# BENEFITS OF INTER-ORGANIZATIONAL NETWORKING IN A CONTEXT OF GLOBALIZATION

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**Abstract.** Inter-organizational networking is said to be one of the most important tendencies of recent time. The numerous benefits provided by cooperation of independent organizations help them to meet the challenges of globalization and improve country's competitiveness. Moreover, globalization and advances in IT enable to network with remote partners. One of the success factors of inter-organizational networking is actors' motivation to cooperate. Therefore, the aim of the paper is to reveal the benefits of inter-organizational networking from perspectives of different network actors in the context of globalization. In order to reach this aim, literature analysis was applied as a research method.

Keywords: globalization, inter-organizational networking, benefits, motivations.

Jel classification: M10

#### 1. Introduction

The growth of inter-organizational networking among independent companies is one of the most important tendencies of recent decades (Grant, Baden-Fuller 2004). The benefits of such cooperation relate not only firms but also regions and countries. One of the most famous examples of successful inter-organizational networking is the Silicon Valley, encompassing a big number of innovative high-tech firms (e.g. Hewlett-Packard, Intel, Oracle, Apple, Cisco Systems, Yahoo!, eBay, Google) which created employment for thousands of people. Moreover, a survey of 175 networks in Denmark in 1991 showed that even in coeconomic recession inter-organizational operation provide benefits such as improved international competitiveness, turnover, product development activities and reduced costs (Gelsing and Knopp (1991) as cited by Hanna and Walsh, 2002). These benefits are important as globalization is changing competitive environment and the increasing global competition results in pressures for lower cost, higher product and service quality, shorter delivery time and wider assortment (Abonyi, Slyke 2010). In addition to this, globalization and advances in IT enable to exploit the benefits of networking even with remote actors.

Despite the growing popularity and important benefits of inter-organizational networks, many of them do not meet the expectations of their participants or fail for other reasons (Barringer, Harrison 2000). Therefore, networks have become the subject of interest for many researchers. The early papers in this field were published in late 1940s, and the amount of scholarly work has grown exponentially over the past half-century, mainly focusing on the properties and overall pattern of relations between and among organizations that pursue a mutual interest while also remain independent and autonomous (Cropper et al. 2008). The majority of studies found when writing this article had explored certain case studies of interorganizational networking and covered the benefits of it fragmentary. There were some studies concentrating on motives for networking among organizations (e.g. Pesamaa 2007); however, they sought for causal relations and were limited in terms of industry or actor type.

The aim of this article is to bring together the benefits provided by being a part of inter-organizational networks. The information presented in the article could encourage organizations to form networks or help networking organizations to check if their relations exploit possible benefits of cooperation. Literature analysis was chosen as the research method for this article. The first part of the article presents deeper theoretical explanation of networks, and afterwards the benefits of interorganizational networking are reviewed.

#### 2. Networks and networking

Cropper *et al.* (2008) cites Mitchell (1969) as one of the first authors who developed definition of a network concept. According to it, a network is a

specific type of relation linking a defined set of persons, objects, or events. Due to the broadness of the concept and variety of object it relates, a term "network" is used in many different fields and disciplines such as IT, biology, sociology, etc.; and Cropper et al.points out that the concept of "network" has often been used rather loosely. In social sciences, network is researched as a system of relationships among individuals and organizations (Jucevičienė 2007). Talking about concept of "networking", Oxford Reference Online defines it as "the process of establishing and maintaining connections among individuals and agencies, organizations, either as an end in itself or to achieve some specific objective" (Last 2007). This article will concentrate only on inter-organizational networking whose members have an intention to cooperate over the longer term than buying-selling transaction. For the rest of the article "network" definition provided by Jucevičienė (2007) is used, according to which inter-organizational network is organizations related by mutual interest and seeking for a certain aim in order to pursue a common activity.

According to Cropper et al. (2008), a network as a manifestation of the existence of inter-organizational relations may sometimes have a name of alliance, collaboration, federation, partnership, association, consortium, joint venture, relationship, cluster, constellation, strategic alliance, coalition or cooperation. The organizations can be public, business, or non-profit and the relationships can range from involving just two organizations. Jakubavičius *et al.* (2008) note that business associations, technology platforms, clusters, integrated centres of science, studies and business-valleys are the most prevalent forms of inter-organizational business networking.

# 3. Benefits of inter-organizational networking

Inter-organizational networking is complex since it requires cooperation of independent organizations having not only mutual but also different goals, paradigm, culture, values, attitudes, etc. Scholars like Pesamaa (2007), Jucevičienė (2007), Sivadas and Dwyer (2000), Mu *et al.* (2008), Morris *et al.* (2006), Maskell and Malmberg (1999), Lorentzen (2008), Ferrary and Granovetter (2009), Bessant and Tsekouras (2001), Hakansson and Ford (2002), Oprime *et al.* (2011), Inkpen and Tsang (2005), Isaksen (2009), Bathelt *et al.* (2004), Giuliani (2005) tried to detect the factors influencing the success of inter-organizational networking. Oprime *et al.* (2011) as well as Pesamma (2007) found out that one of the factors which are important for the development of network relationships are motives revealing firm's intention to cooperate. According to Pesamma, motives affect the way partners are selected and the direction toward which the relationship will develop. In addition to this, identifying the interests of each company should be a pre-condition to plan further projects for the network (Oprime *et al.* 2011). Therefore, it is important that network actors would have some benefits to seek for in a network.

One of the benefits of inter-organizational networking is cost reduction (Porter 2000; Oprime *et al.*, 2011; Altenburg, Meyer-Stamer 1999). Members of a network can cooperate in resource purchase and exploit economy of scale. Besides, they may share physical resources such as labs (Bramwell *et al.* 2008), premises, and equipment. According to Altenburg and Meyer-Stamer (1999), members of clusters can benefit by having lower costs of customer search, because once a cluster has gained a reputation as a production center for certain goods, intermediaries come from all over to these places where they can choose between hundreds of producers.

Another factor motivating firms to enter into network relationships is a wish to be more flexible. A theoretical example of this is given by Chung *et al.* (2006) exploring strategic alliances in knowledge industries. According to him, if two small consulting firms have the expertise in two different areas and a client is in need of expert advice in both spheres, networking between those two firms may be a solution. Neither of the consulting firms in such situation can handle the project alone; however, if those two firms combine their knowhow and resources, they can provide service which would be unrealized otherwise for their client with complex needs.

Another benefit of networking is an access to information (Porter 2000; Altenburg, Meyer-Stamer 1999). According to Porter (2000) in his article exploring clusters, the existence of repeated personal relationships and community ties leads to better or cheaper access to and flow of extensive market, technical, and other specialized information accumulated in the network. Bramwell *et al.* (2008) gives an example of access to research information in case of cooperation between industry firms and university. As their study revealed, there are firms who are eager to keep up with what is happening at the research level, even though they know they will not have any proprietary access to the intellectual property.

Knowledge sharing and learning is another one benefit of networking. Contemporary literature comes to generalization that learning and innovation are the results of interactive processes in

which different actors come together to collaborate in solving particular problems (Bathelt et al. 2004). However, the ease of sharing knowledge depends on its peculiarities. Researchers distinguish two types of knowledge: codified (explicit) and tacit (implicit). Codified (explicit) knowledge can be told, written down in paper or fixed in other similar way. As a result of globalization, explicit knowledge may spread over the world more easily due to relaxed trade regimes, emerging markets for intellectual property rights and improvements in information and communication technologies (Bathelt et al. 2004). However, there are many tasks that involve skills and insights that cannot be codified. Such knowledge is called tacit and, according to Mu et al. (2008), is often the source of innovation and competitive advantage. As noticed by Maskell and Malmberg (1999), the more easily codifiable knowledge can be accessed, the more important becomes tacit knowledge for sustaining and enhancing the competitiveness of a firm. Understanding how tacit knowledge could be caught and transferred is still a big question not only to the practice but to theory as well. As such knowledge resides in people's beliefs, values, experiences, other intangible elements of organization like routines, structures, institutions (Inkpen 1998), it makes complicated to formalize, purchase and share such knowledge. Acquiring tacit knowledge requires personal demonstration, experience, practice and imitation or, in other words, learning by doing (Pinch et al. 2003). Members of networking organizations can explore each other's working ways, principles, ask questions and learn new things from others. Bessant and Tsekouras (2001) state that shared learning also offers benefits such as structured critical reflection from different perspectives, reduction of perceived and actual cost risks in trying new things. Moreover, different perspectives can bring in new concepts (or old concepts which are new to the learner) and shared learning helps explicate the system's principles.

Organizations enter network relationships motivated also by a wish to innovate (Porter 2000; Oprime *et al.* 2011; Niu 2010). Possibility to innovate being in a network is bigger due to several reasons. Firstly, having relationships with universities and/or other members of the network, firms often can get to know about new materials, services, equipment, opportunities and exploit them faster or more easily (Porter 2000). Besides, firms working in a network may improve the ability to identify market needs (Oprime *et al.* 2011). Finally, as Malmberg and Power (2004) notices as cited in Malmberg and Power (2005), most innovations are based on some form of problem solving. Someone realizes a problem and approaches someone else for help and advice. Consequently, a supplier, a customer, a competitor or some other related actor helps to specify the problem and define the ways for its solution.

One more benefit of networking is the access to specialized work-force (Porter 2000; Oprime et al. 2011; Altenburg, Meyer-Stamer 1999). For example, enterprises which network with university may expect to benefit from qualified graduates as prospective employees. There are examples of strong networking between firms and universities. Nelles et al. (2005) tell about university study program developed in cooperation with industrial firms. Students of the program get internships in cluster firms; thus, the firms can employ students who a) are well aware of the products the cluster works with b) take the newest information from lectures to firms c) has relevant job experience d) can be evaluated during internships before being employed for a long time.

One more motivational factor to enter networks is the ability to get financing from governments (subsidies, infrastructure, etc.) (Solvell *et al.* 2003). Due to benefits some networks such as clusters provide to state, governments tend to support creation and development of networks by granting financial help or taxing exemption.

The ability to network is of a paramount importance for small and medium firms. As Hanna and Walsh (2002) say, a small firm needs to innovate to remain competitive and also minimize the cost. However, a small firm with its own product range and scarce resources will rarely be able to update its portfolio without collaboration. It is also unlikely it to purchase such quantities which would let to get the price the big firms get. Therefore, cooperation via networks in purchasing, manufacturing, distribution, marketing, innovation, etc. may be a solution having a significant impact on the ability of small firms to compete in the global marketplace. Oprime et al. (2011), Chung et al. (2006), Barnir and Smith (2000) agree that networking helps small and medium firms to compete with huge firms meanwhile staying small and flexible.

Not only firms but also other organizations are interested in networking. One of the most extensive study exploring benefits networking gives to university was the one of Nelles *et al.* (2005). According to it, universities can benefit from networking by exercising empirical research while analyzing activities of firms. Furthermore, if the university is a part of a certain network, it can provide students not only with academic but also practical knowledge by arranging internships in network's firms. As a result, the students of networking university would be better prepared for job market. In addition to this, a university working in a network may create or develop study programs which would keep abreast with fast changing technical, managerial or other kind of achievements present in business. In case a special study program is developed for network members' needs, often firms finance procurement of technologies needed for student learning. Finally, universities working in cooperation with well-known industry firms raise their prestige and, as a result, may expect to attract a bigger number of talented students.

As mentioned above, belonging to inter-organizational network is beneficial not only for firms. States and regions have also interest in such relations. One of the reasons that motivate governments to promote development of inter-organizational networks is the fact that such interorganizational relationships stimulate the growth of economy and welfare of citizens (Morača et al. 2010). For example, clusters are thought to contribute to the growth of economy by generating employment, attracting new enterprises and direct foreign investment, increasing export. Collins (2008) gives an example of significance of biomedical cluster for recovery of Kobe (Japan) economy. A powerful earthquake in Kobe in 1995 took lives of thousands of people and shattered the economy of one of the most energetic regions of Japan. However, 3 years after the disaster a group of local leaders prepared a plan to develop the city as an international biomedical research and innovation center. During the period from 2000 to 2007, the project attracted 211 enterprises which created employment for 2690 specialists (it is estimated that the number will grow to 311 firms and 9700 employees in 2015). In addition to this, the governments substantially increased revenue from collected taxes. Therefore, the second reason motivating governments to support development of inter-organizational networking is the ability to collect more revenue form taxes in the future. Finally, successful clusters improve the image of the region and the country and, as a result, attract not only new firms but also talents (Porter 2000). The former result is achieved not only with a help of improved region image but also by bigger salaries for cluster employees. As the example from Waxell (2009) study shows, remuneration in firms belonging to Upsala Biotechnology cluster distinguished by bigger growth comparing with the region and country.

One more party interested in inter-organizational networking is potential investors (Waxell 2009). Business angels, venture capitalists and other investors are motivated to enter into network relations due to perspective investment possibilities. As networking influences formation of new businesses (Porter 2000), innovations, productivity, they are potential objects for good investment.

The list of the benefits mentioned above is indefinite and depends on certain actors of a network. For instance, there are examples of networking municipalities which cooperate in order to share experience, obtain financing, just develop relationship (Kern, Bulkeley 2009), share knowledge, cooperate in search of new solutions and learn from best practices (Keiner, Kim 2007).

#### 4. Conclusions

There are a big number and variety of benefits of joining the network. They depend mainly on the nature of the network and help business organizations to stay competitive or create competitive edge.

Firms are motivated to form or join networks by the ability to reduce costs, increase flexibility, learn and share knowledge, access information and specialized work-force, develop innovations and/or obtain financing from governments or special funds. Networking is especially important for small and medium size enterprises.

Universities are also interested in networking because it provides the ability to exercise empirical research in needed real environment, update teaching programs according to newest conditions and needs of a certain education field, train students with practical tasks, get financing and raise prestige.

Other beneficiaries of inter-organizational networking are the governments and potential investors. Due to possibility to receive more revenues from taxes and attract new talents, governments tend to support networks. As for potential investors, they are motivated to join networks in order to get bigger profit and substantial return on investment.

#### References

- Abonyi, G.; Slyke, D. M. 2010. Governing on the Edges: Globalization of Production and the Challenge to Public Administration in the Twenty-First Century, *Public Administration Review (Special Issue)*: 33-45. http://dx.doi.org/10.1111/j.1540-6210.2010.02244.x
- Altenburg, T.; Meyer-Stamer, J. 1999. How to Promote Clusters: Policy Experiences from Latin America, *World Development* 27(9): 1693–1713. http://dx.doi.org/10.1016/S0305-750X(99)00081-9
- Barnir, A.; Smith, K. A. 2000. Interfirm Alliances in the Small Business: The Role of Social Networks,

*Journal of Small Business Management* 40 (3): 219–232. http://dx.doi.org/10.1111/1540-627X.00052

- Barringer, B. R.; Harrison, J. S. 2000. Walking a Tightrope: Creating Value Through Interorganizational Relationships, *Journal of Management* 26 (3): 367– 40. http://dx.doi.org/10.1177/014920630002600302
- Bathelt, H.; Malmberg, A.; Maskell, P. 2004. Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation, *Progress in Human Geography* 28 (1): 31–56. http://dx.doi.org/10.1191/0309132504ph469oa
- Bessant, J.; Tsekouras, G. 2001. Developing Learning Networks, AI & Society 15: 82–98. http://dx.doi.org/10.1007/BF01205739
- Bramwell, A.; Nelles, J.; Wolfe, D. A. 2008. Knowledge, Innovation and Institutions: Global And Local Dimensions of the ICT Cluster in Waterloo, Canada, *Regional Studies* 42 (1): 101–116. http://dx.doi.org/10.1080/00343400701543231
- Chung, Q. B.; Luo, W.; Wagner, W. P. 2006. Strategic alliance of small firms in knowledge industries: A management consulting perspective, *Business Proc*ess Management Journal 12 (2): 206–233. http://dx.doi.org/10.1108/14637150610657549
- Collins, S. W. 2008. Knowledge Clusters and the Revitalization of Regional Economies in Japan: A Case Study of the Biomedical Industry in Kobe, *Prometheus* 26 (1): 111–122. http://dx.doi.org/10.1080/08109020701846066
- Cropper et al. 2008. The Oxford Handbook of Inter-Organizational Relations. New York: Oxford University Press.

http://dx.doi.org/10.1093/oxfordhb/9780199282944. 001.0001

- Ferrary, M.; Granovetter, M. 2009. The role of venture capital firms in Silicon Valley's complex innovation network, *Economy and Society* 38 (2): 326-359. http://dx.doi.org/10.1080/03085140902786827
- Giuliani, E. 2005. Cluster Absorptive Capacity: Why do Some Clusters Forge Ahead and Others Lag Behind? *European Urban and Regional Studies* 12 (3): 269–288.

http://dx.doi.org/10.1177/0969776405056593

- Grant, R. M.; Baden-Fuller, C. 2004. A Knowledge Accessing Theory of Strategic Alliances, *Journal of Management Studies* 41 (1): 61-84. http://dx.doi.org/10.1111/j.1467-6486.2004.00421.x
- Hakansson, H.; Ford, D. 2002. How should companies interact in business networks? *Journal of Business Research* 55: 133–139. http://dx.doi.org/10.1016/S0148-2963(00)00148-X
- Hanna, V.; Walsh, K. 2002. Small firm networks: A successful approach to innovation? *R&D Management* 32 (3): 201–207.

http://dx.doi.org/10.1111/1467-9310.00253

Inkpen, A.C. 1998. Learning and Knowledge Acquisition Through International Strategic Alliances, *Academy of Management Executive* 12(4): 69–80. http://dx.doi.org/10.1016/S0263-2373(97)00090-X

- Inkpen, A.C.; Tsang, E. W. K. 2005. Social Capital, Networks and Knowledge Transfer, Academy of Management Review 30 (1): 146–165. http://dx.doi.org/10.2307/20159100
- Isaksen, A. 2009. Innovation Dynamics of Global Competitive Regional Clusters: The Case of the Norwegian Centres of Expertise, *Regional Studies* 43 (9): 1155–1166. http://dx.doi.org/10.1080/00343400802094969
- Jakubavičius, A.; Jucevičius, R.; Jucevičius, G.; Kriaučionienė, M.; Keršys, M. 2008. Inovacijos versle: procesai, parama, tinklaveika [online] [accessed 10 October 2011]. Available from Internet: http://www.lic.lt/index.php?-382459073
- Jucevičienė, P. 2007. *Besimokantis miestas*. Kaunas: Technologija. 471 p. ISBN 9955-25-183-2.
- Keiner, M.; Kim, A. 2007. Transnational City Networks for Sustainability, *European Planning Studies* 15 (10): 1369-1395. http://dx.doi.org/10.1080/09654310701550843
- Kern, K.; Bulkeley, H. 2009. Cities, Europeanization and Multi-level Governance: Governing Climate Change through Transnational Municipal Networks, *Journal of Common Market Studies* 47 (2): 309– 332. http://dx.doi.org/10.1111/j.1468-5965.2009.00806.x
- Last, M. 2007. *A Dictionary of Public Health*. New York: Oxford University Press. 432 p.
- Lorentzen, A. 2008. Knowledge Networks in Local and Global space, *Entrepreneurship and Regional De*velopment 20: 533-545. http://dx.doi.org/10.1080/08985620802462124
- Malmberg, A.; Power, D. 2005. (How) Do (Firms in) Clusters Create Knowledge? *Industry and Innovation* 12 (4): 409–431. http://dx.doi.org/10.1080/13662710500381583
- Maskell, P.; Malmberg, A. 1999. Localized learning and industrial competitiveness, *Cambridge Journal* of Economics 23: 167–185. http://dx.doi.org/10.1093/cje/23.2.167
- Morača, S.;Hadžistevič, M.;Drstvenšek, I.;Radakovič, N. 2010. Application of Group Technology in Complex Cluster Type Organizational Systems, *Journal of Mechanical Engineering* 56 (10): 663–675. http://dx.doi.org/10.5545/148
- Morris, M.; Bessant, J.; Barnes, J. 2006. Using learning networks to enable industrial development: Case studies from South Africa, International, *Journal of Operations & Production Management* 26 (5): 532–557.

http://dx.doi.org/10.1108/01443570610659892

- Mu, J.; Peng, G.; Love, E. 2008. Interfirm networks, social capital, and knowledge flow, *Journal of Knowledge Management* 12 (4): 86–100. http://dx.doi.org/10.1108/13673270810884273
- Nelles, J.; Bramwell, A.; Wolfe, D. A. 2005. History, culture and path dependency: origins of the Waterloo ICT cluster, in Wolfe, D.; Lucas, M. (Eds.) Global Networks and Local Linkages: The Paradox of Cluster Development in an Open Economy,

McGill-Queen's University Press, 227–252. http://dx.doi.org/10.1080/09654310802553415

- Niu, K. 2010. Organizational trust and knowledge obtaining in industrial clusters, *Journal of Knowledge Management* 14 (1): 141–155. http://dx.doi.org/10.1108/13673271011015624
- Oprime, P. C.; Tristao, H. M.; Pimenta, M. L. 2011. Relationships, cooperation and development in a Brazilian industrial cluster, *International Journal of Productivity and Performance Management* 60 (2): 115–131.
  - http://dx.doi.org/10.1108/17410401111101467
- Pesamaa, O. 2007. Development of relationships in interorganizational networks: studies in the tourism and construction industries (Doctoral dissertation, Lulea University of Technology, 2008). The Munich Personal RePEcArchiv, MPRA Paper No. 8478.
- Pinch, S.; Henry, N.; Jenkins, M.; Tallman, S. 2003. From "industrial districts" to "knowledge clusters": a model of knowledge dissemination and competitive advantage in industrial agglomerations, *Journal* of Economic Geography 3: 373–388. http://dx.doi.org/10.1093/jeg/lbg019

Porter, M. E. 2000. Location, Competition, and Economic Development: Local Clusters in a Global Economy, *Economic Development Quarterly* 14 (1): 15–34.

http://dx.doi.org/10.1177/089124240001400105

- Sivadas, E.; Dwyer, F. R. 2000. An Examination of Organizational Factors Influencing New Product Success in Internal and Alliance-Based Processes, *Journal of Marketing* 64: 31–49. http://dx.doi.org/10.1509/jmkg.64.1.31.17985
- Sliburytė, L.; Ostasevičiūtė, R. 2009. Theoretical Aspects of Economic Globalization Impacts on Emerging Economies, *Economics & Management* 14: 947–953.
- Solvell, O.; Lindquist, G.; Ketels, C. 2003. *The Cluster Initiative Greenbook* [online] [accessed 10 October 2011]. Available from Internet: http://www.clusterresearch.org/greenbook.htm
- Waxell, A. 2009. Guilty by Association: A Crossindustrial Approach to Sourcing Complementary Knowledge in the Uppsala Biotechnology Cluster, *European Planning Studies* 17 (11): 1605–1624. http://dx.doi.org/10.1080/09654310903230533

This article was written in the frame of the Project "Absorptive capacity of innovation system: sector and institutional perspective (ISAG)" (No. MIP-21/2010) funded by the Research Council of Lithuania.