUSTER IN THE SPLIT-DALMATIAN COUNTY

Split-Dalmatian County economy is still burdened by previous economic system inherited anomalies and some transitional problems. Here are some of the most evident ones:

low productivity additionally burdened by a great number of employees and obsolete technology; a predominant lack of products and services demanded by developed markets; Government subsidizes lame ducks; enormous foreign debt; inflationary economic policy; Government meddling with economy; neglected agriculture; uneven development of the urban and rural areas; gray economy etc. However, public property/companies privatization, which is a sine qua non prerequisite for sound market basis establishment and prospective growth, has not been successfully implemented. Most public companies completely disappeared in the privatization process, and those that managed to survive, have undergone numerous recovery programs or have gone into liquidation. In these conditions, small and medium-sized enterprises development could not have been supported by big industrial systems; therefore economic development has been mostly turned to the service sector. Generally speaking, during the transition process there was no development whatsoever, particularly there were no new technologies or new products introduced. Cooperation between economy and science was rather weak, and the accompanying infrastructure required to support technological development and innovations was developing rather sluggishly. Taking all this into consideration, a basic prerequisite for making a turnaround to a successful economic development in the region is to restructure its economy.

In the lack of a unique and commonly agreed economic strategy at the national level, the Split-Dalmatian County has decided to define its own goals and priorities and to develop its own potentials. As a result of this decision there is a recently brought Regional operational program (Petric et al., 2005) that defines the County development guidelines in the next five-year period.

One of the primary strategic goals, defined in ROP, is to develop a competitive, diversified, technologically advanced and environmentally sustainable economy that will be oriented to enhance the living standard of the local population. Consequently, such clearly defined goals require a radical change of the existing settings, in which an inadequately competitive economy still prevails. Moreover, it is additionally burdened with obsolete technologies, insufficiently educated and unskilled personnel, particularly in the marketing and management field. On the other hand, in the places where there are some potentials, economy is not adequately integrated, the products have a rather low VAT, while the export products, excluding rather inefficient shipbuilding industry, are mainly concerned with service industries (tourism and transportation). In order to set things in motion, the following priorities have been defined:

- To strengthen cooperation between research institutions and entrepreneurship that will enable new technologies implementation and technologically innovative products production.
- To restructure organization in traditional manufacturing sectors, agriculture, fishing industry and tourism, in order to achieve bigger competitiveness.

- To support export-oriented, specialized production of products and services with higher VAT.
- To encourage regional and inter-regional integration processes (including transnational ones) and to support cluster organizations in order to strengthen overall synergetic impact in the sectors and between them.
- To ensure business, entrepreneurial and managing training,
- To increase employment opportunities.

Pointing out the need for regional and inter-regional networking, integration and County economy clusterization, is the first step that has to be taken in order to start more intensive research that will help in identification, organization and development of the above-mentioned networks. Bearing this in mind, this paper presents model for identification of basic technologies and industrial clusters development potentials in the County.

The following parameters have been adopted in order to identify basic technologies and industrial clusters development potentials of in the Split-Dalmatian County, taking into account some objective impediments in availability of relevant statistical data:

- Revenue structure, the each industry share in the total revenue of County economy, shown in terms of percentage,
- Employment structure, each industry employed number as oppose to the County's total economy employment number, shown in terms of percentage,
- Cluster index CI (Viergge, 2004). This index shows how high the concentration of some activity is, at the County level as oppose to an average value at the national level.

The basic activities are defined by analyzing industrial activity position in quadrant quarter shown in Figure 1. A measure adopted for the size of an activity in the County, is "share of the revenue structure of an activity compared with total revenue in economy" on the abscissa, and a measure adopted for activity expansion degree is "number of entrepreneurs".

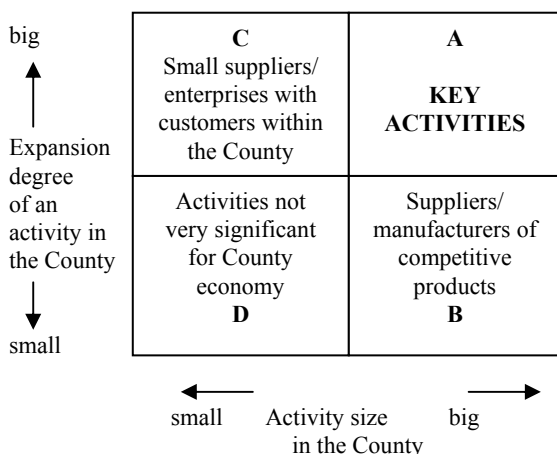


Figure 1. Defining key activities (Roethig, 2002)

Based on activity position in Figure 1, two basic industrial activities have been defined (quarter A), which are considered to be the most significant for Split-Dalmatian County development at the moment. They are:

1. Other vehicles production
2. Food and drinks production

The quarter B includes high revenue structure percentage activities/enterprises in the County economy, but there are very few of them. They deal with motor vehicles, caravans, trailers & semi trailers production, and other nonmetallic mineral products production. These enterprises goal should be increased number of customers at the home and foreign markets.

On the other side, the quarter C includes the activities/enterprises with rather low revenue structure percentage in the County economy, but they are rather spread. These enterprises could easily increase their revenue percentage by networking in clusters. This way they will be able to grow and develop. They include:

- Publishing and printing activity,
- Metal products production, machines & equipment not included,
- Furniture production,
- Rubber and plastic products production.

All other activities (17 out of total 25 industrial activities) are in the quarter D at the moment, and they have a very small significance for Split-Dalmatian County economy.

3. CONCLUSION

In this paper we have tried to emphasize the need for actual development potential identification in the regions where economy has been affected by transition and restructuring processes. We have used theoretical and practical developed countries experience, in which networking and clustering model is based on innovative potential and on knowledge-based economy, which is a basic stronghold for both contemporary industrial development and overall economic development.

Regional development strategic goal is to provide conditions for innovations based on regional identity. However, in order to achieve this goal it is necessary to do the following:

- To ensure transparency with regard to the existing technological competence,
- To link regional resources and competent institutions (universities, institutes, enterprises, chambers of commerce etc.),
- To identify the existing clusters development potentials in attractive regional business lines development context,
- To establish new regional exchange cultures of knowledge and experience.

Therefore, it is necessary to make a transition from the regional strategy based on predominantly industrial production to the knowledge based economic development strategy. Economy, scientific institutions and regional management linkage can be achieved using a triple helix model (Etzkowitz, 2002), which provides required prerequisites for the society towards knowledge transition. In order to redefine the interrelationship between institutional knowledge, economy and regional management, it is of utmost importance to enhance the local conditions for innovative processes development by linking together research activities with others. Our aim is to continue our preliminary research and to develop such linkage models.

4. REFERENCES

- Roethig, H. (2004). Standortentwicklung und Wirtschaftsfoerderung, *Tagungsband zur Fachtagung «Strukturwandel in Wirtschaftsstandorten»*, ISBN 3-937487-01-8, Chemnitz
- Etzkowitz, H. (2002). The Triple Helix of University-Industry-Government: Implications for Policy and Evolution, *Working paper 2002-11*, <http://www.sister.nu/>
- D. Viergge (2004). *Clusteranalyse und Umsetzungsstrategien*, Stadt Neumuenster, 2004
- Petrić, L.(2005). Regionalni operativni program Splitsko-dalmatinske županije (Regional Operational Program of The Split-Dalmatian County), *The Split-Dalmatian County and Economic Faculty of Split*, ISBN 953-6121-79-9, Split
- Porter, M. (1990). *The Competitive Advantage of Nations*, Free Press. ISBN 0-684-84147-9, New York