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Cross-border cooperation institution in building a knowledge cross-border region

Abstract

Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighboring local or regional authorities of different countries located along the shared state borders. They are widely known cooperation mechanisms between the regions.

This paper explores development of integration processes in cross-border region based on the cross-border cooperation organization. Firstly, it conceptualizes euroregions and cross-border cooperation regions from the viewpoint of knowledge management processes. Secondly, the article analyzes management of CBC organizations and knowledge management in general. Thirdly, it examines management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the case of Helsinki-Tallinn Euregio. The article concludes by presenting how a learning organization can be a tool for cross-border regional integration and how it could contribute to the development of a common knowledge cross-border region.

Keywords: cross-border cooperation organization, euroregion, knowledge management process, knowledge cross-border metropolitan region, triple helix, Helsinki-Tallinn Euregio.
JEL Classification: O32.

Introduction

The EU enlargement has created challenging opportunities to countries for the support of economic and regional development. Peripherality is a well-known problem of border regions and there is a wide discussion in the regional development literature about the possibilities to reduce regional disparities.

The cross-border cooperation is one of the most recognized ways to develop border regions (Baldwin and Forslid, 1999; Brodzicki, 2002; Pitoska, 2006). Still, the twenty first century new global economy seems to give metropolitan (city-) regions a new central role. According to Jane Jacobs (1985), regions make the wealth of nations, and yet, often, their governmental structures and functions do not mirror those important urban social, political, and economic and spatial facts. In a British study which describes the challenges and opportunities for knowledge based city-regions under the term "Ideopolis", a city-region is defined as "the enlarged territories from which core urban areas draw people for work and services such as shopping, education, health, leisure and entertainment" (Brenner, 2003).

Cross-border cooperation, in general, refers to "a more or less institutionalized collaboration between contiguous sub-national authorities across national borders" (Perkmann, 2003). One possible and wide-spread cross-border cooperation institutional structure is the euroregion. Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighboring local or regional authorities of different countries located along shared state borders (either land or maritime borderlines).

The authors of the article will use the terms *euroregion* and *cross-border cooperation (CBC) organization* synonymously hereafter to denote an area of cooperation of local and regional authorities situated directly at the border, or close to it and collaborating in different sectors.

The authors of the article work for the Non-Profit Association Helsinki-Tallinn Euregio (further: Euregio) whose mission has been stated as "to enhance cross-border integration between Helsinki-Uusimaa region and Tallinn-Harju county" and the role is "to promote and assist cooperation inside the twin-region, Euregio supports and promotes inter-regional development and competitiveness, aiming to strengthen the regional knowledge-based economic development". It was founded as a network in 1999 and re-organized as a non-profit organization in 2003. As euroregions have been often created for finding solutions to concrete problems and not for dealing with the development of the competitiveness of the region, Euregio stands out as a different case. Euregio will be dealt with as a learning organization. From the point of view of the target and mission of Euregio, its aim is to develop a cross-border metropolitan knowledge region.

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The organization's development has raised several theoretical questions that have proved to be academically insufficiently covered. The problem with regard to activities of the organization lies in disparities in the development of innovation environment between Finland and Estonia. Thus, investigation process is two-fold: organizational learning about the actors that help overcome this disparity and influencing actions via regional decision-makers to help overcome these disparities.

The goal of the article is to analyze knowledge management in the creation of a knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the case of Helsinki-Tallinn Euregio as an example.

Our hypotheses are that a euroregion that aims at developing a cross-border region of knowledge, arts and science should be a developing learning organization itself and, according to the stakeholders, there takes place development towards a metropolitan knowledge cross-border region.

The empirical part of the paper consists of the Euregio's case as its novelty lies in the fact that CBC takes place between capitals/metropolitan regions, not peripheral regions. Still, disparities between two regions exist and they both, Estonia and Finland, are located far from the European growth centers.

The novelty of the article also lies in the fact that it analyzes management of euroregions and specifically the implementation of knowledge management in a cross-border cooperation organization based on the case of Helsinki-Tallinn Euregio. Although there is abundant literature on knowledge regions, the literature about knowledge cross-border region is scarce.

This paper explores development of integration processes in cross-border region based on the cross-border cooperation organization. Firstly, it conceptualizes euroregions and cross-border cooperation regions from the viewpoint of knowledge management processes. Secondly, the article analyzes management of CBC organizations and knowledge management in general. Thirdly, it examines management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the case of Helsinki-Tallinn Euregio as an example. The article concludes by presenting how a learning organization can be a tool for cross-border regional integration and how it could contribute to the development of a common knowledge cross-border region.

The present research is a part of an ongoing longer research.

1. Theoretical framework

1.1. Cross-border cooperation organizations. Historically, the euroregions have come into existence due to the fact that unnatural barriers have been created between regions and ethnic groups which actually belong together. They are widely known cooperation mechanisms between the regions. Until today the concepts and characteristics of CBC organizations have been worked out by the Council of Europe and dealt with mainly by EU institutions and by associations uniting border regions.

However, the characteristics, management and problems of euroregions have not been thoroughly investigated in the Baltic Sea Region. Moreover, there are very few examples of clear institutional and functional frameworks presiding over large cross-border urban regions (Brunet-Jailly, 2002). The management of the cross-border cooperation varies. There can be a joint executive committee created for a cross-border structure or region, permanent working groups and/or a cross-border secretariat with members from both sides of the border (AEBR). With the EU regulation on the European grouping of territorial cooperation (EGTC), adopted in 2006, the initiative was made to reduce the obstacles and difficulties encountered in managing actions of cross-border, transnational or interregional cooperation within the framework of differing national laws and procedures (MOT 2008).

Since 1958, when the first euroregion was created, more than 100 cross-border cooperation structures have been established at regional/local level along the EU's internal and external borders. Very often, there are big differences with regard to size, population, competences and financing. Regarding the euroregions in the Baltic Sea Region, the analysis of the characteristics and most crucial problems for cross-border cooperation institutions and ideas for addressing the problems has been made by Lepik (2009), based on the research, carried out among the leaders of the 35 CBC organizations.

Today the cross-border cooperation organizations in Europe differ with regard to organizational set-ups, legal forms, membership, roles and financing that characterize everyday activity of the cross-border cooperation. Knowledge management importance has risen as today's effective and successful regional and interregional

organizations have been built on triple-helix model. Triple helix cooperation is a term used to denote cooperation between three sectors in the society: the public sector, businesses and high schools/universities at the regional, national and multinational levels (Etzkowitz, 1998). This system is complicated and demands from counterparts knowledge sharing, as well as knowledge creation, sharing storing and transfer systems.

1.2. Knowledge management and cross-border learning organization. The concept of knowledge has fascinated scholars in many disciplines for a long time. Different perspectives have given rise to different methodologies by which knowledge can be studied and different ways for analyzing, interpreting and managing knowledge (Troilo, 2006; Firestone, 2001). Over the last decade the concepts of knowledge and knowledge management in business and management sciences have been up and down the sinuous curves of the hype cycle. Now it is recognized that knowledge, as a management theme, is a fundamental part of our present and future (Dawson, 2005).

The important distinction for the CBC institutions is between tacit and explicit knowledge, introduced by Polanyi (1996): we can know more than we can tell or explain to others. Explicit knowledge is what we can express to others, while tacit knowledge comprises the rest of our knowledge — that, which we can not communicate in words or symbols. Much of our knowledge is tacit. Explicit knowledge, conversely, can be put in a form that can be communicated to others through language, visuals, models, diagrams or other representations. When knowledge is made explicit by putting it into words or other representations, it can then be digitized, copied, stored, and communicated electronically. It has become information. What is commonly termed explicit knowledge is information, while tacit knowledge is simply knowledge. One way we can share our tacit knowledge with others is socialization, where we converse directly, share experiences, and work together toward enhancing another person's or organization's knowledge (Dawson, 2005).

An organization's competitiveness is based on its capabilities that impact its performance. Those capabilities are based on a fusion of effective goal-oriented business and management processes and skills, both of which are forms of knowledge.

Firestone (2001) defines knowledge management as human activity that is the part of knowledge management process (KMP) of an agent or collective. And the KMP, in turn, is an ongoing, persistent, purposeful network of interactions among human-based agents through which the participating agents aim at managing (handling, directing, governing, controlling, coordinating, planning, organizing) other agents, components, and activities participating in the basic knowledge processes (knowledge production and knowledge integration) in order to produce a planned, directed, unified whole, producing, maintaining, enhancing, acquiring, and transmitting the organization's knowledge base.

There is no consensus on the nature of knowledge (Firestone, 2001). Definitions vary from "Justified true belief" (Nonaka and Takeuchi, 1995), "knowledge, while made up of data and information, can be thought of as much greater understanding of a situation, relationships, causal phenomena, and the theories and rules (both explicit and implicit) that underlie a given domain or problem" (Bennet and Bennet, 1996) to "knowledge is the capacity for effective action" (Sveiby, 1996). This definition is the one favored by the organizational learning community. Similarly, Tom Davenport and Larry Prusak contend that "knowledge can and should be evaluated by the decisions or actions to which it leads", while Donald Schön notes of professionals that "our knowledge is in our action".

Firestone (2001) distinguishes three types of "knowledge":

- World 1 "knowledge" − encoded structures in physical systems (such as genetic encoding in DNA) that allow those objects to adapt to an environment;
- World 2 "knowledge" − validated beliefs (in minds) about the world, the beautiful, and the right;
- World 3 "knowledge" − validated linguistic formulations about the world, the beautiful and the right.

In many organizations, there is little concern with world 1 "knowledge" and with the beautiful, and only slightly greater concern with the right, so world 2 and 3 "knowledge" of reality is in the outcomes of knowledge processes that are of primary concern to knowledge managements.

Malhotra (2001) looks at knowledge management as "a synthesis of IT and human innovation: knowledge management caters to critical issues of

organizational adaption, survival and competence, in face of increasingly discontinuous environmental change. Essentially, it embodies organizational process that seeks synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings" (2001).

The authors of this article consider Malhotra (2001) and Karl Wiig's (2000) understanding of knowledge management relevant for cross-border cooperation organizations that have directed their development towards a learning organization.

"Knowledge management in organizations must be considered from three perspectives with different horizons and purposes:

Business perspective − focusing on why, where, and to what extent the organization must invest in or exploit knowledge. Strategies, products and services, alliances, acquisitions, or investments should be considered from knowledge-related points of view.

Management perspective − focusing on determining, organizing, directing, facilitating, and monitoring knowledge-related practices and activities required to achieve the desired business strategies and objectives.

Hands-on operational perspective − focusing on applying the expertise to conduct explicit knowledge-related work and tasks."

Authors consider Senge's (1990) definition of the learning organization most suitable in the CBC organizations context. Senge defines Learning Organizations as "Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together." A Learning Organization has five main features: systems thinking, personal mastery, mental models, shared vision and team learning. In Euregio's context the authors propose that unlike Senge who suggests that all characteristics must be simultaneously developed, O'Keeffee (2002) suggests the characteristics of a Learning Organization are factors that are gradually acquired.

There has been an extraordinary burgeoning of literature in recent years on the relationship between innovation, learning, and regional economic development. This includes literature exploring the concept of a `learning region' (Florida, 1995; Morgan, 1997; Simmie, 1997) and knowledge region. As the Helsinki-Tallinn Euregio's strategy indicates the concept of a knowledge region, the authors remain with the term "knowledge region".

The authors consider most relevant approach to the definition of knowledge cross-border region as presented by the team of the Crossworks (2008) project:

As the analysis shows, leading knowledge region models compel:

- the development of high-tech services;
- the development of education: knowledge workers, universities, life-long learning;
- the development of wide cooperation and collaboration in R&D among and between triple helix actors;
- international cooperation in R&D.

Further moves to extend cooperation should be based on longer-term strategic considerations linked to the science policies of both countries and innovation policies of the countries and cities.

2. Methodology

In terms of methodology, the article adopts a mix of primary research and secondary evidence provided by the literature. Evidence was collected by participatory method via in-depth interviews, elite interviews and questionnaires. The qualitative approach was selected as euroregions are not widely known among not-involved citizens.

The empirical research evidence consists of the 3 investigations and a case:

(a) the investigation carried out among the thirty-five cross-border cooperation organizations in the Baltic Sea Region to identify the most crucial issues and problems for euroregions (Lepik, 2009);
(b) investigation among Helsinki-Tallinn Euregio owners and partners;
(c) elite interviews;
(d) Helsinki-Tallinn Euregio case.

2.1. Research methods. (a) The leaders of the 35 CBC organizations from the Baltic Sea Region commented on the 10 statements concerning euroregions to find out the characteristics and most crucial problems for cross-border cooperation institutions and receive ideas for addressing the problems. The study was carried out in 2006 and other aspects, apart from knowledge, have been addressed in the article "Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region" (Trames, 2009).

(b) The questionnaire. The questions involved Euregio's expected areas of expertise, influence

mechanisms, supporters and co-partners. The questionnaire was sent out to 50 persons in October 2007, the stakeholders and partners of Euregio: members of the general meeting, members and substitute members of the board and secretariat members, entrepreneurs, artists, university lecturers, former speakers on Euregio fora, former project partners. Out of 50 questionnaires 32 answers were received. Respondents were asked to prioritize the statements. There was "other, please specify" option. The given priorities numbers were counted and the number of points calculated.

The statements were:

1. Euregio should influence the decision-making of city governments and state governments in the following policy areas:

- innovation;
- general and spatial planning;
- environment protection;
- physical infrastructure;
- social services;
- energy economy;
- education;
- regional development;
- other, please specify.

2. Helsinki-Tallinn Euregio should influence changes in society through:

- top-leaders (mayors, vice-mayors, municipality heads, MPs, CEOs, etc.);
- middle-level leaders (heads of departments, etc.);
- officials;
- university representatives;
- artists and media people;
- entrepreneurs.

3. Helsinki-Tallinn Euregio is a representation and cooperation organization for:

- politicians;
- common citizens;
- university professors and students;
- artists;
- entrepreneurs;
- Others: .....

4. Please, describe what indicates Euregio's success?

(c) Elite in-depth interviews on regional integration

The research question was on the perspective of regional integration between Helsinki and Tallinn metropolitan regions as the main target area for Euregio. The perspectives of development of Euregio as an institution were additionally studied.

Elite interviews on regional development perspectives were carried out with 14 experts (university, local government, entrepreneurs) from both sides of the Gulf.

Elite interview questions:

1. Which scenario do you predict to happen?

- integration between two regions will deepen;
- joint integration will not happen at all;
- a new entity Helsinki-Tallinn twin-region will emerge;
- regional integration will happen in a form of knowledge region/science and arts region/technology region/functional region/virtual region.

2. Which scenario do you predict to happen to Euregio?

3. How to brand the twin-region and Euregio?

The questions were asked in the course of discussions in order to allow the respondents to comment and offer ideas connected to the research area. Every interview lasted about an hour, the interview period was February to July, 2008 and interviews were conducted by two persons and they were recorded. Respondents were promised anonymity, their names were recorded by researchers.

(d) Helsinki-Tallinn Euregio case

Helsinki-Tallinn Euregio's mission, role, institutional structure and management, strategy, priorities and activities for implementing the given tasks were studied. The investigations named above have been included in the analyses of the case. Additional evidence was gathered from secondary material as well as policy documents of European Union institutions, Council of Europe and cross-border organizations, Helsinki, Tallinn, Uusimaa and Harjumaa different strategy documents, Euregio fora, conference and workshop materials; articles in the local and international press, government programs affecting cross-border co-operation and related issues as well as Internet data were reviewed.

3. Helsinki-Tallinn Euregio case

Authors investigate Helsinki-Tallinn Euregio case as an empirical inquiry that analyzes a phenomenon of the organizational development and goals within its real-life context. Case study research includes qualitative evidence – the questionnaires, elite

interviews and strategy documents of Euregio and its partners.

Euregio has a well-developed institutional organization with characteristics of a classical management system: General meeting, Board meetings, Secretariat meetings as strategic management bodies, manager, project managers as implementing bodies; permanent funding by partners, additional funding from European projects; priorities and action plans are worked out yearly, information producing and preserving mechanisms are established. Since 2001, the target area is innovation, science and arts co-operation, competitiveness of the region. Additionally, the organization has a specified target area of activities – Harjumaa/Tallinn and Uusimaa/Helsinki metropolitan regions.

From both an understanding-oriented and an action-oriented perspectives, it is more important to clarify the deeper causes behind a problem of further developments of the Euregio and the region.

4. Helsinki-Tallinn Euregio – organization, mission, priorities

Helsinki-Tallinn Euregio started as a cross-border cooperation network in 1999. The non-profit association (NPA) for providing services to the partners of the network was established in 2003. Helsinki-Tallinn Euregio's role is to promote co-operation inside the region and enhance regional integration by:

- being a cross-border, triple helix driven tool;
- aiming to strengthen the cross-border regional knowledge based economic and political development;
- aiming to develop a united multi-cluster innovation region of high competitiveness.

The financing of Euregio is provided from annual membership fees paid by the partners. Additional sums for joint projects are applied for from various national and international funds. The key event of the cooperation process is Euregio fora, which takes place every 1,5 years. The second most important event is the Knowledge Arena, which takes place every second year. Effective work in the period between the key events is carried out in seminars, conferences, round table meetings, minor and major cooperation networks, project groups, forming, maintaining and mediating of contacts between local governments, academic circles and entrepreneurs.

Helsinki-Tallinn Euregio members are: Helsinki, Tallinn, Uusimaa Region, Republic of Estonia represented by Harju county government and Union of Harju county municipalities.

The list of cooperation partners includes Culminatum Ltd. (Uusimaa research and development center), the Tuglas Association, the Finnish Institute in Estonia and the Estonian Institute in Finland, embassies, EAS (Enterprise Estonia), universities, science parks, chambers of commerce and trade and ministries.

The mission of Euregio is to increase balanced cross-border integration and to contribute to the emergence of the Harjumaa-Uusimaa, a cross-border metropolitan knowledge region, by boosting the entire area competitiveness and sustainability. The development of an integrated cross-border region is based on the principle that both sides should benefit from closer ties and cooperation and that balanced mutual economic cooperation makes the two metropolitan regions stronger and more visible together than they could be apart. The basis for this process is provided by an innovative and creative environment, knowledge-based economy, mutual support and operation according to the "triple helix" principle – cooperation of universities, business and local governments to either side of the Gulf of Finland.

Euregio priorities are set by two-year periods. The period of 1999-2000 was, for the Estonian and Finnish sides, primarily a period of learning to cooperate and adjusting to the other party's operating culture. The first formal action plan was drafted for the years 2003-2005. Keywords of that period were connected to the European Union – how it works and how to operate within the union, dialog and information exchange, learning how to select possible projects in accordance with the needs of Tallinn and Harjumaa, how to solve own problems. The rectors and pro-rectors of universities of Tallinn, representatives of the Tallinn City Chancellery and higher officials of the Ministry of Education and Research convened in the Euregio offices in January 2004 in order to agree on common interests and spheres of cooperation. The Science twin cities project was completed in 2005; it comprised six reports and studies, including two specifically dedicated to Helsinki-Tallinn universities cooperation "Helsinki-Tallinn − Science Twin City: University Cooperation Development" (Merle Krigul) and "Cooperation in High-tech Business Development" (Raivo Tamkivi).

Keywords for the period of 2005-2006 were competence and knowledge: development of the science region concept, branding activities for the

science and arts twin region – the idea of a science twin region was complemented by art and the designation no longer concerned twin cities, but twin region.

Priorities for the period of 2007-2009 included sustainable regional planning, creating a common business environment, developing human resources. The keywords were recreation services and ways for improving welfare of seniors; relations between urban space and "new media artists", use of new technologies in humanizing the urban space (m-services, VJ-bus, wiki-technologies) and new type of festivals; branding and marketing; cooperation between euroregions of the Baltic Sea area.

Priorities for the period of 2009-2013 are increased interaction in spatial and regional planning, creation of innovative and a barrier free region with common well-functioning markets and development of Twin-region of Arts and Sciences. In order to implement the above-mentioned priorities, the activities must include a fixed link/transportation systems' development study, Helsinki-Tallinn Twin-TV based services' development, implementation of the Living Laboratories' method in Tallinn metropolitan region and common festivals in the framework of Tallinn Culture Capital 2011.

5. Results

5.1. Investigation of euroregions. Based on the study (Lepik, 2009), cross-border cooperation organizations in Europe, depending on type and role, differ in management categories and implementation of management. Euregios are part of knowledge management process, being collective agents of managing cross-border knowledge production, preservation, integration and transfer. In the case, where the strategy, vision and mission of a cross-border cooperation organization are focused on basic knowledge processes, then knowledge management should be applied. Euroregions' competitiveness and sustainability are based on a fusion of effective goal-oriented business and management processes and skills, and both of them are forms of knowledge.

Knowledge management is an inherent part of the work of developed cross-border cooperation organizations as it demands organizational capabilities. As cross-border organizations act in a very practical world, Firestone's World 3 "knowledge", accompanied by Wiig's business, management and hands-on perspectives, forms theoretical basis for the analysis of cross-border organization management. Explicit and tacit knowledge is important part of everyday life of these organizations.

According to Lepik (2009), newer euroregions feel a lack of funds and human resources that raise a dual situation – on the one hand, there is lack of finances for using them in developing knowledge formation, storing and management, and lack of time to develop special knowledge systems; on the other hand, as a majority of euroregions in the Baltic Sea region have one to four employees, a manager is expected to be competent in all areas of activities and processes on different sides of borders. She or he becomes a real knowledge bank – if the manager leaves, organization is at risk of not being sustainable, as explicit knowledge consists basically of minutes of meetings, project descriptions and annual reports; good or bad working relations, unofficial networks, contexts and inside information are not described in the written form.

In knowledge management of euroregions tacit knowledge is predominant, both, in older and newer organizations: this is the information, competencies, and experience possessed by employees, including professional contacts and cultural and interpersonal dimensions – openness, lessons to be gained from successes or failures, anecdotal fables, and information sharing (Hellriegel, 2002). Tacit knowledge is inexpressible, so, in many instances, it is impossible to share it even through non-verbal communication. Thus, if we accept the idea of personal, tacit knowledge, we must also accept that knowledge is not always the experience we can share. Socialization is the possibility to add to knowledge sharing and this is the inherent part of activities of euroregions.

In newer cross-border cooperation organizations actors of knowledge management are covered or partly covered: use of new technologies (tele-conferences, Skype, etc.), knowledge producing and preserving procedures are well established (systems of minutes, information sharing etc.), still, the problem of one-person-connected knowledge and knowledge management makes cross-border cooperation organizations vulnerable.

The importance of knowledge management has increased as today's effective and successful regional and interregional organizations have been built on triple-helix model and form a complicated system. This system is many-sided and demands knowledge storing systems, as well as knowledge transfer and competencies to use the positive effects knowledge management process in different aspects offers.

Cross-border cooperation organizations are well informed about the local needs and problems of border territories and they are bearers of longstanding tradition of cross-border cooperation on the grass-root level. This knowledge and experience of the cross-border cooperation organizations are valuable for discussions concerning crucial issues of the region. Effective knowledge management in a cross-border organization would contribute to developing regions' competitiveness. This means that knowledge creation, storage, and transfer are essential factors of raising regional competitiveness.

According to the development documents of both Estonia and Finland, and strategic plans of Tallinn, Helsinki, Uusimaa and Harjumaa (Tallinn Development Strategy 2025, Harju County Development Strategy 2025, Trends and bases for activities of the Union of Harju County Municipalities 2007-2013, Uusimaa Development plan 2030/Vision and Strategy, Helsinki Strategy Program 2009-2012), all counterparts state that knowledge economy is the future of development of the region. This sets frames to Euregio – Euregio should be a learning organization, and the management type is knowledge management.

5.2. Results of the stakeholders' questionnaire. The areas where positive changes are expected:

Respondents favored innovation (28 points), education (27), regional development (25) and social services (24), environment protection (1), physical infrastructure and energy economy (0 points).

Power of influence of stakeholders:

Euregio is influential via top leaders (18 points), entrepreneurs (14 points), artists and media people (13 points), university representatives (10 points), middle-level leaders (heads of departments, etc.) (0 points), officials (0 points). Strong connection to the respondents' profession or position was noted: university and art representatives did not mention official top-leaders; official top-leaders did not mention middle-level leaders and artists. It may indicate that for official city leaders new developments in city entrepreneurship bases are not familiar and ideas of city economic bases are traditional. The under-estimation of the middle-level leaders surprised the authors as the majority of every-day practice is going on between the middle-level leaders.

Euregio partners in the strategy process:

Euregio was considered as a representation and co-operation body for city authorities (others – 6 points), artists and media people (5 points), entrepreneurs (3 points); politicians and common citizens were not mentioned. It may indicate that mayors and vice-mayors are not considered to be politicians, and the link to common citizen is understood directly.

Euregio's success factors:

Euregio's success factors were connected with fora, seminars, projects, implementing new ideas.

There was a strong connection with respondents' profession. University-connected respondents tended to consider Euregio as a developer of a science and arts region through people connected to universities and artists and they under-estimated local government and politicians' roles. The trend was stronger among Estonian experts. This trend needs further study. Respondents, being the city or regional officials, underestimated university cooperation and pointed out cooperation between local authorities. Only one respondent indicated that success factors can be characterized by the development of co-operation between the regions, namely, the number and scope of joint projects, the number of joint events, marketing and representation of the region in fairs, seminars, etc., the number of joint publications, etc. For the Euregio staff the study indicated the necessity to repeat the questionnaire and organize interviews with key persons. It is also necessary to achieve common understanding between main stakeholders about the expectations towards Helsinki-Tallinn Euregio organization and towards the twin-region as the main goal. Proceeding from these results Euregio brand can be developed.

Based on the research it may be stated that Helsinki-Tallinn Euregio is expected to focus on innovation and education, meaning knowledge dissemination, its visibility increased through top-leaders. The main clientele being from the demand side founding members (board, top-politicians and top-officials, secretariat) and supply side being universities, innovative businesses, new media representatives, and new media artists.

5.3. Results of the in-depth elite interviews.

Future trends for regional integration:

Integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programs. Still, there is no twin-region self-identification (8 experts).

Joint integration will not happen at all. The cities and the regions will follow different paths and the present interaction and networking will be stopped either by internal (common will, laws, economic situation etc.) or external (national security situation, natural disasters, etc.) forces (2 experts).

A new entity, Helsinki-Tallinn twin-region, will emerge.

A twin-entity may correspond to many features. It may include, for example, joint universities between the cities, joint city councils, joint city departments, joint services in the region (social services, health care, procurement, etc.), joint resources, joint transport networks (tunnel), joint spatial planning (general and regional planning), etc. A new dialect (like stadia) might emerge (4 experts).

Future trends for Euregio development:

Euregio is a strong networking and matchmaking organization between Estonia and Finland (8 experts).

Euregio will continue working as it has so far and no significant changes happen. The awareness of the activities and results of Euregio remain low among the stakeholders as well as the target group (3 experts).

Euregio will be transformed into something else like Öresund Committee or Euregio might finish its existence (3 experts).

Euregio branding:

Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

The investigation showed that regional integration will deepen between the two regions, still the self-identification of the region as a twin-region is not foreseen, Euregio development is seen by interviewees as continuing and strengthening but not transforming into any other type of organization. The number of respondents, who believe in positive qualitative developments, indicates that Euregio activities and goals correspond to interviewed partners' expectations.

5.4. Case study results. Euregio's organization and interplay with founding members and interested parties can be described as follows:

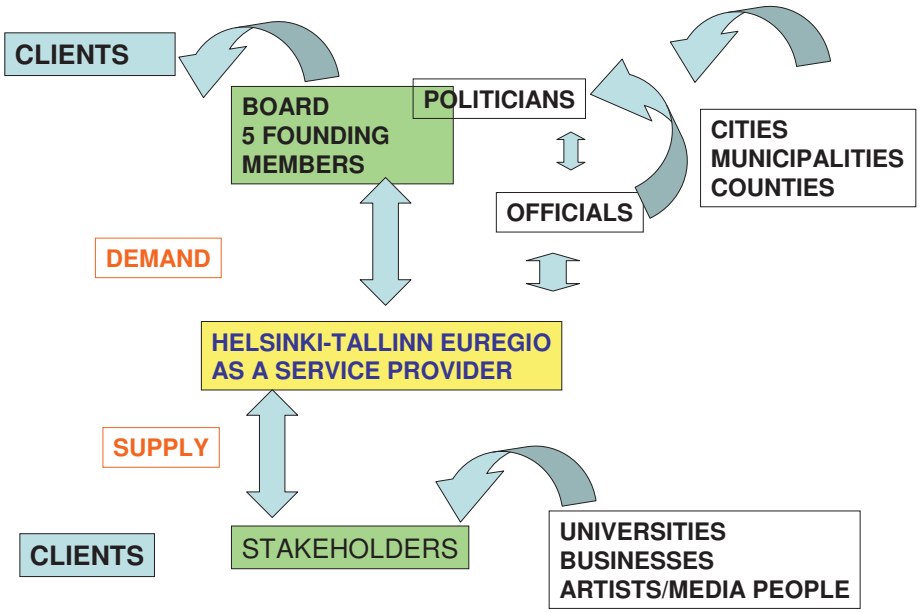

Fig. 1. Euregio's supply and demand chart

Euregio is the only regional level tool between Estonia and Finland which deals with contact making between universities, enterprises and local governments. This task is not given to any other institution in Estonia either by law or by general practice. Helsinki-Tallinn Euregio is also the only institution between Finland and Estonia whose primary task is to enhance regional integration towards a joint region, in Euregio documents also referred to as a twin-city and twin-region.

Based on the analyses of the interviews we may conclude that the organization with the tasks to enhance regional integration would be a learning organization as the tasks continuously vary and develop. Such organization should be developing itself – its systems thinking, personal mastery, mental

models, shared vision and team learning. This is proved by the change in priorities from 1999 to 2001 when learning how to cooperate was stressed until 2009 when extended infrastructure projects are planned.

The stakeholders foresee the development towards a metropolitan knowledge cross-border region. As it is a complex task, knowledge management should be applied.

The twin-region of arts and science (knowledge region) has been stressed but the creation of no other joint institutional structures apart from Euregio is foreseen, e.g. joint city councils. Based on the elite interviews, integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programs.

The target status of Euregio could be as follows:

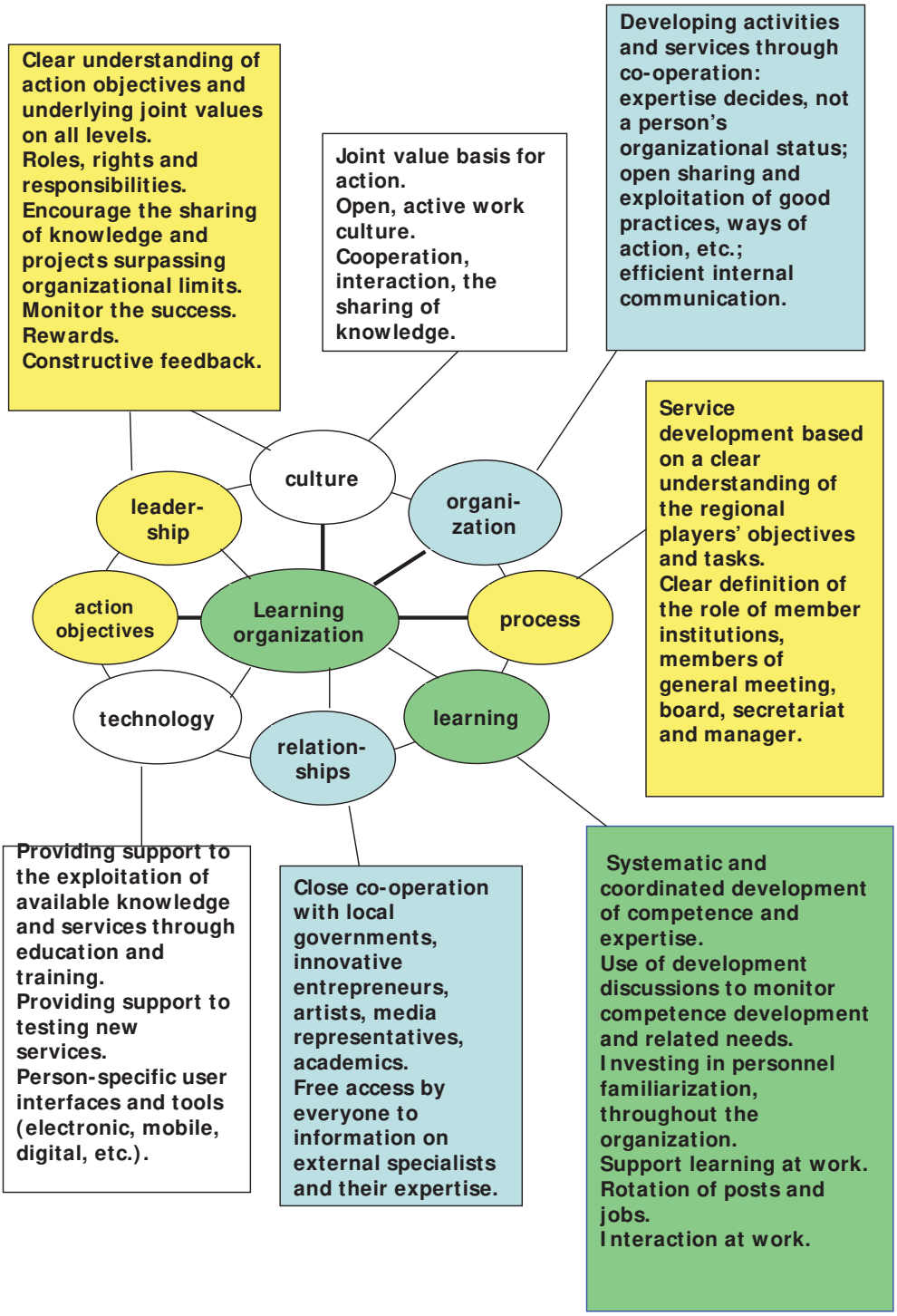

Fig. 2. Euregio's target as a learning organization

According to the authors, in order for the Euregio to be a learning organization, with new and visible tasks, it should grow both in capacities and numbers of working force and should remain one of the leading forces in promoting cross-border regional integration. Further regional development via joint projects, developing joint services, common television, joint festivals and marketing is the most possible option for Euregio in the near future. Branding of a region is usually a task for national governments, but as cities play growing role in regional economic development, still a joint marketing system for the region should be established. Branding the region and the organization is inter-connected. Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

Based on the investigations, the authors claim that regional integration should develop towards metropolitan knowledge cross-border region, meaning integration of higher education, high-tech entrepreneurship, services and new media and arts. They will serve as Euregio priorities in the near future.

6. Recommendations for further research

Euregio's role, as a change agent in knowledge transfer and open innovation, requires further research.

Mutual understanding and acceptance of counterparts of triple helix – local authorities, academic circles and innovative entrepreneurs need further study. There is a need for clarifying the triple helix concept and the added-value of developing such cooperation as well as developing common long-term strategies for how to achieve it. For the Euregio staff the study of stakeholders indicated the necessity to repeat the questionnaire and organize interviews with key persons to find out more on Euregio's success factors and brand Euregio better. Institutional cooperation and coherence of strategy documents between Estonia and Finland for knowledge cross-border regional integration are needed.

Conclusion

The cross-border cooperation is one of the most recognized ways to develop border regions (Baldwin and Forslid, 1999; Brodzicki, 2002; Pitoska, 2006). The twenty first century new global economy seems to give metropolitan regions a new central role.

Cross-border cooperation in general refers to "a more or less institutionalized collaboration between contiguous sub-national authorities across national borders" (Perkmann, 2003). One possible and wide-spread cross-border cooperation institutional structure is a euroregion. Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighboring local or regional authorities of different countries located along shared state borders (either land or maritime borderlines).

The authors of the article used the term *euroregion* and *cross-border cooperation (CBC) organization* synonymously hereafter to denote an area of co-operation of local and regional authorities situated directly at the border, or close to it and collaborating in different sectors.

The goal of the article was to analyze knowledge management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the example of Helsinki-Tallinn Euregio.

Our hypotheses state that an institution that aims at developing a cross-border region of knowledge, arts and science should be a developing learning organization itself and, according to the stakeholders, there takes place development towards a metropolitan knowledge cross-border region.

Authors used Helsinki-Tallinn Euregio case for an empirical inquiry that analyzed a phenomenon of the organizational development and goals within its real-life context. Case study research included qualitative evidence – two questionnaires, elite interviews and strategy documents of Euregio and its partners.

Euregio is the only regional level tool between Estonia and Finland which deals with contact making between universities, enterprises and local governments and whose mission is "to enhance cross-border integration between Helsinki-Uusimaa region and Tallinn-Harju county" and the role is "to promote and assist cooperation inside the twin-region, Euregio supports and promotes inter-regional development and competitiveness, aiming to strengthen the regional knowledge based economic development".

Euregio strategy documents set frames for Euregio as a learning organization, using knowledge management. Based on the research it may be stated that Helsinki-Tallinn Euregio is expected to focus on innovation and education and new high-tech services, meaning knowledge dissemination and knowledge transfer, its influence provided through

top-leaders. The main clientele being from the demand side founding members (board, top-politicians and top-officials, secretariat) and supply side being universities, innovative businesses, new media representatives, artists.

Strong connection to the respondents' profession or position was noted: university and art representatives did not mention official top-leaders; official top-leaders did not mention middle-level leaders and artists. It may indicate that for official city leaders new developments in city entrepreneurship bases are not familiar and ideas of city economic bases are traditional. The under-estimation of the middle-level leaders surprised the authors, as the majority of every-day practice is going on between the middle-level leaders.

Euregio was considered as a representation and co-operation body for city authorities, artists and media people, entrepreneurs; politicians and common citizens were not mentioned. It may indicate that mayors and vice-mayors are not considered to be politicians, and the link to common citizen is understood directly.

University-connected respondents tended to consider Euregio as a developer of a science and arts region through people connected to universities and artists and they underestimated local government and politicians' roles. Respondents, being the city or regional officials, underestimated university co-operation and pointed out cooperation between local authorities.

Euregio's success factors were connected with fora, seminars, projects, implementing new ideas.

The investigation via in-depth elite interviews showed that regional integration is expected to deepen between the two regions, still the self-identification of the region as a twin-region is not foreseen in the near future. Euregio development is seen by interviewees as continuing and strengthening but not transforming into any other type of organization. The number of respondents who believe in positive qualitative developments indicates that Euregio activities and goals correspond to interviewed partners' expectations.

Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

Based on the analysis of the interviews we may conclude that the organization with the tasks to enhance regional integration would be a learning organization as the priorities continuously vary and develop. Such organization should be developing itself. This is proved by the change in priorities from the period of 1999-2001 when learning how to cooperate was stressed until program period of 2009-2013 when extended infrastructure projects are planned.

The stakeholders foresee the development towards a metropolitan knowledge cross-border region. As it is a complex task, knowledge management should be applied.

The twin-region of arts and science (knowledge region) has been stressed but the creation of no other joint institutional structures, apart from Euregio, is foreseen, e.g., joint city councils. Based on the elite interviews, integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programs.

Based on the investigations, the authors claim that regional integration should develop towards metropolitan knowledge cross-border region, meaning integration of higher education, high-tech entrepreneurship, services and new media and arts. They will serve as Euregio priorities in the near future.

Euregio's task in the near future is influencing actions via regional decision-makers to help overcome regional disparities.

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