

Changing the IT sector In Estonia

Case B

The change process

The study visit was very inspiring to the participants, the CEOs of Estonian ICT companies, many of them considered opinion-leaders in the industry. Days filled with the formal program were followed by evenings and nights of informal discussions. The participants were not strangers to each other but had never gone through such an extensive program together. In the discussions, they started to see that they were facing similar challenges in their everyday operations. One night towards the end of the visit, Vaho and some members of the group decided that it would be a good idea to write down some ideas. These could serve as a small blueprint for co-operation, listing the most important things that could be done jointly to foster the development of ICT in Estonia. It was not so much about the words that were written down but the shared experience and understanding that the potential benefits of collaborative action could have a significant impact on their businesses. The Singapore trip had gotten the ball rolling – however, this was just the beginning.

Back at home, Vaho and Jüri joined forces to build upon the “good energy” created in the study visit. Both men spent long hours having one-to-one discussions with companies. The key message here was simple – when Estonian ICT firms worked together they could offer more complex and higher value added services and thus be more competitive in the market. At the time of economic recession and the declining government sector demand, this was a persuasive argument. The opportunities of ICT were far from being exploited to the fullest in the more traditional sectors such as machinery, building, forestry, etc. On the other hand, no ICT company was able to cover the full array of needs of any other sector by themselves – the best results would come from integrating different competences. There were a number of firms who saw value in greater specialization and distancing from the “everybody does everything” model in which many companies offered very similar solutions without remarkable competitive advantages compared to others.

It wasn't difficult to embrace these ideas in principle but there was a need for a clear and viable action plan of how the other sectors would be targeted. In course of discussions of the initiative group that included Vaho, Jüri and some others, a simple model for systematic

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mapping of potential areas for co-operation and concrete project screenings was developed. Foremost, it was important to convince the other sectors of the benefits of introducing additional (or more advanced) ICT into their operations. The protagonists understood that it was impossible to achieve anything with a single meeting, therefore a longer step-by-step process and a series of meetings, brainstorming events and discussions was needed (see Exhibit 1).

The initiative group of the ITL took time to think through the communication aspects related to setting up the meetings. Responsibilities were divided based on who had previous contacts or enough authority to reach and influence the key people from the other sector. In discussions with both the ICT community and the client sector it was emphasized that the meetings and seminars were not intended to be a brainwashing exercise but a targeted effort to create more value for the other sector. This meant that the ICT sector was not trying to sell something that they already had in their portfolio – they tried to understand what the other sector really needs and respond to that. The protagonists understood that other sectors might have a number of issues that were identified as sources of inefficiency or otherwise negative factors - but oftentimes they couldn't see that ICT could provide solutions here. It was the role of the ITL to help them see potential solutions. Here communication issues were crucial again: *“you can bet that for the first hour of the first seminar they (i.e. the ICT sector and other sector representatives) just talk about things that have totally different meanings. But then they start to understand each other's vocabulary. For us, being able to speak the other language is of crucial importance”* (Jüri Jõema).

The availability of funding for innovative projects from the European Union programs was also an important factor in creating a clearer framework for collaboration. Depending on the nature of the project, the funding could be anywhere between 30%-85% of the project budget, thereby helping to alleviating potential risks. In 2008, ITL submitted a proposal to the national cluster programme (see Exhibit 2) that had been started the same year, applying for funding of a project aimed at developing a “cluster incubator” that would help identify and develop new cluster initiatives based on the co-operation of the ICT sector with other sectors. The model described in Exhibit 1 served as the backbone of this project that was among the first two full applications to be funded. The end goal was to increase the export of Estonian ICT products and services via higher co-operation and development of new large scale co-operation projects/niche clusters. As a broader goal, the initiative would also contribute to increasing the export of other business sectors in Estonia via development of more competitive solutions based on broader and more effective uses of ICT.

The same year also saw the birth of the Estonian ICT Demo Center, a showcasing platform introducing the regional success stories (various e-state systems such as e-School, X-way and X-GIS, as well as consumer-oriented solutions such as newspaper kiosks guided by a mobile phone, digital television, Mobile-ID, etc.) and served as a common reference-base for the entire ICT sector (www.e-estonia.com). The main target group were the various international state delegations visiting Estonia. The Estonian President and Minister of Economics and Communications have been very supportive of the initiative and are frequent

visitors with their high-level foreign guests. Also, another cluster project, the Export Cluster initiative, was started in 2010 by the Demo Center. This project was more directly focused on facilitating export and development of necessary skills, contacts, etc. The central issues were the development of an international sales network for solutions developed in Estonia and hiring of foreign experts that would act as consultants and mediators for Estonian entrepreneurs in developing contacts and knowledge needed for moving to the other European, as well as Asian, African and US markets.

While the participants of the cluster initiatives (see Exhibit 3) had agreed to the goals outlined in the cluster strategies and action plans, after a while, it seemed that the progress with real co-operation in the various collaborative activities was still not as fast as the companies expected. Even with the general strategic leadership and spokespersons in place, a pattern of having higher activity levels in the beginning of the projects and then slowing down could be observed. In short, having the framework in place, cluster projects approved and budgets confirmed didn't automatically mean real results.

When looking at the reasons for joining and continued involvement in the collaborative platforms, there was a group of companies that firmly believed in co-operation and its positive effect. However, there was clearly a more diverse set of motives in the whole set of members. The core group saw some companies as being carried by the fear of missing out on something that could end up big in terms of money, future reference, etc. Some were driven by curiosity – being not so sure about the actual results but willing to listen and, to some extent, contribute. Some also saw benefits related to the potentially increased visibility of their company, themselves, etc.

Also, the level of trust and collaborative spirit that had developed between the companies was subject to tests from time to time (and in the wider sectorial perspective, the old issues hadn't disappeared; see Exhibits 4 and 5). While it was easier to co-operate in aspects related to the general framework conditions, collaboration related to joint fulfillment of orders and anything related to real sales was much more tricky. As pointed out by one of the cluster companies *"when it comes to procurements, everyone is trying to say that they are the best and the biggest."* A number of times this has resulted in conflicts between the competitors and clashes between personalities. Occasionally, cluster meetings had moments when some members declared that they haven't gained anything real from participating in the process. There were also other companies that adopted a continuously critical position but still stayed involved.

The difficulties of co-operation are well illustrated in the case of the highly ambitious EstWin project, the objective of which is to provide all residential houses, businesses and authorities in Estonia with an opportunity to connect to a next-generation broadband network with a transmission speed up to 100 Mbit/s by the year of 2015. In the scope of the project, more than 6000km of fiber-optical cables will be installed and more than 1400 connection points will be constructed all over Estonia. The rural areas, in particular, would benefit from high-quality internet connections that will improve the attractiveness of these regions as

residential areas and business locations, helping to reduce problems related to long distances and low density of population.

To run the project, the Estonian Broadband Development Foundation was established in 2009, under the initiative of the Ministry of Economic Affairs and Communications and by eight member companies of the ITL. The CEO of the Foundation described the process as „conducting studies, having disputes, holding meetings, having disputes, developing principles of co-operation, having disputes, and only then developing real work concepts.“ All parties agreed that the project was important for positioning Estonia as a continuously successful IT country and in creating infrastructure for extended business opportunities – and that it was only possible to do all this together. However, all companies had their own interests, which they wanted to protect, nobody wanted to see that someone would end up in a more favourable situation than others. To move on, some activities had to be cancelled. The real work started only when, after an extended time of disputing, the core principles for co-operation (related to the scope of the project, the rights and obligations of the partners, etc.) were mutually agreed upon in written form.

As of 2012, both of the cluster initiatives were running rather steadily and although occasional conflicts persisted, the feedback from the participating companies confirmed that the existing co-operation platforms were considered necessary and the participants were interested in sustaining them. After the initiation phase was over, Vaho Klaamann pulled out from among the key protagonists. This did not cause a major setback. In reality, there had not been one person driving all processes, instead, several members of the core group of CEOs of leading ICT companies had been involved continuously. The issues with slow progress had been somewhat alleviated with the hiring of dedicated operational managers/development specialists to ensure consistency in operational work.

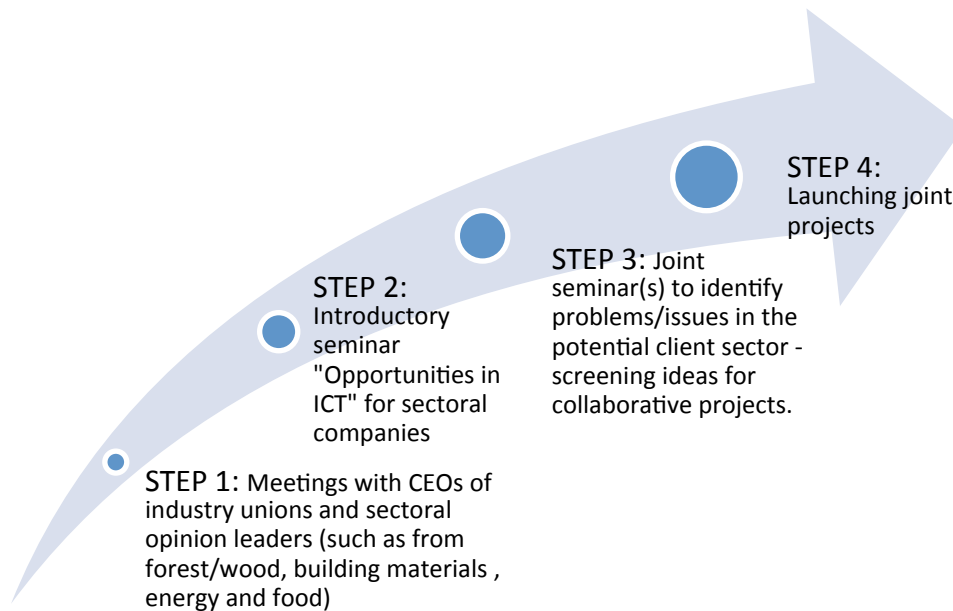
It took one and a half years to get the first results of co-operation with other sectors. The logistics sector and forest/wood industries were the first ones where the model was tested successfully. The e-Waybill project replaced the compulsory paper documentation required for the carriage of timber with an electronic solution that significantly improved the speed and quality of transactions between various stakeholders. This success helped to spark interest in a wider group of companies. Soon, there were negotiations with the building materials and planning sector, energy sector, food industries, etc. By 2012, it had been accepted that progress takes time and sometimes things will not work out – on the other hand, the experience has shown that it makes sense to keep up the dialogue and in some cases it pays off to wait for the long-term results.

Within four years, the Estonian ICT community had taken a large step forward in terms of co-operation. The stakeholders sensed a certain change in the general mind-set. There was more trust between different actors even though some conflicts continue to emerge from time to time. Looking back at the process and reflecting on the progress and challenges behind and in front of them, many of the stakeholders pointed out *“in the end, it all comes down to people. We are not working with companies but people.”* In general, the cluster companies

looked hopefully into the future, believing that positive co-operation experiences would lead the way to new successful projects and activities that would eventually be visible to everyone, such as being expressed clearly in economic indicators.

Exhibits

Exhibit 1. Model for identifying co-operation possibilities with other sectors



The model developed consisted of four stages. As a first step, the 'ambassadors' of ITL would meet with CEOs of other industry unions and sectorial opinion leaders to introduce their agenda for mutually beneficial co-operation and a plan for identifying potential co-operation projects. If the other sector expressed interest", a seminar was organized jointly by the two industry unions/with the help of other stakeholders that were the first contact point. In this seminar, normally 3 representatives of the ITL would introduce the opportunities of ICT to 20 representatives of the other sector. After this, a joint seminar of 15-20 participants from both sides would be organized for identification of problems in the client sector, including focused brainstorming and discussion of potential solutions from the ICT sector. In this meeting, the initial screening for potential joint projects would be carried out and a priority list would be developed. Successively, each project would be assigned a leader who would be responsible for organizing the next meeting with stakeholders interested in this project – from here on, each project would start to live its own life.

Source: Estonian Association of Information Technology and Telecommunications.

Exhibit 2. Estonian Cluster Programme

Since 2008, the national Cluster Programme has driven a considerable increase in clustering efforts in Estonia. By 2012, 49 applications had been financed within the round of preliminary applications and 19 full scale applications had been supported.

The programme is designed by the Ministry of Economic Affairs and Communications and implemented by Enterprise Estonia (one of the main institutions responsible for the implementation of the EU structural funds in Estonia). The Cluster Programme grants are provided based on open calls for proposals. The maximum size of the support in the stage of preliminary application is 25 565 EUR and up

to 75% of the eligible costs - i.e. training and study trips for potential cluster teams, conducting feasibility studies of potential clusters, enrolment of external expertise, etc. – are compensated. In case of the full-scale applications, collaborative activities like joint marketing, joint training, capacities for joint fulfilment of orders etc. are supported. The size of individual grants is not limited but the overall budget for the Programme is 4.5 MEUR and 70% of the eligible project costs are compensated.

Cluster development under the Programme is to a great extent aimed at improving the international competitiveness of Estonian companies and attracting more FDI in parts of the value chain that account for more added value. For this reason, Estonia views cluster development in a trans-national context and the Cluster Programme encourages cross-border development of the existing and new clusters. In analysing the background of the Estonian Cluster Programme, it is pointed out (Oxford Research, 2007) that the Programme aims to address the challenge of how Triple Helixes and sectorial industrial value chains can be reorganised or better linked to achieve higher competitiveness on the global market; for that reason inter-cluster cooperation is encouraged and international co-operation is an important issue.

Source: Enterprise Estonia.

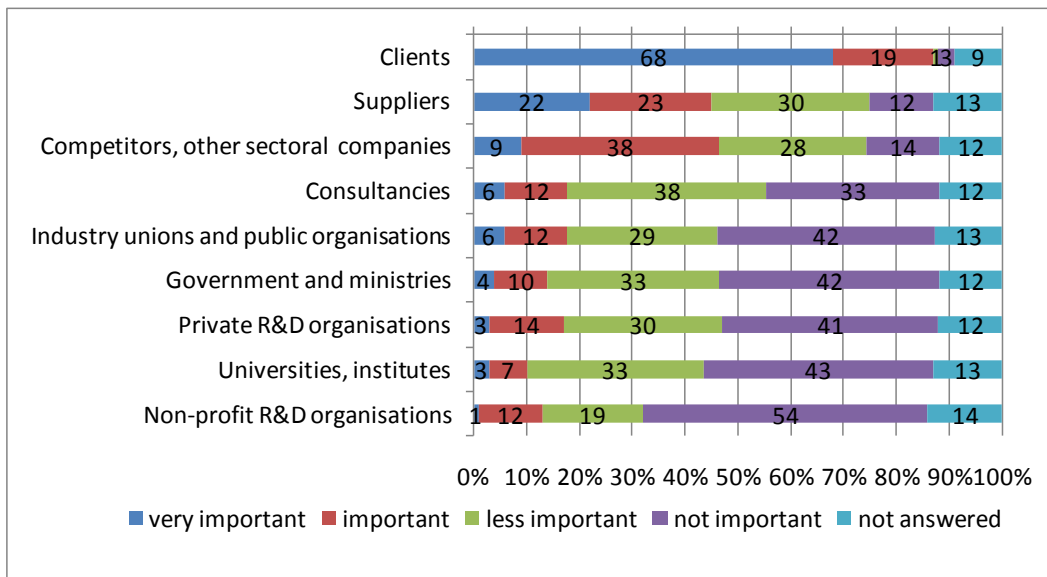
Exhibit 3. Comparison of the ITL and Demo Centre Cluster Initiatives

Cluster Incubator (ITL)	Export Cluster (ICT Demo Center)
<i>Focus: new (exportable) products and services in co-operation with other economic sectors</i>	<i>Focus: R&D, support services and market development to increase export of ICT products and services</i>
<p><i>Key lines of activities:</i></p> <ul style="list-style-type: none"> • Co-operation within the ICT sector • Co-operation between the ICT sector and other economic sectors; related studies, training programmes and projects • Sharing of export experiences between companies • Synthesis of co-operation opportunities with other sectors and potential business models supporting their implementation – development of new microclusters 	<p><i>Key lines of activities:</i></p> <ul style="list-style-type: none"> • Co-operation with R&D institutions; • Export support: development of contact networks in target regions, market research, fostering participation in foreign procurements; development of marketing and export-related skills • Joint branding activities supporting improvement of client loyalty • Development of existing ICT solutions into marketable products/services
<p><u>Participating organisations (15):</u> Baltic Computer Systems, BCS Itera, <i>Columbus IT Partner Eesti, Datel, Elion Ettevõtte, Fujitsu Services, Icefire, MicroLink Eesti, Microsoft Estonia, Santa Monica Networks, Regio, Sertifitseerimiskeskus, Tallinn University of Technology, Uptime, Webmedia.</i></p>	<p><u>Participating organisations (24):</u> 3D Technologies R&D, Aktors, <i>Columbus IT Partner Eesti, Cybernetica, Datel, eKool, EMT, Ericsson Eesti, Helmes, IT Kolledž, Mediconnect, Microlink Eesti, Microsoft Estonia, Mobi Solutions, Net Group, Nutiteq, Positium LBS, Regio, Sertifitseerimiskeskus, Tallinn University of Technology, Track24, Uptime, Webmedia, Yoga Intelligent Building.</i></p>

Source: Estonian ICT Demo Center www.demokeskus.ee; ITL Cluster www.itl.ee

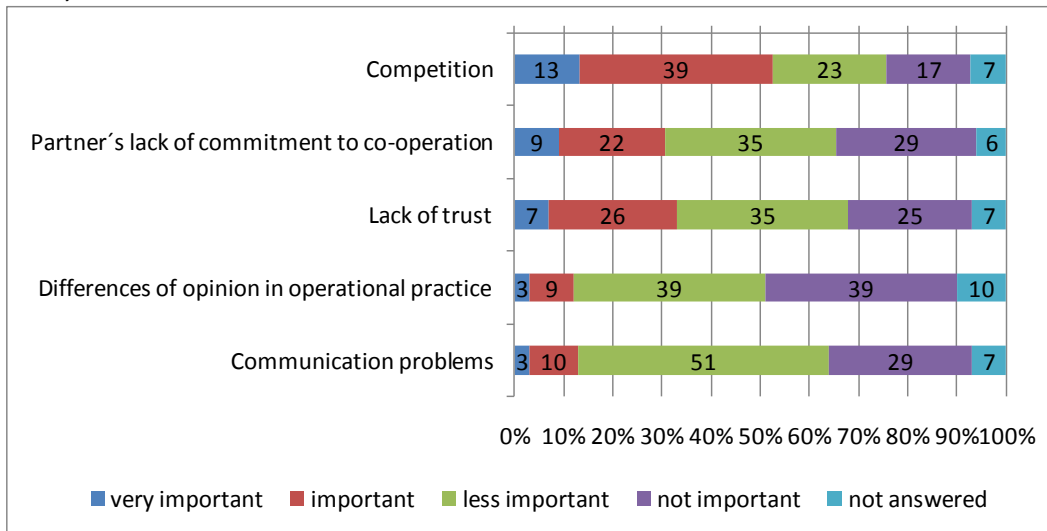
*Italics – organizations that participate in both initiatives.

Exhibit 4. Importance of co-operation with other ICT companies and organisations in export development (*evaluations of exporting companies, N=69*)



Source: Rozeik, H., Jürgenson, A. (2009) Survey of the Estonian Information and Telecommunication Technologies Sector companies. Praxis Center for Policy Studies.

Exhibit 5. Factors hindering sectoral co-operation (*evaluations of exporting companies, N=69*)



Source: Rozeik, H., Jürgenson, A. (2009) Survey of the Estonian Information and Telecommunication Technologies Sector companies. Praxis Center for Policy Studies.

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Interviews

- Interviews with Jüri Jõema (ITL), Vaho Klaamann (Santa Monica Networks), Rain Laane (Microsoft), Enn Saar (MicroLink).

Other

- Enn Saar's blog. <http://ennsaar.blogspot.com/search?updated-max=2009-09-01T17%3A33%3A00%2B03%3A00>.