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## **CLUSTERS – COOPERATION CULTURE APPROACH**

Latvian innovation performance on the EU level is very low, with declining SME collaboration. Co-operation culture in Latvian entrepreneurship environment is undeveloped. Networking and clusters are still very new concept in Latvia, while being increasingly popular and developed in Europe, where SME's are actively using such networking possibilities, in order to attract new external resources, implement innovation and develop new, competitive products and boost their export capacity. This article analyses the concepts of firm co-operation and co-opetition, benefits that company networking, and organized networks – clusters, can provide. Article elaborates on the Latvian situation with cooperation and cluster development and also uses Scandinavian cluster developer experience that can be used as an example for cluster development in Latvia. It is concluded that in modern economic environment, for companies to maintain their competitiveness, it is necessary to pursue both – strategies of competition and strategies of cooperation, one of such being the networking within the organized cooperation networks – clusters. It is concluded, that very important key factor for cooperation culture development within the clusters, is trust building between cluster participants, which can be achieved by using various mechanisms, such as ensuring information exchange, involvement of companies within joint projects and cluster branding. Trust building and successful cluster development is a long term endeavor, which requires sustainable funding and continuous efforts by the cluster facilitators. The continuous work of cluster coordinators and facilitators, their ability to ensure equal information flow within the cluster, and ability to develop it as a stable and reliable platform, plays a significant role for the development of successful cooperation culture in the clusters, which helps companies to overcome various innovation barriers through cooperation. Based on the Scandinavian experience, it is concluded that it may take approximately from 5 to 10 years, for Latvian clusters to develop successful co-operation culture in the entrepreneurship environment.

**Key words:** clusters, co-operation, co-opetition, trust, entrepreneurship, innovation.

### **Klasteri – sadarbības kultūras pieeja**

Latvijas inovāciju sniegums ES līmenī ir ļoti zems. Samazinās MVU iesaiste sadarbībā. Sadarbības kultūra Latvijas uzņēmējdarbības vidē ir maz attīstīta. Tīklošanās un klasteri vēl ir relatīvi jauni koncepti Latvijā, kas vienlaikus kļūst arvien populārāki un attīstītāki citur Eiropā, kur MVU aktīvi izmanto šādas tīklošanās iespējas, lai piesaistītu jaunus ārējos resursus, ieviestu inovācijas un attīstītu jaunus, konkurētspējīgus produktus un eksporta kapacitāti. Šajā rakstā tiek aplūkoti ieguvumi, ko sniedz uzņēmumu sadarbība un tīklošanās organizētos sadarbības tīklos – klasteros. Rakstā tiek apskatīta gan Latvijas sadarbības kultūras un klasteru attīstības pieredze, gan Skandināvijas klasteru attīstītāju pieredze, kas var tikt izmantota arī kā piemērs Latvijas gadījumā. Tiek konstatēts, ka mūsdienu ekonomiskajā vidē uzņēmumiem, lai tie saglabātu savu konkurētspēju, ir nepieciešams izmantot gan konkurences, gan sadarbības stratēģijas, no kurām viena ir tīklošanās organizētu sadarbības tīklu - klasteru ietvaros. Tiek secināts, ka būtisks atslēgas faktors sadarbības kultūras attīstībai klasteros ir uzticēšanās veidošana starp klastera dalībniekiem, izmantojot dažādus mehānismus, gan nodrošinot informācijas apmaiņu, gan iesaistot uzņēmējus kopīgos projektos un attīstot klastera atpazīstamību. Sekmīga klasteru un savstarpējās uzticēšanās attīstīšana tajos ir ilgtermiņa pasākums, kas prasa stabilu finansējumu un nepārtrauktu klasteru attīstītāju darbu. Liela nozīme sekmīgai sadarbības kultūras attīstībai klasteros ir klasteru koordinators un attīstītāju darbam, to spējai nodrošināt vienlīdzīgu informācijas apriti klasterī un izveidot to kā stabilu, uzticamu attīstības platformu, kurā uzņēmēji var sadarboties un pārvarēt dažādas inovācijas barjeras. Balstoties Skandināvijas ekspertu pieredzē, tiek konstatēts, ka Latvijas gadījumā var paiet aptuveni 5-10 gadi, kamēr ar klasteru palīdzību tiks attīstīta sekmīga sadarbības kultūra uzņēmējdarbības vidē.

**Atslēgas vārdi:** klasteri, sadarbība, uzticēšanās, uzņēmējdarbība, inovācija.

### **Кластеры - подход на основе культуры сотрудничества**

Достижения Латвии в области инноваций на уровне ЕС оцениваются как низкие. Снижается вовлечённость малых и средних предприятий в процесс сотрудничества. В свою очередь, культура сотрудничества в области предпринимательства в Латвии мало развита. Объединение в сети и кластеры в Латвии является еще новой практикой, которая в других странах

Европы становится все более популярной и развитой. В других странах Европы малый и средний бизнес активно использует возможности объединения в сети для привлечения ресурсов, введения инноваций и развития новых конкурентоспособных продуктов и экспорта. В данной статье рассматриваются преимущества для предприятий от объединения в организованные сети – кластеры. Статья предлагает обзор опыта культуры сотрудничества и развития кластеров в Латвии, а также опыт основоположников развития кластеров в Скандинавии, который может быть успешно использован в Латвии в качестве примера. Результаты исследования показывают, что в современной экономической среде предприятиям для сохранения своей конкурентоспособности необходимо использовать как стратегии конкуренции, так и стратегии сотрудничества. Одна из стратегий сотрудничества - это объединение в организованные сети-кластеры. Автор делает вывод, что ключевым фактором в развитии культуры сотрудничества в кластерах является формирование доверия между участниками кластера, используя различные механизмы для обеспечения обмена информацией и вовлечения предпринимателей в реализацию совместных проектов, а также для повышения узнаваемости кластера. Успешное развитие кластеров и взаимодоверия внутри них является долгосрочным процессом, который требует стабильного финансирования и непрерывной деятельности координаторов кластеров. Большое значение в успешном развитии культуры сотрудничества имеет работа координаторов кластеров, их умение обеспечить равнодоступный поток информации внутри кластера и сформировать его как стабильную надежную платформу развития, на основе которой предприниматели могут сотрудничать и преодолевать различные инновационные барьеры. Основываясь на опыте экспертов Скандинавии, констатируется, что в случае Латвии может пройти примерно 5-10 лет, пока при помощи кластеров будет развита конструктивная культура сотрудничества в предпринимательской среде.

**Ключевые слова:** кластеры, сотрудничество, доверие, предпринимательская деятельность, инновация.

## **Introduction**

Development of co-operation and co-opetition culture within, and with the help of cluster development, is the focus of this article. Lessons from the theoretical framework in the field of cluster development, and practical cluster development cases in Latvia and expertise from Nordic experts, is being elaborated, to provide comprehensive analysis on clusters as a cooperation culture development approach.

While Latvia and Europe are recovering from the deep financial and economic crisis, the importance for sustainable, innovation based business environment development is necessary, to keep Latvian and European economies competitive, provide jobs and market development. Despite economic recovery, Latvian innovation performance is still among the lowest in the whole European Union. Particularly low and constantly decreasing performance is in the indicators: “Non R&D innovation expenditures in the business sector” and “Innovative SMEs collaborating with others”.

While in EU27 the SME collaboration indicator is the fastest growing, meaning that SMEs are engaging in cooperation networks and utilizing their benefits, in Latvia the collaboration among SMEs, SMEs and R&D and public sector is still very low and declining (European Commission 2013). Latvian companies are generally not investing in innovation and are not open for co-operation with others, thus seriously endangering themselves and Latvian economy to lose the competitive advantages in the European and global market, which could seriously endanger firm survivability, economic growth and economic security in the long term. Co-operation culture is much undeveloped in the Latvian entrepreneurship environment, and development of organized cooperation networks – clusters, is at very early stages (Rocans 2013). Therefore not only analysis of cluster development cases in Latvia, but also lessons from theoretical analysis and successful foreign expertise could be very valuable for a successful cluster and co-operation culture development in Latvia. The necessity for foreign experience adaptation was also outlined already in 2009 by Vera Boronenko in her doctoral thesis:

[..] the application of successful foreign experience in Latvia is quite limited. However, the situation can be changed. That is why it is necessary to [...] adopt successful experience in the sphere of clustering achieved by other states (Boronenko 2009).

This article uses qualitative empirical research methods. Main methods used are, document and literature analysis, analysis of some Latvian cluster development experience and focus group with foreign experts. In this article the co-operation culture and clusters, as important facilitators of such approach, are being analyzed. The article focuses on the analysis of co-operation and co-operation concepts and their provided benefits for the entrepreneurship development. The importance of cluster networks, as facilitators of social capital among companies is elaborated. Based on that, a particular form of organized co-operation networks – clusters are analyzed, showing how the cluster approach can develop co-operation culture and create benefits for the companies and regional economies. Theoretical framework is then supported by brief analysis of Latvian entrepreneurship environment and elaboration of some Latvian cluster development cases experience, which is followed by deeper analysis of successful Scandinavian cluster facilitators experience and derived conclusions from New Zealand cluster expert workshop in Riga. In order to analyze such specific, practical information and experience in cluster development – development of co-operation culture within those Scandinavian clusters, a focus group with 5 cluster development experts from Sweden and Finland, was held in Riga on 11 September 2013. The focus group experts agreed that their names and affiliations are used for this paper, the full audio-recording of the focus group can be provided for all interested if necessary. More information on the experts is provided in the article.

This article follows the publication on clusters as factors for economic security and social inclusion (Rocans 2013), and also master's thesis on "Policy initiatives for the entrepreneurship cluster development in Vidzeme region: the case of Vidzeme food cluster" (Rocans 2012). Field research was carried out in the master's thesis, with interviews from Latvian entrepreneurs, R&D and public sector partners within the food cluster, and with national level policy makers, thus establishing deepened analysis on policy initiatives that could foster regional cluster development in Latvia. Field research results are also used in this article as a basis of cluster development experience analysis in Latvia. In this particular article, the analysis of clusters is mostly focused on social capital and co-operation culture development within clusters, as functional coordinated networks, not on economic analysis of cluster development in Latvia.

Therefore this article does not try to prove the necessity of cluster development in Latvia, based on economic analysis, but it focuses on the benefits to the business environment, created by the development of the co-operation culture within and with the help of cluster networks. The novelty that this article brings to the academic and practical discourse on cluster development in Latvia is that it focuses on practical issues with the cluster development - networking aspect within clusters, trust, information sharing and company cooperation relationship building, also deriving specific practical knowledge from highly experienced cluster experts, thus bringing international expertise.

This article provides a comprehensive analysis on co-operation culture development through clusters and can be used as a practical guide and support research for cluster facilitators, researchers and students in the field of clusters, co-operation and co-operation, economic and regional development.

## **Co – operation, co - opetition and clusters**

According to the traditional view of inter-firm dynamics, relationships are either competitive or cooperative in nature. However, firms can compete and cooperate with each other at the same time in practice (Chai, Yang 2011). Such a situation where firms are in relationship of both – competition and cooperation is defined as a relatively new term: co-opetition, which is the phenomenon when firms engage in simultaneous cooperation and competition with each other (Gnyawali, He, Madhavan 2006). An example of co-opetition in the practice is when firms in this kind of relationship cooperate, for example, to develop a new product and create value, and then compete in a market to get a share of it, or distribute the returns to the value that has been created (Chai, Yang 2011).

There are highly appraisal thoughts on the concept of co-opetition, among various authors. As Gnyawali, He and Madhavan explain in their research, many scholars have argued that firms can generate economic rents and achieve superior, long-run performance through simultaneous competition and cooperation, and that co-opetition is the most advantageous relationship between competitors. In many cases, a co-opetitive relationship can create competitive advantage via complementary resources (Chai, Yang 2011). There are also some critical views, who suggest that collaboration among rivals may inhibit competition by facilitating collusion or by shaping industry structure in anticompetitive ways (Gnyawali, He, Madhavan 2006). There always are some risks that can hamper successful relationships among companies in the co-opetitive environment. In practice, there can always be a risk where one party is not getting enough of a return, leakage of confidential information, different objectives and intentions or distrust (Chai, Yang 2011). Therefore, to minimize these risks, it is important that co-opetitive relationships are carefully developed.

It is clear that companies do not operate in the isolated spaces, they are not only competing for the customers and resources, but to stay competitive in the market, they are also forced to innovate and to find resources not only through competition, but also through cooperation. Therefore the effects and structures of collaborative relationships and co-opetition between companies are elaborated.

Today's business environment requires the ability of firms to pursue both competition and cooperation strategies simultaneously to achieve competitive advantage (Chai, Yang 2011).

It is especially important to pursue both these strategies for SME's who operate with much more limited resources than large companies. Actually various research suggest that collaborative advantage appear to be higher for the SMEs than large companies, and by joining forces with other companies, the SMEs can surmount the limits derived from their limited resources and become dynamic innovators. And although co-opetition is not unilateral and simple, often the advantages can outweigh the negatives (Dana, Granata, Carnaby 2011). Competition and cooperation can help firms leverage economic advantage as they share knowledge, information, marketing intelligence and distribution chains (Dana, Granata, Carnaby 2011). Ability to cooperate is especially relevant for SMEs, if these companies want to internationalize and be competitive not only in their local markets, but also abroad. As Ye Kwan Tang writes, SMEs encounter significant challenges in obtaining resources, foreign market knowledge, overseas contacts and business opportunities, and achieving organizational viability for developing foreign business. Tang explains that networking is important factor that can help SMEs to become more competitive: networks are influential in helping SMEs to overcome resource constraints and isolation and in enabling rapid internationalization from inception or at an early stage of start-up (Tang 2011). It is

important to understand that networks are not some isolated structures that companies just become part of, and then benefit from – they are structures that are being shaped by the companies themselves, through their commitment and collaboration, and the involvement of the companies will determine the success and level of benefits the networking brings. Networks are the products (outcomes) of firms' investments and efforts (Tang 2011).

As Chai and Young writes, the social capital that is developed in strong networks brings several benefits for the networked companies – it provides the access to broader sources of information, provides control and influence and provides solidarity benefits of closure and trust. The cohesive structure of networks exerts positive effect on the production of social norms and sanctions that facilitate trust and cooperative exchanges of high quality information and tacit knowledge, and also serves as a mechanism of social control that governs the interdependencies in partnerships (Chai, Yang 2011). Therefore it can be assumed, that to mitigate risks of co-opetitive relationships and for a co-opetition to be successful, strong networks with developed social capital and relations among partners, are very important. Firms as participants of the networks are also the shapers of the relationships within them.

Firm can have an active influence on its networking activities that shape its network relationships and position, which in turn affects business development. However, networking is resource-demanding [...] and requires considerable time and resources, and the right attitudes and skills, to be effective (Tang 2011).

Tang emphasizes that from a firm's perspective, networking is a resource-intensive business investment, and the commitment of firms to developing and maintaining relationships is essential to cultivate the level of trust and interdependency between partners that motivates exchange of resources (Tang 2011). Indeed the nature of networks, where co-opetition takes place, is not static and does not necessarily imply identically equal relationships among the participants. Much depends on the activity of the companies and the focus of the network – whether it is more on cooperation or on competition focused. Chai and Yang propose a typology of cooperative relationships:

Three main relationships can be found: (1) “cooperative dominant”, when there is more cooperation than competition; (2) “competitive dominant”, when there is more competition than cooperation; (3) “equal relationship”, when cooperation and competition is about the same (Chai, Yang 2011).

The way one of these three dominant phases take place within the network, is largely defined by the objectives and interests of the companies – their needs and goals they want to achieve with the help of the network. As Manuel Castels explains in his book “Communication Power”, networks are complex communication structures that are built and focuses around certain goals, and the structure of the networks is constantly evolving in pursue of the best operational models for the network (Castels 2009). Castels emphasizes that networks are the most successful forms of organization, since they encompass three elements: flexibility, scalability and survivability. Networks are able to adapt for changing circumstances by changing the components of the network, but maintaining the goals. Networks can become wider or smaller without much trouble, they maintain strong level of survivability since there are no one main center in the network (Castels 2009).

Basically what can be derived thus far is, that whether or not co-opetitive relationships among companies arise and are utilized successfully, depends on various factors. Mainly it is firm's readiness to cooperate with others, not only compete in market. It is necessary for a company to understand it's limitations at the first place. If the SME does not see any need for broader pool of resources, if it is not interested to

grow, innovate or enter new markets – if it is not ready to invest time and resources necessary for growth, it will be less likely to cooperate with others. On the other hand, if the SME feels a need for growth, and understands that for that it needs to utilize resources of others, it is more likely to not just only enter networks, but become an active shaper of them.

So far the positive benefits of networks as a flexible, scalable multi-central and goal focused platforms that facilitate effective and less risky co-opetitive relationships has been elaborated on. But what is the main difference between cooperation in a network (a form of strategic alliance) and sporadic cooperation among partners without network relationships? Hassan, Chrisman and Mohamed explain that the strength of ties among cooperating parties influences both – firm behavior and outcomes of the cooperation. In general, strong ties among partners can provide much better results for the parties than weak, sporadic ones (Hassan, Chrisman, Mohamed 2010).

Strong ties are also more likely to foster trust and mutual identification between members. This in turn then facilitates a rich exchange of information that will be taken into consideration and acted on. Such ties can promote a governance structure among the partners characterized by norms of mutual gain and reciprocity, closeness, indebtedness, and a history of interactions. Weak, sporadic ties (for example contractual agreements that do not include development of social capital and deeper relationships among parties) on the other hand do not engender binding commitments because they do not necessarily lead to reciprocity or repeated contacts between parties to an exchange. Important factor is that weak ties can function without any prolonged human or social contact between parties and as such, they do not possess the attributes necessary to foster trust that is an integral part of strong ties. Summarizing, it is concluded that [...] Only strong ties are likely to create the channels necessary for the active exchange of in-depth and detailed information and resources between partners that occur because of trust (Hassan, Chrisman, Mohamed 2010).

It is obvious that strong ties among parties can be developed within the networks, but short-term cooperation, that does not require prolonged relationships, developed trust and knowledge exchange, can be seen as a sporadic action, that does not develop culture of co-opetition among the companies, and all the benefits this approach can deliver, with a condition that a company acts as a active, invested partner and a shaper of these networked relationships. In the next chapter this paper elaborates on widely used and successful form of an organized network platform – clusters, who can serve as tools for competitiveness and innovation.

### **Clusters – tools for cooperation**

Collaborating and networking open up possibilities that cannot be achieved by any single person. The aim or the goal of the networking can have many different views, but there must always be a critical amount of people or organizations involved to fulfill the ambition (Lindahl, Ahlden 2011).

One of the most relevant, successful and globally popular tools for enhancing competitiveness through collaboration and networking is the “cluster”. There are many definitions of “clusters”, but all share the relevance of **geographical proximity, networking and specialization**. For example World Economic Forum states that clusters are: groups of related businesses in a common geographical framework, operating in an environment characterized by a high level of specialization, intense competition and a critical mass of highly trained employees (Ffowcs-Williams 2012). While, as defined by one of the cluster concept founders, Prof. Michael E. Porter:

Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate.” (Porter 2000).

So basically clusters are platforms that are specifically designed for a purpose to enhance competitiveness and innovation through collaboration and networking among partners/members within these clusters: companies, academia and public organizations. And it is very important to understand, that both – collaboration and competition can take place within these networking platforms. So the **clusters can be viewed as a vivid embodiment of the co-operation culture and co-opetition.**

Clusters, as specialized networking platforms and tools for economic development, are widely popular in many countries and regions, and that they bring different kinds of benefits to their participants and broader economic environment. The relevance of clusters in highly globalized economy is more important than ever. A. Centonze notes that over the past two decades, there has been significant emergence of clusters as a focus of academic research and economic development policy. (Centonze 2010). C.S. Colgan and C. Baker emphasize, that there is no doubt that the concept of clusters has become one of the central policy paradigms in economic development during the past decade. (Colgan, Baker 2003). President of The Competitiveness Institute, Dr. Christian Ketels emphasizes that the discussion about the clusters has progressed significantly over the years:

Over the last two decades, the experience with cluster-based economic policies and the launch and management of cluster initiatives has grown significantly. Many countries, especially in Europe, but also in Latin America, North America and parts of Asia have designed policy programs based on the cluster idea. Hundreds of cluster initiatives have been launched, and many of them by now have years of experience. [...] Companies, regional governments, and others, especially academic institutions have learnt to use cluster initiatives as useful platforms for joint action (Ffowcs-Williams 2012).

In the foreword to the cluster initiative green book, M.E. Porter also highlights that the concept of the clusters has emerged as the central idea in competitiveness and economic development over the last decade, and that while understanding of clusters has grown; they have become a prevalent component of national and regional economic development plans (Solvell, Lindqvist, Ketels 2003). “Transnational Alliance of Clusters towards Improved Cooperation Support” (TACTICS) claims:

Globalization has dramatically increased the need for specialization and excellence. Clusters are often a remarkable lever to foster and accelerate this process as they speed up innovation, boost the cooperation among actors and contribute to the territorial economic development (TACTICS 2012).

Many international organizations, development strategists and government consultants have recognized the growing and important role that clusters play in fostering industrial development. International economic organization such as OECD, the World Bank, IMF and others, are engaged in sponsoring research, evaluation and development of clusters or cluster policies throughout the world (Glavan 2008). Today almost every country, region and international aid agency has some form of a cluster program (Lindqvist, Ketels, Solvell 2013). One of the world’s leading experts in the field of cluster development Ifor Ffowcs-Williams writes:

Today’s economy is about speed, flexibility and connectivity in an environment where innovation and economic growth are geographically concentrated. Clusters and their smart specializations are cornerstones of this reality (Ffowcs-Williams 2012).

European Commission is one of the most active cluster development supporters. The European Commission is now actively encouraging the development of world-class clusters. The logic is to support the internationalization of small firms, industrial transformation and the development of regional specializations (Ffowcs-Williams 2012). European Commission views clusters as a key source of competitive advantage in the global economy, and is not only fostering development of clusters, but also is actively supporting the cooperation across the Europe of regional research-driven

clusters, with the objective of promoting European competitiveness and regional development through the smart specializations of regions (Ffowcs-Williams 2012).

It is clear that clusters are becoming increasingly important, and that they play explicit role in fostering the cooperation culture. Also, the development of clusters themselves is not an end-goal. Rather they have to be seen as platforms that bring certain benefits to their participants, regional, national or even European Union level economies. As European Secretariat for Cluster Analysis (ESCA) emphasizes:

Clusters provide governments with an excellent opportunity to address social and economic challenges through business development and innovation support programs. However, clusters have to be considered as a tool not as an objective itself (ESCA 2013).

Keeping that in mind, it is important to understand what the main benefits that the clusters proved are, and how do they can help to develop cooperation culture among their participants and in the regions they operate in.

Clusters play a critical role in innovation processes among firms and in regions. Cluster must be seen in both dimensions: as a collection of different types of complementary actors (firms, R&D institutions, universities, public bodies, financing organizations), and in ways how these actors interact (Lindqvist, Ketels, Solvell 2013). As it is confirmed in one of the most recent and broad analysis: “The Cluster Initiative Green Book 2.0”, clusters create an environment that fosters innovation.

The reason clusters are relevant for innovation is that when there is a critical mass in a location of a sector or industry, the different actors can support each other, and new ideas are formed in both planned and unplanned meetings and interactions. Through interaction within the cluster, conditions are more likely to emerge that are adapted to the needs of the firms, and that are conducive to innovation. [...] By building a commons where firms, research and education institutions, and the other cluster actors can meet, exchange ideas and collaborate in projects, the innovation climate can be radically improved (Lindqvist, Ketels, Solvell 2013).

Cluster organizations can help bring the different types of actors together, and are able to connect business with academia, education with industry, and large firms with small firms. Clusters do this by providing activities and meeting places where common issues can be discussed and acted on jointly. Cluster approach can help to overcome the seven innovation gaps, which are:

1. the **research gap** barring interaction between firms and research organizations;
2. the **education gap** barring interaction between firms and education organizations;
3. the **capital gap** barring interaction between firms and education organizations;
4. the **government gap** barring interaction between firms and public bodies;
5. the **firm-to-firm gap** barring interaction among firms in the cluster;
6. the **cross-cluster gap** barring interaction with firms in other clusters/technologies;
7. the **global market gap** barring interaction with global markets and value chains (Lindqvist, Ketels, Solvell 2013).

One of the main prerequisites of the cluster – collaboration between academia and businesses, plays a crucial role. Cooperation between small and medium enterprises (SMEs) and research centers can make a productive tissue more competitive and dynamic (Cannarella, Piccioni 2005). Therefore, a successful cluster – one that has both active complimentary participants, and developed ways of interaction among them, may serve as a valuable tool for firms to succeed with new products, processes, packaging, logistics etc. (Lindahl, Ahlden 2011). Regional clusters can serve as valuable tool for the firms, since they contain both competitors and linked entities, such as suppliers, universities, and complementary firms.

Information flow between cluster participants (which is easier when firms are in close proximity) is one of the main benefits that cluster platform provides (Ketchen, Snow, Hoover 2004). Since the cluster platform – one that enhances participants to communicate and exchange information among each others, is able to overcome innovation gaps for the companies, the cooperation and networking is one of the most obvious benefits, from being in the cluster. Every participant expects cooperation and networking to take place within the cluster (Lindahl, Ahlden 2011). Therefore, since the clusters networks can provide co-operation environment, that fosters knowledge transfer and development of innovations, clusters can be seen as a tools that actually help SME's to become stronger and more resilient, because innovation capability is critical for SME survival (Wolf, Kaudela - Baum, Meissner 2012).

Innovation fostering environment that the cluster networks provide, encompass several main types of activates, that most of the clusters utilize, and usually focus on 4-5 of them simultaneously, based on what the focus of the cluster is – more R&D or business development. They are:

- General cluster networking: information and knowledge sharing, meeting of various cluster actors, relationship building;
- Human resources upgrading: development of available skills resource pool for the cluster companies;
- Cluster expansion: increase the number of firms, promotion of investment;
- Business development: joint export promotion, purchasing, services;
- Innovation and technology: product, services and process innovation promotion, by enhancing cooperation between cluster companies, and between companies and R&D entities within clusters;
- Business environment: regional branding, improved infrastructure or legal solutions (Lindqvist, Ketels, Solvell 2013).

It can be assumed that clusters serve as a networked innovation fostering environments, which SME's can use to build their capacities and competitiveness. Since clustering initiatives, especially in Western Europe and Nordic countries, have been constantly developing for the last 10 and more years, upcoming approach to develop even more effective, specialized innovation fostering networks is at the forefront. For clusters to keep being dynamic and successful networks that proved benefits for their participants, it is important to focus even more on developing clusters as dynamic cooperation environments.

Recognized expert, practitioner in the field, director for innovation and foresight of the Council of Tampere Region (Finland) Petri Rasanen, in the international workshop “Smart clusters for a new industrial revolution” held in Brussels on 9 October 2013 outlined several key focal points. He noted that focus on the clusters as a cooperation platforms is necessary. The shift is happening from traditional, industry based innovation networks where universities and corporations are the main drivers and networks focuses on R&D projects and „technology push” to the market prevails, towards developing **clusters as a innovation ecosystems which function as a platforms for co-creation, testing and “speeding – up – to market” of new products, solutions, technologies and services.** Building of capability and capacities among cluster companies is the key, and focus is on the „market pull”, rather than „technology push” (Rasanen 2013a, 2013b).

Considering this, it is obvious that development of clusters, co-operation culture and co-opetition within them, is a necessary prerequisite for these platforms to function successfully and to create real benefits for the companies, market and regional economies. As was outlined by the experts and practitioners in the aforementioned

Brussels workshop, development of trustful relationships, social capital, effective transfer of information and knowledge in the clusters takes a lot of time, public support and, very importantly – interest and commitment of the companies and effective cluster facilitators. Since in Latvia generally cluster approach is still in the early development stages, there are many lessons to be learned from more experienced clusters in the Europe and especially in the Nordic countries, on how to develop successful co-operation culture and innovation fostering co-opetition environments through clusters.

Building on the already elaborated theoretical and practical knowledge, next chapter outlines the background of Latvian situation with the cooperation culture in entrepreneurship environment and describes practical key lessons, learned from experienced cluster development experts from Sweden, Finland, that could be used for the successful development of clusters and cooperation culture in Latvia, since development of clusters and co-operation culture closely linked, because the clusters basically serve as a facilitators of co-operation and co-opetition. Key findings are derived from the two events: focus group and expert workshop both held in Riga, in the autumn of 2013.

### **Lessons for development of co-operation culture and clusters in Latvia**

**Lessons learned - situation analysis in Latvia.** The scientific article on entrepreneurship co-operation networks (clusters), as factor for economic security and mechanisms for social inclusion (Rocans 2013), focused on analysis of cluster development policies in EU and Latvia, illustrating a case of “Vidzeme high added value and healthy food cluster” in Latvia. Current situation with cluster development and state support policy in Latvia was analyzed, and it was concluded, that even with the 11 cluster pilot projects, funded for 3 years, through the Investment and Development Agency of Latvia (LIAA), the existing public support for cluster development is insufficient and has risks of short term effects without long term results. It was also elaborated, that cluster approach has a large potential for the development of currently undeveloped co-operation culture in Latvian entrepreneurship environment (Rocans 2013). During the interviews with the participants of Vidzeme food cluster network (representatives of companies and research organizations), it was found out that cluster is not an instrument that can bring rapid changes in the cooperation culture or short term, easily measurable results. For example director of State Priekuļi plant breeding institute A.Kronberga, noted that it is clear that tangible results are not going to happen within the cluster in the short term, since product development and their push to the market takes time, therefore cluster has to be seen as a long-term endeavor and development strategy (Rocans 2013).

In his analysis of Latvian entrepreneurship environment Latvian expert Arnis Sauka outlines several problems that hamper development of competitiveness of the Latvian companies. The list of issues cover problems with unpredictable taxation changes, high production costs combined with relatively low revenues and **insufficient use of communication networks by the companies**. Sauka emphasizes that to be more competitive, Latvian companies need to seriously rise the innovation level, work more actively with the competitors and take more elaborated business risks and to use opportunities provided by the networking with other companies and R&D sector (Sauka 2013). In his analysis Sauka elaborates on similar thoughts that are outlined in the previous chapters of this paper. He notes that Latvian companies very minimally use networks, which are broadly recognized and globally used tool by successful and competitive businesses to achieve competitive advantages and attract external resources

with low costs. He writes that generally Latvian companies almost completely ignore opportunities that they could utilize by cooperating with business labs, universities, R&D institutes, sources of market information, local governments and various entrepreneurship development supporting organizations.

On the other hand, these co-operation resources are actively used by the companies abroad, to enter export markets, stabilize the position of themselves in global and local markets. Therefore for Latvian companies to be competitive, they need not only to deal with external barriers, but also plan for more efficient internal strategies (Sauka 2013). Basically what Sauka outlines, is that Latvian companies are not utilizing co-operation resources and triple helix networks, while companies in other countries are doing it successfully, therefore Latvian companies are lacking in competitiveness and innovation development. As was noted in the interviews by the representatives of Vidzeme food cluster participants (company owner and researcher), both parties noted that cooperation among the companies is not the primary problem – it is much harder for companies to cooperate with R&D institutions, than to cooperate with each other (Rocans 2013).

Indeed situation in Latvia in terms of innovation performance and co-operation is very poor, compared to many other European countries, especially Nordic countries which are innovation and co-operation leaders in the Europe. Statistically only one out of 20 innovative SME's co-operate (with each other and with R&D sector), thus putting Latvia at the very bottom compared with other EU27 countries by this indicator (European Commission 2012) and in 2013, Latvia is still just in front of Romania and Bulgaria in terms of EU member states innovation performance, seriously lagging behind even Lithuania and Estonia, not even mentioning Sweden, Denmark and Finland, which are innovation leaders (European Commission 2013). On the EU 27 level in 2013 the indicator “Innovative SMEs collaborating with others” show the largest growth performance from 32 indicators altogether, with 7,9% growth, which means that in Europe generally cooperation networks are becoming significantly more utilized by SMEs (European Commission 2013).

In Latvia however the situation is different - “Innovative SMEs collaborating with others” is the second lowest performing indicator with negative (- 6,9%) growth, after only staggering failure in “Non R&D innovation expenditures in the business sector” (-26,% in Latvia , - 5,2% in EU27 (also the lowest performing indicator) ) (European Commission 2013) It can be argued that both – very low and decreasing investment in innovation and SME co-operation, are one of the main factors that lead Latvia to be one of the worst innovation performers in the EU. It is obvious that company and R&D networking through co-operation platforms provided by clusters, could be one of the solutions in the Latvia, one that has been highly successfully utilized for more than 15 years in innovation leaders Sweden and Finland.

As was noted in the interview with the Vidzeme food cluster participant, the owner of research farm “Gundegas” Mr. A. Spats, there is lack of coordinating and systematic structures, especially in rural areas of Latvia, therefore clusters are an opportunity for companies. There are no similar knowledge exchange systems among researchers, technologists, producers and traders, besides clusters.

Mr. Spats emphasized that organization of such knowledge exchange network and maintaining of contacts is very time consuming, therefore it is much better that it is done by the professionals (cluster coordinators) than each partner on their own (Rocans 2013). Also, another cluster participant Mr. A. Rungis, owner of the “Valmiermuiza brewery”, who's company is partner in both the tourism and food clusters located in the Vidzeme region, outlined in the interview, that for a small, niche companies who build

their business on high added value products and services not mass production, using clusters as an added value facilitators is not only preferable strategy, but actually a necessity to stay competitive in the market (Rocans 2013).

Also, the competition element of the clusters must not be forgotten. As pointed out by Mr. A. Spulis, coordinator of the Latvian Supply chain cluster, the perfect cluster covers all the elements of the value chain with the companies who are highly competitive, but at the same time these companies must be trustworthy and proven (by the practical joint projects), that means the company leaders must meet each others at least once during the project development (Spulis 2013).

The strategic planning of the cluster development and physical involvement of the company representatives in the meetings and joint projects (not only virtual communication via e-mail or phone) are important factors necessary for successful cluster development, outlined by the Gauja National Park tourism cluster facilitator A.Klepers and the managing director of the Latvian IT Cluster Lilita Sparāne (Klepers 2013; Sparane 2013). Few, joint large EU funded projects (not many small projects) and involvement of the key cluster stakeholders in these joint project development and cluster governance are the key factors that have been important for the successful long term development of Latvian IT cluster, which is one of the oldest and most developed cluster initiatives in Latvia, operating in the form of association already for 7 years, with total attracted project funding of 2,5 million euro, and with 35 member companies (Sparane 2013).

In the interviews with the participants and facilitators of the particular food cluster in Vidzeme, and facilitator of Gauja National park tourism cluster Mr. A.Klepers, it was concluded that for any cluster to develop successfully and stay operational in the long term, two main prerequisites have to be at place:

- 1) Companies who are open for the cooperation and interested in the cluster development and ready to form a clusters"core". If there are no such companies, no national or regional support programs for cluster development will be successful;
- 2) Permanent and long term strategic operation of the cluster coordinator (in many cases a public organization) that has dedicated resources for this task (Rocans 2012).

Since these two factors can be seen as one of the main prerequisites of the successful cluster development in the Latvia, it is beneficial to acquire knowledge from more experienced cluster facilitators, about how to maintain interest of companies to cooperate in the cluster, and how to optimally organize the cluster development processes by the cluster coordinators. Therefore practical key lessons on cluster and co-operation culture development from Swedish and Finnish cluster development expert focus group are derived in this paper. It is especially beneficial, since these particular experts are familiar with the cluster development and related issues in Latvia, since they represent organizations that are developing cooperation projects with the Vidzeme food cluster, and are familiar with the cluster structure and companies.

**Lessons learned from foreign cluster development experts.** Focus group with the five Nordic experts (1) was held in Riga, Latvia on 11 September 2013. Focus group participants were visiting Latvia in the September, in the framework of Swedish cluster led "BSR Food Hosue" food industry cluster co-operation network project development workshop. The focus of this project is to develop strong Baltic Sea Region food cluster co-operation network that would serve as a platform for food industry SME's to integrate in the larger market. Nordic cluster partners are interested in food sector cluster development in the Baltic countries that could be effective cooperation

partners in the long term. Therefore they are developing cooperation with the food cluster organizations in the Baltic countries, and Vidzeme food cluster as one of them. Focus group participants were cluster development experts and practitioners from Finland and Sweden with managing and leading positions within their particular cluster organizations, and with experience in the field of cluster development and development of food industry from 5 up to more than 20 years.

During the focus group three main blocks of questions were discussed with the experts:

- What are the main factors important for developing trustful relationships among companies in the cluster, and what is the role of the cluster management team?
- How in their experience, the cluster development fosters cooperation, co-opetition and the development of trust among cluster participants?
- What are the key lessons from their experience in Scandinavia, to be learned and adapted by the growing Latvian clusters?

All the experts agreed that for a cluster to foster co-operation and co-opetition and trust among companies, several key factors must be in place, and that it takes time and effort for a trustful relationship to develop (1)

Key factors outlined by the experts are:

- Cluster has to serve as a neutral platform, ensuring the equal distribution of information among the cluster participants, (by the cluster coordinator/management team).

All companies should have exactly the same information all the time so that they can't even think that some companies are getting more specific information than others (Lahteenkorva, Focus group, Riga, 11.09.2013; (1))

It is a necessity for a cluster to be a platform that guarantees the information flow between small and large companies, because **normally small and large companies never collaborate with each other**. Cluster must serve as an arena where small and big companies can meet, and such meetings and information exchange among different size companies would never happen without the cluster. (Lindahl, Lähteenkorva, Focus group, Riga, 11.09.2013.) Therefore for a cluster coordinator, it is very important to ensure the equality among different size companies within the cluster, especially when it comes to the joint projects:

“No matter if you are small company or big company, if you are working in the same project you are equal.” (Lahteenkorva, Focus group, Riga, 11.09.2013; (1))

- Joint cooperation projects among cluster participants have to be developed within the cluster, and these projects have to be coordinated by the cluster organization in various levels.

Cluster facilitators have to act as neutral brokers and coordinate the projects together with the companies, but **they should never do all the work for the companies**, they should just give guidelines, provide information and involve companies, and help with coordinating legal issues before these projects start. (Lähteenkorva, Laitinen, Ahldén Focus group, Riga, 11.09.2013; (1))

Legal stuff has to be clear if you start cooperation (in joint projects), it becomes more difficult to do it if there are already results. Companies complain a lot for the paperwork, but you have to do it before the joint projects, because if you don't it can cause problems in a 1-2 years when the actual results develop (Laitinen, Focus group, Riga, 11.09.2013; (1)).

Paperwork always has to be done before the project. If companies develop something together, it has to be outlined what results will belong to which partners, and in a joint projects there always is a line what results belongs to individual companies,

and what is common, therefore projects in a cluster should be run on a different levels, **not to directly mix competition and cooperation components** (Lindahl, Laitinen, Ahldén Focus group, Riga, 11.09.2013; (1)).

- Cluster organization (cluster management team/facilitator) has to be directly involved in shaping the development of the cluster, but has to always be a neutral party.

As a facilitator you can see how to connect the players in a cluster together to create added value. They would not connect themselves without the clusters, because first of all they don't know each other and they would not speak to each other (Ahldén, Focus group, Riga, 11.09.2013; (1)).

If a cluster facilitator is not neutral then trust among companies won't develop. Cluster coordinator and organization has to be open to all members. The role of the cluster manager is to ensure the information platform and keep neutral ground. (Lindahl, Laitinen, Ahldén, Lähteenkorva, Focus group, Riga, 11.09.2013; (1)).

“Sometimes facilitator is aware that there are some companies doing the same development, that makes them direct competitors in the market, and then he should not interfere.” (Laitinen, Focus group, Riga, 11.09.2013; (1)).

To summarize, key factors are: the organizational structure of the cluster (facilitators/management team) that ensure field for information exchange, act as a brokers; joint projects being developed within the cluster; neutrality of the cluster facilitators and equal distribution of information.

There are several ways how the cluster development fosters cooperation, co-opetition and the development of trust among cluster participants.

It is important to understand that cluster is not a static network, it has to be constantly evolving and adapting to changing conditions. The main advantages and factors that differentiate clusters from simple networks, thus making them so valuable for the companies are:

- Cluster is an organized network, where there are facilitators and cluster organization acts as a broker for participants.
- Compared to ordinary network where you mostly have stakeholders from the same field with similar resources and knowledge, in clusters there are many different experts (companies, university, experts in logistics, marketing, product development, branding, biotechnology etc.), therefore cluster can provide a lot more resources for the companies than a simple network, and actually serve as an external development platform for SMEs (Lehmann, Lindahl, Focus group, Riga, 11.09.2013; (1)).

For a cooperation and trust to develop in the clusters it is always easier to start collaboration at the start of the value chain, not when the product is close to entering the market. It is always easier for SMEs to cooperate with each other, or big companies cooperate with the SMEs, since SMEs always can find a way to coexist in a large market space, and big companies on the other hand don't see SMEs as competitors, therefore they are ready to share knowledge and information. Collaboration among big companies is always much more difficult because of their organizational structure that involves a lot of legal agreements etc. (Lindahl, Lahteenkorva, Focus group, Riga, 11.09.2013; (1)).

It is also necessary for the companies to be interested in being in the cluster. It is always better for the companies who are not interested in cooperation to leave the cluster and not to bother others. Those companies which do not understand that in a cluster you are not only benefiting but also sharing your resources and knowledge, they are the ones that usually leave, and it is a very normal process for that to happen.

However in most cases the cluster companies stay and the drop-out rate is minimal, since they value the benefits that information exchange and discussions in the cluster can provide, even if they are not active participants (Lindahl, Lahteenkorva, Ahlden Focus group, Riga, 11.09.2013; (1)).

“We are having companies participating in our cluster organization and they are paying the membership fee just because they want to participate and listen to the discussions, even if they never participate in the joint projects.” (Lindahl, Focus group, Riga, 11.09.2013; (1)).

(for a company to stay) it is very important that companies receive some added value in being in the cluster. As long as a cluster can give companies something and keep them interested they understand the value. If cluster is not introducing new things and increasing, then it will start to decrease. It must be innovative all the time (Ahlden, Lahteenkorva, Lindahl, Focus group, Riga, 11.09.2013; (1)).

Since cluster is a dynamic network, as it develops and grows in time and scale, the level of cooperation changes. Some *mini clusters* (groups of companies) will form inside the “large cluster”, formed by the companies that find they doing some projects in a smaller group, and other things with the larger cluster. Such minor business to business relations groups will occur spontaneously (Lindahl, Lahteenkorva, Focus group, Riga, 11.09.2013; (1)). The similar concept of “micro-clusters” has also been extensively analysed in the doctoral thesis of Latvian cluster development expert Andris Klepers, who is also involved in the strategic development of Gauja National Park Tourism cluster in the Vidzeme region. According to Klepers micro-clusters are specific forms of clusters, in that they consist generally of small companies without dominance of larger companies, and that such clusters are less specialized, but more focused on the relative growth in the competitiveness within the cluster itself compared to the previous competitiveness ratios of the companies. Such micro-cluster approach is especially relevant to the Latvian small internal market situation (Klepers 2011).

The relationships in the cluster – among the companies and between the companies and the facilitator also evolve seriously during the time. For example when the berry mini-cluster in Finland started 6 years ago, there were only competing companies that shared very little information with each other or with the cluster facilitators, and the first half a year was a very difficult time, but since then a lot has changed:

I was working in a cluster for 6 years and at the beginning I did not had a network, companies did not trust me. It really takes years to really develop. And now within 6 years we are doing really, really deep business analysis within the cluster, we are doing all parts of business with the companies, but 4 years ago companies would not discuss those things, would not talk to cluster facilitator about them, It takes time to get the trust.[...] Today sometimes it takes just a one phone call and they are happy (Laitinen, Focus group, Riga, 11.09.2013; (1)).

When a cluster develops, this is common experience that even direct competitors in the cluster like to meet each other and discuss things in the meetings, because they have the same problems, and then suddenly they start to help each other, if they see that in market there is place for them both (Ahlden, Focus group, Riga, 11.09.2013; (1)).

The most important thing unanimously emphasized by all the experts in the focus group, is that trust building and development of co-operative relationships within a cluster is never-ending. It is a continuously on-going process that puts a lot of pressure on the key people in the cluster (most active CEO’s of the companies and facilitators).

“Building the cooperation environment within the cluster never ends, you have to bud it all the time. You can’t set a date, when you finally have achieved trustful cooperation. It is a continuous process. It is changing all the time.” (Ahlden, Focus group, Riga, 11.09.2013; (1)).

Cooperation level in the cluster is never OK, you (cluster facilitator, organization) have to work on it all the time. You can never relax, because it is an ongoing process, and it is absolutely necessary to

have a modern means of communication, to tell the world that you are existing (Lindahl, Focus group, Riga, 11.09.2013; (1)).

Clusters themselves are nothing without the people who are working in the clusters. If important key people leave the cluster, then you have to start again – not from the beginning, but from several steps back. It is absolutely impossible to say that we worked in the cluster for 1,5 years and now the cooperation is OK, it newer is, you can always be better (Lahteenkorva, Focus group, Riga, 11.09.2013; (1)).

To summarize, it is clear that cooperation culture evolves in the cluster with time, it can take more than 2-4 years to have a productive relationships, and even then the trust building is a constant, never ending process that relies on the key people of the cluster. Cooperation relationships in the cluster evolve and change in time as the cluster develops in size and age.

Since clusters in Scandinavia are so much more developed and experienced than cluster initiatives in Latvia, what are the key lessons from their experience in to be learned and possibly adapted by the growing Latvian clusters? Basically there are four blocks outlined, that Latvian cluster facilitators should take as lessons from Scandinavia:

- Cluster branding and external communication;
- Trust building within the clusters;
- Time and public funding for the cluster development;
- Cooperation with other clusters abroad.

As was outlined by the Swedish and Finnish experts, Baltic countries are in a good position currently to develop clusters, and export, since in many foreign markets the opinion on Latvian products and services is still not developed (for example Poland is being associated with the cheap products, that are not interesting for Swedish customers, thus putting it behind Baltic countries), but much work has to be done with the country and cluster external branding. Not only internal but also external communication is extremely important for a cluster to grow successfully.

You have to put much effort of how you present your cluster – everything that goes out from the cluster must be seen from a view of a customer. It is talking to customers – what is in it for them? And to adapt to the new ways of consumption, changing consumer trends, growing specific segments, niches in the industry that clusters have to follow. Cluster can be communication link for companies to reach markets (Lehmann, Focus group, Riga, 11.09.2013; (1)).

For clusters to become successful, trust building is the most important factor to take into account. Trust building has to be on level of interpersonal communication within the cluster, but also constantly developing cluster platform as a reliable organization for companies. As Lindahl and Lahteenkorva strongly emphasized:

**In clusters it is all about trust. That is the most important thing.** Trust is something you can't buy it is something that takes time and you have to earn it. And when you have earned it, you can't be sure that you cannot lose it, and if you lose it you have to do something else, you can lose your trust once. **Even if you represent organizations, it is still very personal. Organizations do nothing, people do things,** and clusters will work if the right people are involved; it is all about the people, not the organizational model. Human capital is the most important thing. If you don't take care of that then you won't be in the business (Lindahl, Lahteenkorva, Focus group, Riga, 11.09.2013; (1)).

Time and public funding available are also very important elements for cluster development. While compared to Latvia, Nordic countries are at the very top of innovation performance and cooperation culture development, it was achieved within a long term and continuous public funding (Ahlden, Focus group, Riga, 11.09.2013; (1)). If the public support is there and clusters are being developed, similar results can be achieved in Latvia, in the following decade:

We are working in a cluster development in almost 30 years, and we have a lot of clusters and cluster networks working together, and that will happen in Latvia also. **In 10 years you will have a lot of clusters here**, and you will be working together and compete and become better and better, based on our experience in Sweden. And more companies will join the clusters, but you need society to put in money for it to work and develop. Public and EU funding is necessary. Things will happen. Companies will get used to work together and with academic work, through clusters. **In 10 years it will look completely different** (Ahlden, Focus group, Riga, 11.09.2013; (1)).

Also it is very important for new Latvian clusters, such as “Vidzeme high added value and healthy food cluster” to integrate into larger value chains, so that to adopt knowledge and experience from much advanced clusters. Clusters who work in the same ways and areas should cooperate with each other and grow together. Clustering creates more benefits not only for the cluster companies, but also for a larger society, it is able to create more employment, bring new competitive products and services to the local and global market (Ahlden, Focus group, Riga, 11.09.2013; (1)).

To sum up the key findings from the focus group, it is clear that clusters as an cooperation culture approach is clearly working, and it has proved to be working successfully in Nordic countries – European innovation leaders. Latvian clusters can learn a lot from Nordic colleagues, and the key things that have to be taken in account are following:

- Cluster development takes a lot of time and effort from the cluster facilitators; it is never-ending process of innovation and trust building that needs public support.
- Key people and social capital within the cluster is extremely important, facilitators should provide neutral ground for cooperation and information exchange.
- External communication and branding of the cluster is also important, cluster cans serve as an external development platform and window to new markets for a companies.
- In positive scenario, cluster development in the next following 10 years can become similar to that in Sweden.

Lessons learned from the focus group are very much in line with the key recommendations for Latvian cluster facilitators, provided by international expert Ifor Ffowcs-Williams (CEO “Cluster Navigators” New Zealand), and during his expert workshop “On cluster Development”, organized by Ltd.”Konso” and Latvian ICT cluster, on 16.09.2013 in “Riga IT Demo centre”.

Mr. Ffowcs-Williams outlined, that based on recent international survey of 350 cluster organizations in 50 countries; the overall picture is that most common areas of cluster cooperation are in the IT, food, automotive, green tech, health and energy sectors. On average, in the clusters there are 4 employees (facilitators, managers), 80 members, 60% / 40% private/public funding and half of the firms in clusters are in an hour’s drive (regionally closely located) (Ffowcs-Williams 2013). He emphasized that it is important for clusters to have a long term vision and mix of public and private funding, cluster geography has to be narrowly defined, with over a half of cluster participants being within an hour’s drive time from each other, and that a cluster organization need s to have a facilitators and a triple helix management board, in which the companies constitute largest part. Cluster has to serve as a neutral meeting place for its participants, and cluster development centers on active relationships, that start developing cooperation in the areas which require low trust among companies. Cluster development must be more action, not analysis driven with a focus on “learning by doing” - “If there are no failures you are taking it too easy!” (Ffowcs-Williams 2013).

The emphasis of effective cluster management and sustainable financial basis is also outlined by the European Secretariat of Cluster Analysis.

Cluster management requires a sustainable financial basis. Without this [...] the cluster management has to spend a lot of resources on fundraising. In consequence these resources are not available for the development and provision of services for the cluster participants (ESCA 2013).

It is very important that the cluster managing team can focus most of its time and efforts on developing trust and cooperation among companies and it can only be done if the cluster organization can provide need-oriented services for the companies, and facilitate co-operation between the cluster members, build visibility and reputation of the cluster (ESCA 2013).

Concluding the analysis, it is clear that for a cluster to foster truly effective and trust-based cooperation culture, much time and resources must be invested in the cluster long term development. There are no short-term solutions.

## **Conclusions and recommendations**

Modern business environment, where SMEs capacity to innovate is one of the most important factors for companies survival, requires the ability of firms to pursue both competition and cooperation strategies simultaneously to achieve competitive advantage, thus engaging in a co-opetitive relationships, best developed within organized networks such as clusters.

Clusters are dynamic, organized networks that change and develop in time and scale, thus also developing and changing cooperation culture among cluster participants. Clusters are globally becoming more important tools that can be used to speed up innovation, boost the cooperation among actors and contribute to the territorial economic development and company competitiveness and survivability in global market.

For a cluster to be successful and sustainable, the most important factors are: development of trustful relationships, social capital, effective and equal transfer of information and knowledge among cluster participants and development of joint projects within the cluster, using cluster and cluster facilitators as a neutral platform providers.

Development of trustful cooperation culture within the clusters is a long-term, never-ending, continuous effort, that is very much dependant on the key people involved in the cluster, effective cluster management by the cluster facilitators and sustainable mix of public and private financing available to the cluster.

Latvia is one of the worst innovation performers in the EU27, and while cooperation among innovative SMEs in EU27 is rising, it is declining in Latvia. Latvian companies generally do not utilize the benefits from networking, thus losing competitive advantage.

To stay competitive in the global market, Latvian SME's need to seriously rise the innovation level, work more actively with the competitors and to use opportunities provided by the networking with other companies and R&D sector. Clusters can be one of the instruments that can help. By integrating in the clusters, SME's will be able to utilize the benefits that co-opetitive relationships in the networks provide.

For Latvian clusters to develop successfully the important lessons to be utilized by the cluster coordinators (managers), cluster development policy makers and cluster participants are: the importance to develop cluster branding and external communication; trust building within the clusters; cooperation with other similar clusters abroad. To achieve similar success level as clusters in Scandinavia, a

sustainable long term public funding for the cluster development and at least 10 years time is necessary.

For Latvian clusters to develop successfully, it is important that cluster companies are open for the cooperation and interested in the cluster development, and this interest to cooperate can be facilitated by the successful, permanent and strategic long term operation of the cluster coordinator (in many cases a public organization) that has dedicated resources for this task.

(1) Focus group organized within the project “BSR Food House” in Riga, Latvia, on 11.09.2013. Available at: <http://www.ideonagrofood.se/index.php/bsr-food-house-ger-utbyte-over-ostersjon/>  
Development workshop available at: <http://www.vidzeme.lv/lv/jaunumi/3/126887/>

Focus group with the five Nordic experts:

- **Jukka Lähteenkorva**, Finland OSKE Programme director of the Food Development cluster of Finland, responsible for coordination of five centres of expertise forming the basis of the cluster, also involved in the management of Finland food cluster coordinating centre of expertise ”Foodwest”Ltd. (operating as a cluster organization since 1995., working with the entire Finnish food industry);
- **Marja-Leena Laitinen**, Development director in ”Kuopio Innovation” Ltd., Finland, one of the five centres of expertise, forming the Food development cluster of Finland, established in 2008. Coordinator of Finland berry cluster.
- **Lennart Lindahl**, President and CEO of Foundation “Ideon Agro Food”, Sweden, operating in Skane region, as a one of the oldest cluster organizations in Scandinavia and Europe. Since its foundation in 1986, more than 500 food industry development projects including companies and academia have been developed. Mr. Lindahl has more than 25 years of experience as an expert in the field of cluster development.
- **Inger Ahldén**, Project coordinator in Foundation “Ideon Agro” Food, Sweden, together with Mr. Lindahl, operating within the cluster for more than 25 years. She has developed extensive experience coordinating and managing many industry-academia projects involving food companies.
- **Rikard Lehmann**, Communication manager within Foundation “Ideon Agro Food”, Sweden, responsible for internal and external communication and branding of the cluster.

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