

CLUSTERS AS PLATFORMS FOR SMES LEARNING AND INTERNATIONAL LINKAGES

Petya L. Andreeva

EU Business School Munich, Germany, petia.andreeva@euruni.edu

Abstract: The human nature is based on curiosity and people have been always looking for new opportunity, trying to find new places, to exchange products and ideas. Cross-cultural interactions are not new, they are just constantly changing. The forces driving internationalization have been mainly, trade of goods and flows of finances. Nowadays the drivers of global interaction are increasingly knowledge-based. The unprecedented fast technological change in Information Communication Technology (ICT), the internet and the rise of emerging economies have transformed the nature of international linkages. The global environment impose additional challenges, such as changes in climate, financial crises and others. This article attempts to gain additional, deeper understanding of the role of Clusters on the Small and Medium-sized Enterprises' (SMEs) international linkages, learning processes and cooperation. Although these issues have been studied within the Clusters and industrial regions literature, the aim of the article is to provide additional view on the collaborative mechanisms of learning. The knowledge and the technological learning of SMEs are strongly influenced by the context and the region. The industrial districts and Clusters are important as a collective entity of economic activities, social and institutional relationships. Cluster management reinforce the notion of making the knowledge of each individual firm meaningful by recognizing the social nature of leaning and knowledge creation. Exchange of ideas and international cooperation stimulate the human creativity and accelerate the innovation. Cheaper inputs and new technology from abroad make the companies (SMEs) more competitive. It creates inequality among people and districts. The future studies shall focus more on the human side of Cluster knowledge management. The SMEs have usually limited capacity, scarce financial possibilities, lack of opportunities and less business partners. To be able to operate internationally the small firms need support. Cluster organizations, being created as teams of Cluster SMEs managers, understand the needs of each cluster member and serve as an activating agent for international initiatives. Although many Clusters have been studied in the business literature, this article attempts to gain deeper understanding of the Clusters as main driving force for SMEs internationalization. The Cluster Organizations are facilitating the access to market information. They are helping the SMEs in networking and for obtaining new international contacts and business partners. They introduce SMEs' managers to the desired contacts. Thus the firms can gain new insights and inspiration, which are considered of being driving forces for innovation. The Cluster Organizations provide channels for easier access to new markets and the Cluster SMEs, have better opportunity for knowledge sharing and expanded networking.

Keywords: SMEs, Cluster, internationalization, knowledge management

1. INTRODUCTION

The phenomenon of geographical concentration of economic activities, has been observed since centuries. It is widely perceived to be an important factor for economic development. Marshall (1890) described the advantages of agglomeration of economic activities in terms of availability of a qualified workforce and specialization. Similarly, Schumpeter (1934) referred to the “swarming” or clustering of industry. The concept of clusters comprises diverse perspectives and most often relates to the traditional location and agglomeration theory. Another terms are “industrial districts”, growth poles, innovative milieux, national or regional innovation systems, learning or creative regions etc.

Becattini (1990), has developed the concept of “industrial districts”. In his article “From industrial sectors to industrial districts” he refers to the regional policy and territorial development. He addresses the issue of the importance of place-based economic development and the importance of social capital geography, sociology, politics and history and their relation to innovation policies.

The concept of clusters has been popularized by Porter (1990). He has created the so-called “diamond model” of competitive advantage, system of mutually interdependent determinants that influence the competitive advantage: production conditions; firm strategy, structure, and rivalry; demand conditions; related and supporting industries; government and chance. The concentration of economic activities in clusters he describes it as the result of “competitive advantages” of firms. It provides the companies with ideas of new and better ways to compete. He also stated that clustering bring innovation faster to the market.

2. THE ECONOMIC REASONS FOR EXISTANCE OF CLUSTERS

The factors that are considered as determinants for the existence and the growth of clusters, can be presented in three main categories: The most often Clusters are considered geographical concentration of specialized firms, having labor with particular skills and competences, and there are in close proximity supporting institutions which increase knowledge flows and spill-overs. It is believed to be a promising strategy for global

competitiveness. Are the firms in the clusters more efficient and do they benefit from the economies of scope and scale? It is a question that many researchers are trying to find answers, such as Audretsch and Feldman (1996). Nowadays regions compete with each other on the international market worldwide in providing the best framework conditions trying to facilitate business growth to attract capable and talented workforce.

Clusters are seen as having a functional purpose to provide a range of specialized and customized services to a group of companies, providing infrastructure and different business support services (such as research and test centers, consultancy and others). In this sense, clusters are a form of “self-organization” that aims to offer competitive advantages. Clusters facilitate both intense competition and close cooperation.

Geographical proximity is believed to facilitate the flows of tacit knowledge. The close proximity of the firms facilitate interactions, which is believed as a critical factor for innovation. Sharing knowledge and building relations of trust can facilitate networking and cooperation. Clusters can be characterized by “social glue” that holds together the interlinked actors such as universities, businesses and public authorities and enables intense interaction and cooperation amongst them. The dynamic communication in the knowledge triangle of education, research and innovation is an important ingredient for achieving competitive advantages.

Clusters offer possibilities of formal and informal contacts and exchange of business information, know-how, and technical expertise. These effects can lead to technological spill-overs (Audretsch and Feldman, 1996). It contributes to the development of new, products, services and business concepts. The geographical proximity is seen as a facilitator for trust and close cooperation between Cluster actors.

3. THE APPEARANCE OF CLUSTERS

The emergence of a cluster in a particular location can be explained differently. One of the reasons is related to some advantages, such as a particular resources - climate, soil, forest, transportation routes, built infrastructure, ports, etc. The production factors can explain for example the location of clusters based on natural resources - wine clusters, forest, paper clusters and others. Another explanation could be linked to historical “accidents”, such as the location where several successful entrepreneurs start a business and/or a large pool of talent and research activities are gathered.

Creating products and services that bring value to the customers is the key driver for success. The Clusters can appear in locations that are not determined by markets or natural resources. The technology and market conditions can influence the geographic distribution and the linkages and collaborative networks.

Agglomerations of economic activity is a phenomena. Some examples for clusters with global activities are film industry(Hollywood), cars (Stuttgart), watches (Switzerland), optical equipment (Tokyo), flowers (The Netherlands), computer software (Silicon Valley), marine technology (Southwest Norway), mobile telecommunications (Stockholm), wine (Bordeaux, Southern Chile). Clusters can be found in the Developed as well as in the Emergent Economies, and each cluster has its own history and development path.

4. INTERNATIONALIZATION AND INNOVATION OF CLUSTER SMEs

In the recent years significant attention has been paid to the innovation policies related to research globalization and innovation activities (Commission of the European Communities, 2012).The focus has been on the benefits of establishing international linkages between clusters (and other specialized research and innovation entities).

Clusters and other types collaborative innovation environments can be viewed as “systematic instruments” (Smits and Kuhlmann, 2004) – serving as platforms for learning and experimentation, managing interfaces between various actors, and stimulating new forms of interaction (including international linkages). The ongoing policy development provide some new insights on the support that SMEs needs. Internationalization of innovation in Cluster SMEs is growing in practice and policy initiatives. There are some new developments regarding the process of accessing international sources of knowledge.

The understanding of the capabilities needed for globalizing innovation helps SMEs and research organizations to overcome the barriers limiting their internationalization. Innovation policies are needed in addressing systematic problems such as a lack of linkages and interactive learning between the cluster actors. The role of the cluster initiatives is of implementing measures that strengthen linkages and foster the knowledge management and the linkages between internationally-dispersed innovation nodes.

The policy makers are working on initiatives and legislations that support nationally created knowledge and generate a new knowledge. The governments are supporting SMEs activities of international collaboration and technology transfer in both directions -Developed to Emerging and Emerging to Developed Economies (European Commission, Reflection Paper on Harnessing globalization, 10.5.2017).There are policies aiming to foster transnational innovation and interactive learning processes in geographically-dispersed as well as internationally-interdependent activities. These Initiatives help for better understanding the process of internationalization and knowledge creation in SMEs. Capabilities needed for internationally-interdependent innovation processes are related to the importance of strong network linkages. Much of the existing literature

discuss the role of cluster initiatives and trade networks, as well as the role of global value chains in fostering and making use of the international network linkages.

The geographical proximity plays an important role in enabling exchange of tacit knowledge and collaboration. The transnational innovation networks, and the capabilities of SMEs as innovation actors need to operate efficiently within the internationally-interdependent structures. The role of public policy in relation to transnational innovation processes is important for both Developed and Emerging Economies.

5. LEARNING AND INNOVATION

Knowledge is often described as being one of two different types: codified- explicit or tacit. Codified knowledge is possible to articulate, store and transfer easily. Tacit knowledge, has been described as “things that we know but cannot tell” (Polanyi 1962, 1966). Tacit knowledge is not easily shared, but is rather learned through experience.

The complexity of learning and innovation processes is the level of specialization of knowledge and economic activities. The firms invest in developing certain fields of expertise (through e.g. education and research), this leads to increased capabilities and efficiency. Such intentional and strategic choices of specialization, taking advantage of unique competencies and strengths in the business environment provided by Clusters, give a “competitive advantage” (Porter, 1990, 1998a). The processes need to have a social interaction, ability to communicate and work across organizational, disciplinary and professional boundaries

An important issue is the absorptive capacity of actors- cluster SMEs in seeking knowledge. Absorptive capacity has been defined as “the ability to recognize the value of new (external) information, assimilate it, and apply it to commercial ends” (Cohen and Levinthal, 1990). Success in absorbing and using new knowledge is based on prior related knowledge and expertise. Prior related knowledge and expertise includes a range of things – from shared language and context, to knowledge of the most recent scientific or technological developments in a field. The prior possession of relevant knowledge gives rise to creativity. The SMEs that have little or no prior knowledge are less likely or unable to understand the benefits of and apply external knowledge inputs. Effective communication between managers as well as between firms – also strengthens absorptive capacity. At a minimum, effective communication includes a shared language and symbols. The inter-firm collaboration, SMEs, suppliers and customers provides access to insights that are important inputs to innovation processes (Porter, 1998b). Collaboration with universities and other research actors provides firms with access to newest findings and knowledge and universities with the opportunity to better understand industry needs and help them shape research to be more relevant. The public sector has a role in providing for example: infrastructure and supportive institutional frameworks.

6. CONCLUSIONS

Recent study on Cluster SMEs (Baltic Sea Region Stars Innovations Express) identified activities, that are the most effective in the process of SMEs internationalization, such as: Access to market information, benchmarking, inspiration; General networking and access to new international contacts, cooperation partners; Exposure to new opportunities/ new partners in other sectors or application fields; Development of stronger international visibility; Access to new markets; Access to particular knowledge sources (e.g. individuals or centers with specific expertise); Access to external infrastructure (e.g. physical or virtual labs, demonstration or test facilities); Facilitation/initiation of collaborative research and/or development processes.

Due to the internationalization through clusters, SMEs gain a better understanding of new foreign markets and market players. The SMEs establish more commercial connections and get more visibility and stronger presence on the market. The firms benefit from knowledge sharing and the initiation of new collaborations. Empirical study based on cases shows that the Cluster organizations are very effective instrument to support SME internationalization.

The process of internationalization is irreversible, bringing many challenges, treats and opportunities. The combination of globalization and technological changes require knowledge and highly skilled labor. The internationalization makes firms interacting, sharing experiences and ideas. Companies active in international markets remain competitive because they learn and adapt faster (European Commission, Internationalization of European SMEs, 2010). The way we live, work, produce and consume, and the way we take decisions is on the process of transformation. The emerging economies’ participation in the global value chains is increasing. The Cluster SMEs are important in the world economy, creating new jobs and being innovative. Further challenges for the process of learning are digitalization, robots, artificial intelligence, are to be considered in further research related to Cluster SMEs. How the international linkages of Cluster SMEs will look in the future? How the open –source and shared content transaction will affect the business? The support not only from Cluster Initiative but an active support from the local governments is needed.

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