

New Ways of Innovation in Tourism Economy: Implementing Clusters

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Abstract: - The common element of the theories presented is the geographic proximity of the entities within the cluster, as well as a main feature of a cluster, which must be understood from a point of view of transport and communication possibilities, as well as the cultural identities, traditions and client preferences. At the moment, due to the concept of clusters and cluster policies and their role for competitiveness and innovation: main statistical results and lessons learned - Commission staff working document SEC (2008) 2637 (http://ec.europa.eu/enterprise/policies/innovation/files/clusters-working-document-sec-2008-2635_en.pdf). A special focus is set on the technological proximity (as how close are the technologies used by the companies within the cluster), complementarily regarding the labour force, the complementarily regarding the clients and the social proximity (the level and the types interaction among the managers and employees of companies within the cluster).

Key-Words: - tourism, global competition, cluster, innovative

1 Introduction

In the global competition for markets, the chances of economic success of a country or of a region is based on the specialisation of the offer and the focusing of the development efforts to the key-fields, where the competitive advantages, the resources and the competences are. In this context, the innovative clusters in tourism represent a successful solution because it offers a combination of entrepreneurial dynamism, intense connections between companies and institutions, which have top-level knowledge, respectively pro-active synergies between the main actors of innovation. At the level of the European Union, the innovative clusters are considered "the engine" of economic development and innovation, these representing a good frame for development of businesses, of collaborations between companies, universities, research institutions, suppliers, clients and competitors located in the same geographical area (local, regional, national, trans-national).

The national policy in the field of clusters is a

part of the Industrial Policy of Romania (2010-2013), aligned to the Europe Strategy 2020.

The last of the industrial policy objectives of Romania is the stimulation of creating and developing innovative clusters with an internationalisation potential for producing large added value goods, competitive on the national and international market.

Together with the focusing of the globalisation phenomenon and the increase of competitiveness on the national, European and international markets, the belonging to the innovative cluster becomes a real advantages for the small and medium sized companies, as a consequence of the easy and rapid access to the results of the research in order to see their implementation in the production and the achievement of innovative products, using performing technologies, as well as common development strategies, starting from the ones of cooperation in production and acquisition of technologies and performing equipments meant for the common use, up to the marketing ones.

The concept of "cluster" has a long history,

being called in many ways, including "competitiveness pole", "industrial district", "industrial agglomeration". Now the terms that have imposed are "cluster" and "competitiveness pole" (in France and Belgium), the most used term being "cluster".

The simplest description of the clusters has as basis the description of the relations supplier-client and the value chain: The majority of the companies buy "inputs" (raw materials, services, components) from other suppliers and include them in their products that then are sold to clients. The function of the companies within the "industrial agglomeration" brings them a competitive advantage, because they dispose of a dense network of suppliers and clients.

2 Problem Formulation

Regarding the concept of "value chain", it derives from the concept of Alfred Marshall (1842-1924), who shows that a geographical concentration of a certain industrial sector determines the specialisation of the suppliers. For instance, in northern Italy, there are clusters formed of small companies, which are specialised according to the various stages of the productive process, among these there being coordination relations. Marshall based his theory known under the name of "Marshall's third" on the observations made on the situation of the "industrial districts" from England, according to which there are 3 reasons for which the companies localised in the same geographical area are more efficient than if they would act at a larger distance:

- "work force basin";
- the specialisation of the suppliers;
- the transfer of knowledge.

Marshall noticed that an "industrial agglomeration" of similar companies attracts, develops and benefits of a "work force basin" with a common set of qualifications. In addition, the economic safety of the employees is far larger because in the same geographical area there are more possible employees who need their competences. Marshall noticed that the "industrial agglomerations" create a good market for suppliers and conditions for them to improve and specialise the offer. Therefore, this leads to a productive advantage for their clients. In addition, Marshall noticed that in "an industrial agglomeration", the ideas "travel" easier from one company to another, like a "journey through the air". It is in fact what economists call nowadays, "outsourcing". Subsequently, Jane Jacobs in her study called "The

New Economic Geography" (1969), captures the role of cities in the development of clusters, and the German economists Lösch and Von Thünen applied the economic ideas and techniques, including the neo-classical ones, on the localisation of the economic activity, and in 1956 Walter Isard (1956) and other researchers started the regional sciences. The regional scientists improved Marshall's idea underlining the advantage of companies deriving from the geographical closeness, distinguishing between the two types of outsourcing: the localisation outsourcing (winnings from the proximity to similar companies, especially from the industry) and urbanisation (earnings from the proximity to the other industries companies).

In 1990, Professor Michael Porter, the one who promoted the term "cluster", but not its inventor, defines the cluster as a "a geographical concentration of companies and interconnected institutions from a certain field".

The definition of "cluster" is found in the Romanian legislation (GD 918/2006 - "Impact" program): a group of manufacturers, users and/or beneficiaries, in the purpose of applying the good practices from the EU in order to increase competitiveness of the economic operators.

The classical theory of the economic development based on the availability and the abundance of the production factors (labour, nature and capital) explained very well the economic phenomena from the 19th century but later, together with the extraordinary success of some countries like Japan or some regions like Silicon Valley, without any resources whatsoever, proved outdated. The solution was found by Michael Porter who, in his paper "the Comparative Advantage of the Nations" (1990), showed that the economic success depends on the interaction of the following factors, grouped in what is then called "Porter's diamond".

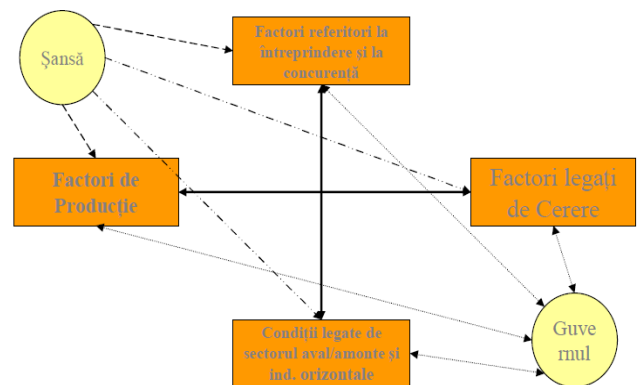


Fig. 1. Porter's Diamond

In addition, The Centre for Innovation and Technique of Northern Renania Westphalia land - ZENIT (Germany) has recently developed the model "New diamond of innovation" (picture 2). The considerations that form the basis of the development of the mode "New diamond of innovation" are the following:

- ✓ Innovation is fundamental on profound scientific knowledge, supported by a modern infrastructure;
- ✓ The technological transfer processes and innovation cannot take place in a polarised economic and social environment. A condition for the implementation of the innovative processes is represented by the economic and social cohesion;
- ✓ Innovation is built on the individual and institutional learning;
- ✓ The individual and institutional learning may take place if it is set as a common set of norms, rules and visions;
- ✓ We may talk about innovation only when knowledge is applied in a new product/service/process or in a new management instrument.
- ✓ the access to information, based on which the companies decide to act in a certain direction, with the respective resources;
- ✓ the strategies of each company and the pressure on companies to innovate and invest.

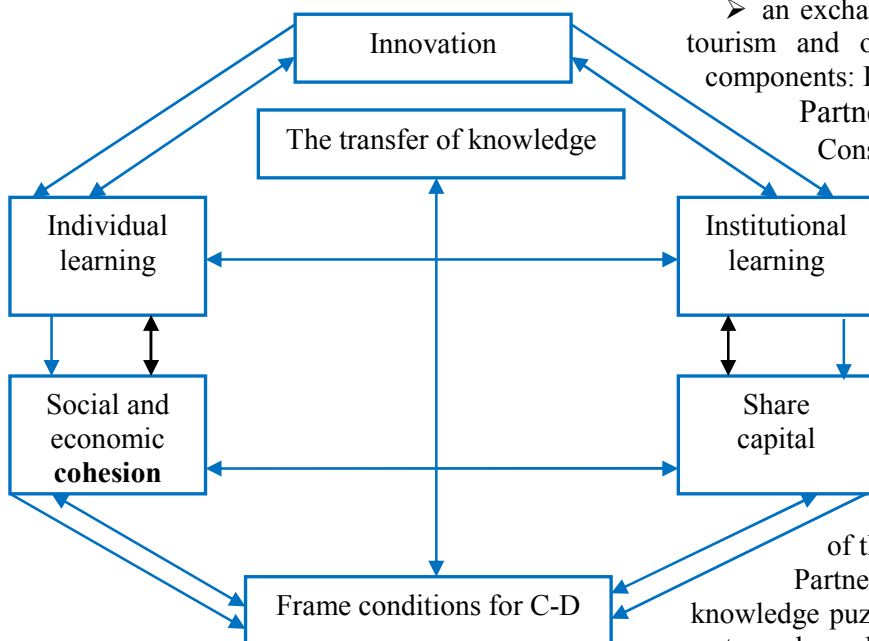


Fig. 2. The "New Diamond of Innovation"

On 26 January 2010, took place at Baile Herculane, the seminar The Promotion Of The First Cluster In The Tourism Field At A Regional Level - For a European innovative and sustainable tourism. http://www.comunicatemedi.ro/PROMOVAREA_PRIMULUI_CLUSTER_IN_DOMENIUL_TURIS_TIC_L_ic32668.html.

The seminar was organised within the project financed through the frame program 7 Knowledge Regions TOUREG - RESEARCH DRIVEN CLUSTER FOR TOURIST SECTOR COMPETITIVENESS AND KNOWLEDGE www.tourisminnovation.eu

Starting from the research-development opportunities and the specific needs of this economic sector, Toureg has as purpose the facilitation of the technology transfer on 3 main corridors, respectively: IT&C, energy, environment.

The contribution of TOUREG to the development of European tourism, especially of Romanian tourism, consists of the achievement of an infrastructure to ease the good practices exchange and to support the technological transfer, the functional infrastructure within a collaborative platform.

This seminar has drawn the following directions:

- the access to the mentoring services, models, solutions and innovative technologies of the other member states of EU
- the development agenda of tourism at the European level and an integral part of the Informational Society
- an exchange of good practices in the field of tourism and of the interconnection of those 3 components: IT&C, energy, environment.

Partners within the project: GIT

Consultors (GIT) - Spain, Madeira Tecnopolo - Portugal, AREAM - Portugal, Expedita - Portugal, Technical University of Crete (TUC) - Greece, Science and Tech. Park of Crete (FORTH) - Greece, Project Management Consulting, PEMENCO - Sweden, CDT- Lulea University (CDT) - Sweden, ARC Fund - Bulgaria, Regional Government of the Balearic Islands - Spain.

Partners of European importance achieve a knowledge puzzle and abilities: Spanish and Greek partners have brought an important experience in the field of promoting green technology, the protection of the environment in the development of tourist services, but also of the innovating solutions

for the seasonal tourism and the cross-sector economic initiatives for the extra-seasonal period. The Swedish partners brought the IT&C experience in tourism and the importance of the tourist offer in the virtual environment as well as the marketing techniques regarding the message transmission according the target group. Expedita Portugal is an excellence in tourism and innovation unfolding the activity on a tourist island Madeira, they have represented the pillar in achieving the clustering and technological transfer on the 2 essential deliverables of the project.

➤ All the participating regions contribute actively to the formation of processes and of the initiatives at the level of public policies of promoting the tourism industry through the means of the partnerships and the specific activities of a cluster. In this way, a series of methodologies have been developed and are available on the official page of project.

http://www.tourisminnovation.eu/index.php/downloads/cat_view/50-deliverables

Mehedinti county, the partner region have represented a case study achieving a report regarding the innovation and tourism in the region of South-Western Oltenia, the report may be found on the official page of the project (achieved by Prof. Ph.D Mirela Mazilu - Universitatea Craiova and M.E.S. Andreea Gatman, European project coordinator). The conclusions of this report as well as the methodologies developed together with the reference partners in Europe in the field of research and innovation in the tourism industry have emphasised the need that must be addressed at the level of the region in the purpose of the promotion of the competitive sustainable tourism: "Thus the main challenge is represented by the Information, its lack as well as the main dissemination channels, of easing the meeting between the demand and the offer, in order to reunite all the factors involved directly as well as indirectly - investors, public authorities, NGOs, the Association of Promoting Tourism in Mehedinti (coorganiser of the seminar in Baile Herculane), active companies in the field. It is obvious that the basic infrastructure is the number one priority, but its detailed planning should be the result of an active dialogue between the ones mentioned above in the context of latest existing knowledge technology and alternatives".

www.sejmh.ro/sites/.../REGIONAL%20REPORT%20MEHEDINTI.pdf

<http://www.sejmh.ro/sites/ConsiliuJudetean/2009/DiVerse/REGIONAL%20REPORT%20MEHEDINTI.pdf>

The association for the Promotion of Mehedinti tourism, together with initiators and founding members have started the protocol for collaborating for the foundation of the first cluster for a sustainable tourism and innovation at a regional level in Romania, TURINN, subsequently supporting the development and the competitiveness of Romanian tourism through actions that support three directing lines set within the seminar.

Objective: The creation of a competitiveness and knowledge pole in the Oltenia region for the tourist sector. The improvement of competitiveness and strategic position of the present services in the tourist sector, through the means of a generating platform transmitting the information and knowledge based on researches and innovation present at an international level with a direct impact on the development of the SMS companies in the field; of the public policies and of the development strategies; the activation of an informational network of the main actors in tourism, **THE CLUSTER FOR A SUSTAINABLE AND INNOVATING TOURISM (TURINN)** has as purpose: The increase of the promotion capacity of innovation, competitiveness, research, technologic transfer as a sustainable regional development policy through the interconnection of knowledge, technologies and persons.

Initiators: The Association of Tourism Promotion of Mehedinti; IPA CIFATT CRAIOVA, Technological and Business Incubator, Ro 4 Europe ,ARoTT, Romanian Association of Technological Transfer, The Ministry of Sustainable Development and Tourism, The Danube Star Tourist Hostel, Melba Tourist Hostel, Smile Travel Tourism Agency

Founding partners: University of Craiova, Drobeta Turnu Severin University Centre, ARIES Oltenia, The Romanian Association for Electronics and Software Industry, Drobeta Turnu Severin City Hall, The Local Council of Drobeta Turnu Severin, The Danube Gorges Association, The Local Employer Association of SMS companies - PLIMM Calafat.



Fig. 3. Logo

3. Problem Solution

Acknowledging the essential role of the cluster, innovation and technological transfer as an engine of development of the sustainable and competitive tourism at a European level and in order to:

- promote the tourist potential
- identify the economic units, the needs, the priorities and the economic perspectives, including the ones of research, development and innovation at a regional level,

- unite the efforts for the active support of SMS company sector in the tourist field from the South-West Oltenia,

- ensuring a functional partnership between the regional factors through the supply of adequate informational, promotion and formation services, the improvement of the access to services for SMS companies, including through the attraction of finances for the projects with an innovating feature and to support the correlated and uniform development of tourism in Oltenia

- create themed poles of competitiveness, innovative clusters in the main fields of expertise, the regional fields,

- institutional cooperation for the improvement of the absorption capacity of the Community Funds, improvement and efficiency of the planning and programming process of using the community funds in the south-western Oltenia;

- know-how transfer and good practice exchanges;

- support of mentoring activities especially in the areas which have problems in the field of information, but with a real tourist potential;

- adapt the research, innovation and technology requirements to the real needs of the business environment in the field of tourism

- start up the functional mechanisms through which the tourism actors, the SMS companies have more and more rapid access to the result of researches and latest technology;

- coordinate the research, the development and the innovation agenda with the public policy agenda and the political agenda.

In Romania, the Cluster Model *Triple Helix* was initially approached consisting of the following players (picture 4):

- The industry, especially the SMS companies (including the start-ups and spin-offs) which represent the innovation demand

- The research and innovation (universities, research - development - innovation institutes, training centres that represent the offer of innovative products and services;

- Authorities with competences in the facilitation of the innovative processes.

In other words:

- The business environment;
- Research and development;
- Authorities.

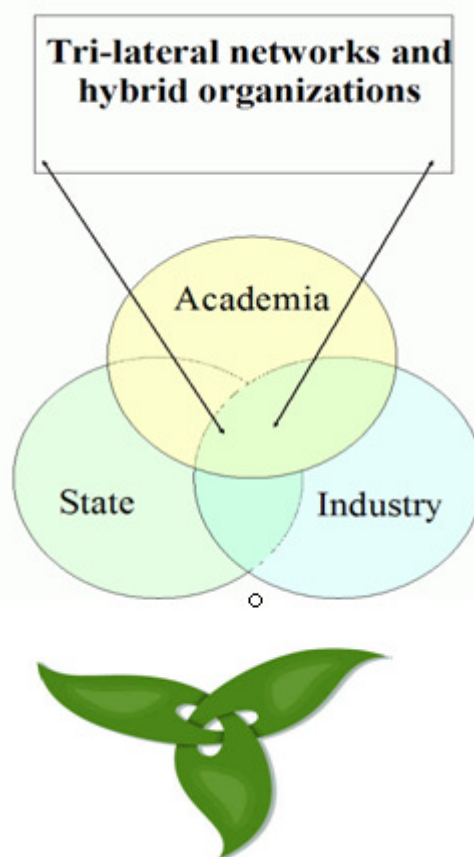


Fig. 4. The Triple Helix (Etykowitz H., Stockholm, 2002)

This mode of thinking - referred as 'triple helix' - is beneficial especially for the 'hard sciences', in which basic and applied research can be organized according to the triple helix model. However, in the field of humanities and social sciences, anything comparable to the technology centres has not yet been established, even though there are some efforts to that direction. Today the life sciences are a good example of a field where the co-operation between state, universities and a specific industrial cluster is a prerequisite for generating innovations. Universities are needed for the basic research, and they collaborate in R&D with the enterprises for the development of practical applications in specially designed environments (science parks etc.) funded largely by national governments but extracting also a lot of other funding. These installations have the capacity to employ a large amount of experts with postgraduate qualifications in different disciplines.

What are the benefits of a cluster?

- The clusters stimulate the innovation through the exchange of information among different actors and they create strong synergies with the complementary sectors along the value chain.
- The clusters are a source of work places.
- The clusters can reduce the barriers of the market and determine the creation of new enterprises and business models.
- The cluster is a key instrument for the strengthening of the entrepreneurship, helping the companies find resources, technologies and knowledge and facilitate ideas to transform in opportunities of businesses.
- The clusters are components of policies and strategies of strengthening competitiveness and regional development.
- The clusters networks as instruments of internationalisation.

4 Conclusion

At the community level, clusters are eligible partners in many research-development programs, etc. Among the European finance programs that are valid for Romania, we mention:

FP7, Knowledge regions, INTERREG IVC, URBACT II, SEE (INTERREG IVB), ETC.

Others conclusions:

❖ We cannot talk about clusters at the level of a whole development region, but of a concentration/industrial agglomeration around the cities with the elevated industrial potential.

❖ Among the 8 regions of development, there are the necessary conditions for the set-up of a certain presence of the three petals of the clover: the field of business (businesses and industries), the university environment and research, development, innovation and public field (local and regional authorities).

❖ There is a real interest for the constitution of innovative clusters of Romania, at the level of the local authorities, of NGOs, of companies, of universities, of C-D entities and of the business communities.

❖ The generation of a climate of trust is necessary among the partners, essential condition for the creation and development of a successful cluster.

❖ The awareness of the role which must be supported by the innovative products specific of the cluster and of the role that the academic and research environment may have, is different from one region of development to another.

❖ The definition of a Romanian concept is necessary following the adaptation of the international models for a common understanding of the term and a unitary approach from the competent authorities' point of view as well as the beneficiaries.

❖ The model of the classical clover should contain a fourth petal, in the Romanian version, representing the link of facilitation of the processes within the cluster ("catalyst" entities: innovative entities and technological transfer, trading chambers, consultancy companies).

❖ There are numerous initiatives of founding clusters of several types: "state driven", "research driven", or "industry driven".

❖ In some areas, there are natural clusters, even is only in an unofficial stage.

❖ In other regions, there are incipient clusters and initiatives of cross-national clusters.

❖ There are initiative for the creation of associative structures that are specific to the clusters.

❖ The finalisation of cluster mapping for Romania is necessary.

❖ The national strategy in the field of clusters and an action plan is necessary.

❖ The non-existence within the unity finance frame of clusters is at the moment a break in their development.

❖ The achievement of some training in the field, a manner of financing being the use of structural funds, POSDRU, for the training of the personnel, is necessary.

❖ The achievement of the cluster specific infrastructure, a manner of financing being the use of POR structural funds is necessary.

❖ The start of the finance from structural funds is necessary for the creation and the development of top level clusters in Romania through the use of POS CCE funds.

Among the global competition for markets, the chances of the economic success of one country or one region are based on the specialisation of the offer and the focus on the development effort of key-fields, where there are competitive advantages, resources and competences. In this context, the innovative clusters in tourism are a successful solution because they offer a combination of entrepreneurial dynamism, intense connections between companies and institutions, which hold top knowledge, respectively pro-active synergies between the main actors of innovation.

At the level of the European Union, the innovative clusters are considered the "engine" of the economic development and innovation, these

representing a very good frame for the development of business, for the collaboration between companies, universities, research institutions, suppliers, clients and competitors located in the same geographical area (local, regional, national, cross-national).

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