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THE IMPORTANCE OF CLUSTERS IN THE DEVELOPMENT OF THE TEXTILE AND CLOTHING INDUSTRY

Literature review

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Abstract

This paper provides a critical review of current research on clusters in the textile and clothing industry and the connection to the development of the areas they are concentrated in. The study aims to systemize the main concepts and theoretical research regarding clusters, offering insights into the way clusters determine a more efficient and competitive industry and to what extent. In the current continuous competition for markets, companies that seek economic success need to intensify relations with others that activate in similar fields of interest but also with educational institutions, research and development, government and other economic factors involved. Clusters prove to be a successful solution for small and medium companies because these provide cooperation between companies and institutions, easy and fast access to information and facilitate cooperation in different stages of production and selling a product like acquisition of technology and equipment intended for shared use or marketing strategies.

Introduction

Regions and countries that seek economic success must rely on offering specialized services and products but also, they must focus their efforts towards a constant development of the key areas that hold competitive advantages, skills and resources especially in the present continuous competition for markets. In this context, clusters are a successful solution because these provide a combination of entrepreneurial dynamism, intense links between companies and institutions holding top level knowledge, respectively pro-active synergy between the key players of innovation.

With increased globalization and increasing competitiveness in domestic markets, European and international membership of a cluster is a real advantage for innovative small and medium enterprises (SMEs), due both to easy and fast access to the research results in order to implement these in production and achieving innovative products, making use of advanced technologies and joint development strategies, starting from the cooperation in production and acquisition of technology and advanced equipment intended for shared use, and finishing with the marketing strategies.

The Textile Industry

The textile and clothing sector (T&C) represents an important segment of the European manufacturing industry, as well as a vital sector of the Romanian economy, giving employment to more than 200,000 people in 2012 in this country only. The necessity of analyzing and understanding the T&C industry is emphasized not only by the great workforce needed, but also by the fact that it is characterized by a significant number of small and medium enterprises which are often concentrated in particular regions of a country, playing an important role in the prosperity of the regions both from the economic and social point of view.

After the fall of communism, the Romanian textile industry activated mostly in the loan system, where a foreign company provides raw materials and the contracting company offers the labour force and all the technology and equipment needed to finish the products that later will be sold under its own brand. The factories working under contract finally obtain a low value added and now they are facing several problems including competition with Eastern countries, where the workforce is cheaper, or the increasing number of imports from Asian countries which diminish the number of contracts they obtain.

Among the strategies to revive the textile industry, there is clustering, which means that a group of firms having related activities combine their efforts with other actors involved, in order to provide all stages of production and marketing of a product, from raw material to ensure the development of improved technologies and new marketplaces.

Over time, clusters have become a topic of interest to economists, governments, companies and different institutions primarily for having the potential to enhance the performance of cluster firms, to introduce innovation and stimulate growth domain.

The Concept of Cluster

The concept of “cluster” has a rather long history, having been assigned several names, including competitiveness pole, industrial district or industrial cluster. The terms that were imposed are cluster and competitiveness pole. The simplest description of clusters is based on vendor-client relationship description and value chain. Most companies buy "inputs" (raw materials, services, components) from other vendors incorporate them into their products that they sell to customers.

Companies functioning in an “industrial clusters” obtain a competitive advantage because they have a dense network of suppliers and customers nearby.

Regarding the term "value chain", the concept derives from Alfred Marshall, who showed that geographical concentration of a particular industry determines suppliers’ specialization. For example, in northern Italy clusters are composed of small companies that are specialized according to the various stages of production, between them existing coordinating relationships. Marshall based his theory known as the 'Third Marshall' on observation made on the situation of "industrial districts" in England, according to which there are three reasons why companies located in the same geographic area are more effective than if they acted far away :

- "Labour pool"
- Specialized suppliers;
- Transfer of knowledge

Also, Marshall noted that an "industrial agglomeration" of similar companies attracts, develops and benefits from having a "labour pool" with a common set of qualifications. Also, the economic security of employees is much higher because in the same geographical area there are several possible employers who need their skills. Marshall also noted that "industrial agglomerations" create a market for suppliers and good conditions for them to improve and specialise their offer. As a consequence, this results into a productive advantage to their customers. Also, Marshall felt that in an "industrial agglomeration" ideas "travel" much easier from one company to another, such as "a journey through the air." Today is actually what economists call "externalities" (Rocha Kachba Y., Kazuo H. & Gomes Ferreira G. M., 2012).

Subsequently, German economist Lösch expanded on Christaller’s and Von Thünen’s work and applied economic ideas and techniques, including neo-classical towards the location of economic activity, although they based their research on agriculture production and location. In 1956, Walter Isard and other researchers have established the studying of regional sciences. Regional scientists have improved Marshall's idea highlighting the advantage of companies that benefit from geographical proximity, distinguishing between the two types of externalities: localization externalities (gains from proximity to similar companies, especially in the same industry) and urbanization (gains from proximity to companies in other industries).

In 1990, Professor Michael Porter, defines cluster as "a geographic concentration of interconnected companies and institutions in a particular field." (Porter, M., 1998)

In Romanian literature, the notion of cluster is approached by Nicolescu O., who specifies that the cluster is a network of interrelated companies at a higher level which makes it act as an integrated system, cumulating on a higher plane both the advantages of diversity and complementarity of the network, as well as the intense threshold between the activities involved, largely similar to those of a large company.

The definition of "cluster" is encountered also in the legislation of Romania (GD 918:2006 - The "Impact" Program) as being a grouping of producers, users and / or beneficiaries for implementation of best practices from the European Union in order to increase the competitiveness of economic operators.

Porter's model of interactions within a cluster takes into consideration as part of the "value chain" a company's competitive advantage which derives from how that company manages its activities from product design and procurement of raw materials until sale and service. Many of these activities involve interactions with other entities as suppliers of raw materials or parts, of specialized services, of research services and innovation, distributors, customers, etc. Because of this reason, the geographical location of the company is significant in defining its' strategy (Porter, 1990). The importance of supplier-customer relationships increased with the remoteness of companies' vertical integration model. The classical theory of economic development based on the availability and abundance of production factors (labour and capital nature) explained very well the economic phenomena in the nineteenth century, but later, with the extraordinary success of countries like Japan, the lack of resources, proved obsolete. The solution was found by Michael Porter, in his book "Comparative Advantage of Nations" (1990). He showed that economic success depends on the interaction of some important factors: demand business strategy and competition, factors of production, supply chains and horizontal integration, grouped in what was later called "Porter's Diamond". (Cortright I. J., 2006)

Porter's Diamond Model

Traditional economic theories include land, location, natural resources, labour and population as determinants in competitive advantage of a country, a region or a company. The Diamond Model uses a more proactive approach in considering some other types of factors like:

-The firm strategy, structure and rivalry

-Demand conditions for products
-Related supporting industries
-Factor conditions

The forces identified in Figure 1. determine a company's competitive environment, which affects profitability. The bargaining power of buyers and suppliers affect a small company's ability to increase prices and manage costs, respectively. For example, if the same product is available from other suppliers, then buyers have bargaining power over each supplier. However, if there is only one supplier for a particular component, then that supplier has bargaining power over its customers. Low-entry barriers attract new competition, while high-entry barriers discourage it. For example, opening a small tailor shop is simple, but starting a clothing company is considerably more difficult. Industry rivalry is likely to be higher when several companies compete for the same customers, and intense rivalry leads to lower prices and profits.

The role of government is to encourage and push organizations and companies to a more competitive level, thereby increasing performance and ultimately the total combined benefit. Government policies can influence the components of the diamond model. For example, lower income taxes stimulate consumer demand, which leads to higher sales and profits. Countries that invest in education have a skilled workforce, which helps companies engage in research and development. A competitive industry structure is also important because companies that can survive tough competition at home are usually able to withstand even tougher competition in a global business environment.

In the last decades, Porter's Diamond Model has faced criticism from two perspectives: from the management school and from the economic school. Criticism from the management school suggests that Porter's Diamond is not applicable to most of the world's smaller nations (Bellak&Weiss 1993; Cartwright 1993). Criticism from the economic school (Waverman 1995; Jegers 1995; Davies&Ellis 2000; Boltho 1996) advances Porter's central thesis that firms, even though part of the same cluster, are still in competition with one another. Porter based his paper on case studies and these tend to only apply to developed economies (Smit A.J., 2010).

In the current economic climate for businesses to remain competitive in the local market and to gain access to new international marketplaces it is needed an intensification of relations between companies that activate in the same field of interest but also between them and educational institutions, R & D, government and others. This need can be satisfied by developing clusters that each company can provide the additional resources it needs to operate with maximum efficiency, such as new knowledge, access to different markets, qualified labour force etc (Nicolescu O., 2011)

In a cluster, there are different types of agents, and between them there are paths along which one agent can interact with another. One path or perhaps rather one set of paths, runs between research organisations and firms, another between government and firms, and so on.

In an ideal cluster these paths are busy with traffic. People move between actors, talk with others, bring news to others, discuss with others, change jobs, and tie the systems together in a thousand different ways. All this traffic helps make the cluster dynamic. Knowledge is spread and shared. Collaboration ensures that resources are used in the best possible way. Coordination aligns the interests and actions of different agents.

In 2012, the European Cluster Observatory carried out a survey of cluster initiatives, collecting data from 254 cluster organisations in Europe. One of the most important aspects to analyse is the level of priority some objectives have in the eyes of companies' managers when they decide to be part of a cluster (Figure 2.).

In the survey conducted, the most prioritised objectives were creating an Identity and brand for the cluster, Innovation and R&D and developing a Strategy and vision for the cluster. More than 80% of the respondents chose there three elements as having high and medium priority. On the other hand, aspects like HR supply or HR upgrading did not look very appealing in terms of priority. Moreover, less than 5% answered that joint purchasing was a high priority objective when joining a cluster.

The highest priority a cluster organisation should have refers to collaboration between members in order to perform better both internally and externally. Clusters roles as part of industry, innovation, and regional and science policy are to rejuvenate the established industries in Europe, as well as helping emerge new industries. The chances of success are improved if such policy initiatives are fact based and there is a strong collaboration between all actors that are part of the cluster. A cluster allows companies to operate more productively in sourcing inputs; accessing information, technology, and needed institutions; coordinating with related companies; and measuring and motivating improvement.

Conclusion

This article reviewed the literature related to clusters applicability in the T&C domain. The cluster represents an environment in which learning, innovation and operating productivity can flourish. Clusters appear to be lacking in developing countries, which limits productivity growth in those economies.

Based on literature review and according to the research of actual facts, local competition is the main dynamic behind cluster development and companies' performance. Indubitably, by competing with each other, T&C companies and the related industries tend to concentrate in a few locations which are favourable to the purchase of raw materials, to the transportation of finished products or to facilitate selling merchandise. Another significant aspect is that know-how and experience are very difficult to transfer across long distances.

Even though companies in the same sector or product market have been observed
hundreds of years ago to locate themselves in specific geographic regions, rather than spreading out evenly across the geography or economy, the search for ways to encourage clustering has only recently begun.

The emergence of a cluster in a region can be explained in different modalities. The first explanation resides in the factor advantages, as transportation routes, easier communication ways or local textile resources. The second possible explanation refers to the location where several successful entrepreneurs start a business and/or a large pool of talent and research activities gather.

It is easier for companies located in the same region, usually a centre of urban development, to find suppliers, to negotiate the acquisition of goods at a convenient price or to deliver the orders on time considering that the area benefits from a well developed infrastructure. These benefits would not exist if the companies in the industry would be dispersed unevenly across the country, in isolated or difficult to access areas.

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Tables and Figures

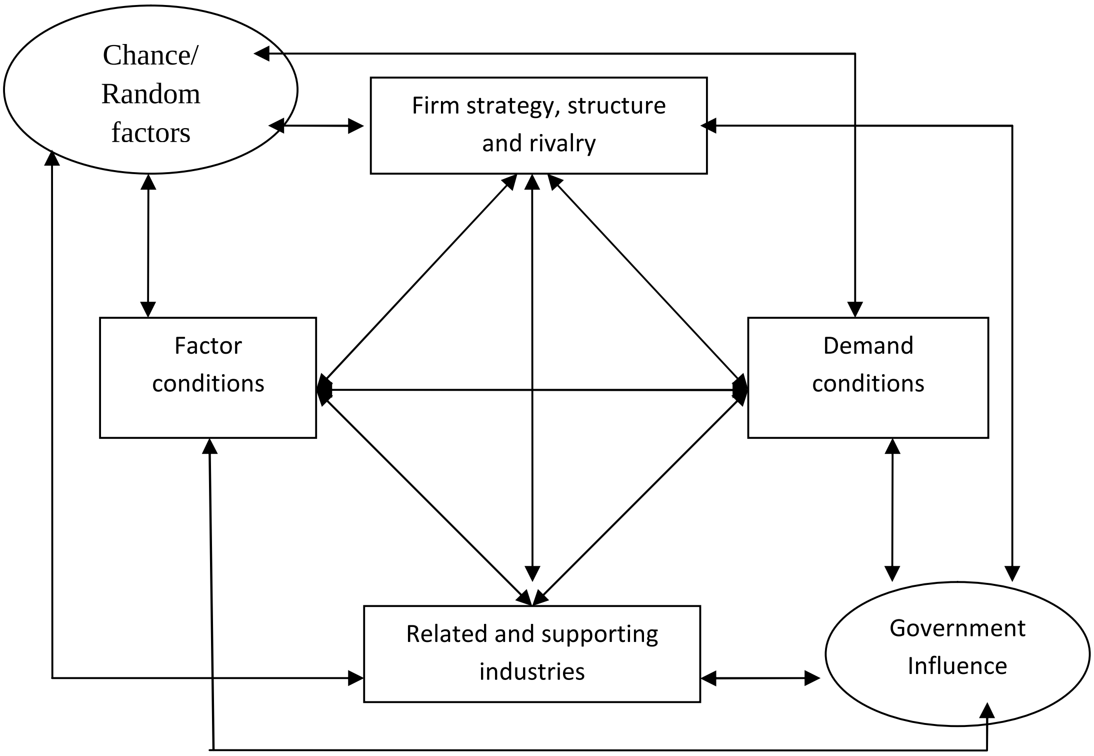

Figure 1. Porter's Diamond

Source: Adapted from: Porter M. E., *Competitive Advantage of Nations***,** New York, 1998

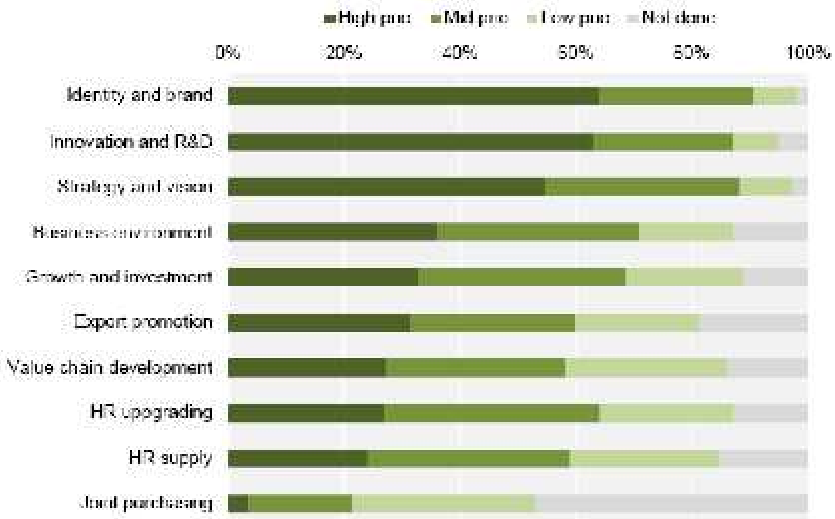

Figure 2. Level of Priority for European Companies When Joining a Cluster

Source: Ketels C., Lindqvist G., Sölvell O., (2012), *Strengthening Clusters and Competitiveness in Europe The Role of Cluster Organisations*, The Cluster Observatory