

## Competitiveness through networking in the SME sector

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The post-modern age economy is driven by new factors of production and new sources competitive advantage, such as innovation, life long learning, know-how and personalized services. (Lengrand – Chatric; 1999) The economy is at change: in a shift towards knowledge economy. The process advances national economies differently. The ability to acquire useful methods, tools and practices of the knowledge economy results a better international competitiveness. The above mentioned ability depends partly on the efficiency of getting, analysing and using informations, which could be improved by networks.

The paper examines some important patterns of the networking in the SME sector and its effects on competitiveness. The paper contains recommendations and best practice examples for the establishment and development of SME networks.

### **Formation of SME networks**

The terms networks and clusters are used interchangeably in the literature, because the two phenomena have many common criteria. (Martin et al.; 2004) Lets take a closer look at clusters! The differences at regional competitiveness have been approached through the production at the 70's. Later, in the 80's, the advantages of geographical contraction became a more important factor. In the 90's, Porter (1990) created the „diamond-model” which is based on four determinating factors. These factors depend on each other and strenghten each others effects. A region can become the most competitive if this factors and the interactions between them show a favourable shape. The four factors are the supply with resources; the conditions on demand; the corporation strategy, structure and rival; and the relations with supporting and connected industries. Grosz (2000) examined many definitions of clusters, and summarised from the literature that clusters are more than a simply network of connections at the same market or industry: the cluster is a network, and it contains enterprises which are connected by the supply chain or have a common knowledge base. Strong specialization with refined task-sharing; close geographical location; spill over and synergy effects characterize the clusters. (Steiner; 1998)

SME's amount more than 95% of the enterprises and produce more than 40% of the GDP. SME sector plays an important role as employer and assures flexibility for the economy in the field of different services and production. SME's can hold their flexibility as a member of a cluster, and can achieve competitive advances which would be unattainable alone. Even large enterprises, suppliers, research institutes and universities can join a cluster and enjoy different advances. In the literature there are different types of clusters (Rechnitzer; 1998), like geographical concentration of enterprises based on infrastructure of knowledge; vertical supply chains; industrial concentration in agglomerations; connections through common knowledge-base in basic research; clusters on common demand (eco-clusters); clusters in the service sector. The difference between clusters and networks is that the connections between the members of a network are formalized, but in a cluster not necessary and in clusters the effects often succeed by positive externalises. (Buzás; 2000)

SME's are facing the patterns of the shift towards the knowledge economy increasingly. Enterprises have to use new methods of production and of services, and handle the knowledge and corporate learning related issues. Many forms of cooperation should complement the

competition between enterprises in this situation. It is evidence that the success in business depends on the quality and quantity of information which is owned and managed by the enterprise. Since information and its production at a single enterprise is often limited, cooperative forms spread in the economy, like licensing agreements, supply chain networks, common marketing activities, etc.

A change in the forms of cooperation can be described too. (Lengrand – Chatric; 1999) The first, earlier forms of cooperation are technological networks, alliances in the field of research and development with the aim of cost-reduction. Larger technological networks could become a regional innovation network, but the nature of cooperation remained technical. The new, later form of co operations are the knowledge networks. Productivity can not be achieved by additional productivity of operations, most of the added value comes from the knowledge input. Knowledge networks function is the enhancement of information production and the better use of information through regulated mutual sharing.

### ***Overcome barriers to knowledge networks***

In 1995, in the European Union, the Competitiveness Advisory Group composed a report, entitled 'Enhancing European Competitiveness', in which they encouraged new schemes to shorten the distance between suppliers and users of information. (Lengrand – Chatric; 1999) Networks, especially knowledge networks are able to facilitate supply and demand on information in a systematic and sustainable way.

Of course there are some barriers which the enterprises have to overcome. Some barriers are connected with the awareness, like the difficulty to convince SME's of the worth of added-value of networks; fear on expensive ICT-equipment and services; low level of ICT-use; and the reluctance of companies to use ICT to their work. Other barriers are connected with knowledge-sharing and collaborative action, internal or external, like cultural resistance or managerial insufficiencies; presence of unfavourable ICT market conditions for SME's or absence of suitable consultancy services.

To overcome the above barriers, planners of knowledge networks have to evaluate the potential of enterprises and organisations, and analyse the economic, technical and social factors. True results should be presented for the affected stakeholders. Although enterprises are reluctant to share informations with each other, presentations should stress the advantages of cooperation in knowledge networks. Self-diagnosis mentality and ability should be disseminated too. Knowledge sharing could be maximised by combining innovative and traditional tools and approaches (media, conferences, etc.); by stipulation of participation; by ensuring sustainability and by favouring direct experience and collect feedback. (Lengrand – Chatric; 1999)

### ***Functions of knowledge networks***

Recognition of the contribution made by knowledge to business growth and economic development was articulated decades ago (Marshall, 1920). In the post-modern age, accompanied with the fast development of info communication technology and spreading of dematerialized services, innovation and knowledge became the most important factor of the added value production. Recent research shows that most innovation activity is based on collaboration and networking (Zhang, M. et al, 2004) Accordingly collaborative action between enterprises and strong networking practises at cluster level stimulate innovation and extend added-value of production and service activities.

The structure and operation of knowledge networks varies according to actor types, profession, market and industrial patterns. Knowledge networks operate in several relations between and inside business, government, NGO and private (consumer, citizen) sector. Members of knowledge networks are highly motivated individuals, who are working together towards a common goal of which they are convinced and they communicate through direct contacts instead of through hierarchies. There are three types of individuals in the core team of a collaborative innovation (or knowledge) network: creators, collaborators, and communicators. Creators launch creative ideas connected with their surrounding; collaborators are coordinators and expeditors inside the network; communicators carry new inventions to internal or external markets, where they will come to fruition. (Gloor, P. A. 2004) Knowledge networks are also called Communities of Practice which are provided by organizations with several resources (people, activities, technology, content) to improve the exchange and flow of knowledge and information. (Hildreth, P – Kimble, C. eds. 2004)

The basic operational objective of knowledge networks is to increase the level of knowledge and information flow between the stakeholders. Further, optional functions are the creation of new knowledge and communication with external actors. iCKN<sup>1</sup> predicates that applying principles of creative collaboration, knowledge sharing, and social networking makes organizations more creative, productive, and efficient. They state that sponsors and members of Collaborative Innovation Networks often change their work and leadership styles to become more creative innovators, more efficient communicators, and more productive collaborators. iCKN also states that Collaborative Innovation Networks deliver results in R&D, better customer relationships, better project management processes, and high performing team building. Gloor, P. A. (2004) alludes to three main goals of collaborative innovation networks: better performance in creativity, in quality and in efficiency, which result higher innovation, more efficient organisations and seamless process integration.

### ***Knowledge networks in practice***

The United Nations Trade Point Network is a good example of large knowledge networks. Gloor, P. A. (2004) reviewed the Trade Point system in 1998 as a consultant, and found some useful lessons to learn about it. The Trade Point Program was initiated by the United Nations Conference on Trade and Development (UNCTAD) in 1992. The objective of the program was to assist Small and Medium-Sized Enterprises (“SME”) in overcoming informational, financial and logistic obstacles to increased participation in international trade, with particular emphasis on firms in developing countries. Today there are more than 120 Trade Points, mainly in developing and transitional countries, and some in industrialized countries. At the beginning, Trade Points served as centres of several business and government services, such as customs authorities, banks, insurers and freight forwarders, to support the foreign trade of small and medium sized enterprises. Today, the Trade Points are specialized more on Internet services, providing internet access and helping business owners to join electronic markets worldwide. In some Trade Points, the service providers are presented physically, in other cases, for example in Beijing, an EDI network links together the various partners electronically.

Trade Points are increasingly moving towards virtual trade facilitation. Virtual Trade Points offer free and fee-based services, such as online malls to present goods and services. Customs and taxation information providing, business partner identification and translation services through the worldwide network of Trade Points makes additional value and security in trade.

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<sup>1</sup> iCKN: innovative Collaborative Knowledge Networks. <http://www.ickn.org/>

In some developing countries, for example in Senegal, the Trade Points unified the access to almost all components of the import or export process into a networked solution. Any producer or trader can join the system by filling the formalities once. SME owners without internet access or adequate computer literature can bring out offers in electronic trade too. Some trade points train native trainers in internet technology and computer topics, to stimulate the use of new technologies. The worldwide services of Trade Points make the network to a collaborative innovation network, which is increasing the level of knowledge and information flow. The Trade Point system constitutes the core of this network, and the clients extend it.

Gloor, P. A. (2004) stated that Collaborative Innovation Network of Trade Points foster creativity and they are part of a global knowledge network. Directors of Trade Points initiated services accommodate to the local needs but using the knowledge and opportunities of the worldwide network. Trade Points, where the director built excellent relations both to local clients and to other Trade Points, were the most successful. The network of directors acts also as a network of trust, which reduces risk in international trade. This Collaborative Innovation Network is a multiplier of new technologies, both through its Internet based business services and through its training programs. The Trade Point system implements a knowledge network of high quality at very low costs, giving the benefits mostly to the local SME's in the less developed part of the world.

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