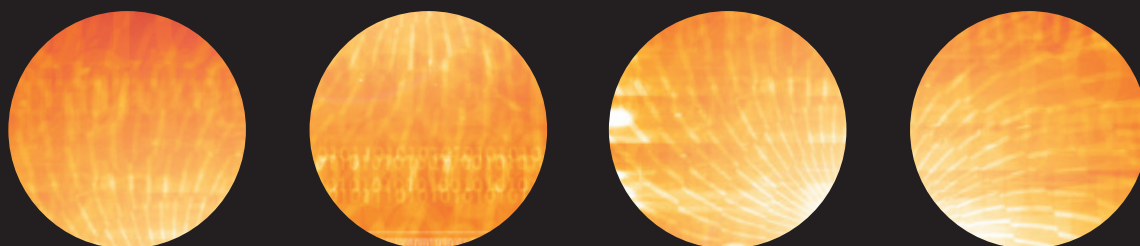


INNOVATION AND GROWTH THROUGH COLLABORATION AND EU FUNDING



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With help from the EU Structural Fund and the Sixth and Seventh Framework Programmes and through cooperation between the business sector and public researchers, knowledge has been transferred into new innovations, new companies and new investments, resulting in an increased number of jobs in Värmland.

Region Värmland
April 3, 2009

Summary – cooperation and joint efforts

This brief history of how the success of ICT development in Värmland has emerged is a history of collaboration, cooperation and courage. The courage to choose and the courage to meet each other straightforwardly with one common goal is important for the process – to improve Värmland and evolve the conditions for sustainable social and economic growth and innovation in the region. Perseverance and an open climate between public bodies, private business and Karlstad University have worked as a firm framework while creating a platform for growth and innovation. The creation of plans that relate to each other is one proof of the joint efforts to contribute to the development of Värmland.

“The political leadership for collaboration has been of great importance for economic life in Värmland.”

Tomas Riste, Regional Commissioner, Region Värmland

The efforts of public bodies, institutes of higher education and companies have resulted in a mental climate that stimulates new ideas, unexpected cooperation and eventually job opportunities and a prosperous ICT industry. This is an example of Triple Helix at its best. The efforts have been enhanced by EU funding from both the Sixth and Seventh Framework Programmes as well as the Structural Funds. It has also generated funding from Interreg which had not been possible without the result of the earlier funding. In the centre of all this activity is Compare Testlab, an independent ICT test laboratory where both Karlstad University and ICT companies come together and test new software and collaborate in new ways. Although the Compare Testlab has been up and running for less than a year it has already contributed to a fast commercialization of an algorithm that makes it possible to identify whole files from data fragments. This discovery has interested the police in several EU countries and resulted in the formation of a new EU project linked to the Safer Internet Plus Programme.

The establishment of the ICT laboratory has both secured employment and resulted in new job opportunities. One example is that Tieto and Relacom, both companies with business all over the world, have found collaboration areas in serving their mutual customer. The tests that Relacom previously had to do in Germany can now be performed in Värmland. New business opportunities are found every week.

In the beginning – from the search for highly qualified employees to world class research

In 1998, the former Ericsson unit in Karlstad, now Tieto, turned to the department of Computer Science at Karlstad University. This was at the time of the ICT boom and the successful business in Karlstad was seeking opportunities for bonding trained young men and women to the company. It started with an Ericsson financed student laboratory and activities

for students. The company was also developing software linked to communication. A research project was soon established, the area of partially reliable transport protocols. This was the beginning of an ongoing success story.

"Our first externally financed research project was like a starter button for our further development. At that time we had no externally financed research. Today it's 65%."
Anna Brunström, Professor of Computer Science, Karlstad University

In the following years the cooperation between Computer Science and Ericsson grew and produced new industrial partners such as Telia, IBM and Hewlett Packard. The department also began a resolute strategy to recruit competence, in the areas of security, privacy and wireless networks, from all over the world to form a group of senior researchers. Today more than one third of the staff has its origin from other parts of the world, for example two of the three professors stem from Germany.

The externally financed projects led to EU applications in the areas of security and privacy and wireless networks. Computer Science received its first funding from the Sixth Framework Programme in 2004 for a total of five projects worth around €1.2 million. Today Computer Science is engaged in five projects with EU funding. All of them are, in one way or another, related to Compare Testlab and stimulate the ongoing business. The total amount of this funding is €1.5 million.

It is also worth mentioning that the students have been able to take advantage of both the collaboration between Computer Science and Compare and the new Compare Testlab where Karlstad University has its own premises available.

Compare – from breakfast meetings to business development

Compare, Competence Area, Karlstad, is a business driven foundation and industry cluster that provides a shared platform for ICT businesses in Karlstad and the County of Värmland. From the beginning its purpose was to recruit and market the ICT companies in the region. The interest for Compare was huge from the beginning and exceeded all expectations. In its first year, 2000, the cluster initiative had counted on 25 members but at the end of the year there were 90 companies. Today Compare has turnover of €1 million . Half of the income comes from the membership companies.

As the market changed, Compare developed new services and was also a main reason why ICT competence could remain in the area during the hard years for the ICT business in the beginning of the 1990s. The big network got people together and made them see business opportunities in a recession.

Compare has always had its focus on business development, but in the beginning the collaboration with Karlstad University mostly consisted of breakfast meetings and student

activities. The change came when the ideas of Compare Business Competence Center and Compare Testlab took form and shape. During the years contacts between Computer Science and Compare had grown. The university had enrolled more qualified researchers and taken on more and more projects in the area of wireless communication/networks, privacy and security. It was time to move on and take another step.

“Compare always has business opportunities in focus. In the beginning we had little to do with Karlstad University, today we meet on a daily basis and research and business development walk hand in hand.”

Göran Österman, President, Compare

Public bodies who dare to choose

When ICT cluster Compare was formed in 2000, public bodies immediately saw opportunities for growth in this industry-driven initiative. The County Administrative Board, County Council of Värmland, and the municipality of Karlstad did not hesitate to contribute financially when Compare was established. These efforts have continued. Today Compare receives financial public contributions from Region Värmland, The County Administrative Board, Karlstad and Hammarö municipalities and Sparbanksstiftelsen Alfa.

The economic contribution is of course of great importance, but even more important are the strategies that have been processed and written as joint ventures in the region. In 2003, like every other region in Sweden, Region Värmland was asked to form a regional growth strategy. About 100 companies and organizations were involved. In this first programme, innovative clusters were selected as one of the most important challenges for economic growth in Värmland. One of them was Compare. Everybody involved in the process agreed on the importance of prioritizing and fusing the region resources. This work was followed by a similar process in 2007/2008 to update the old strategy.

This approach was further strengthened when the Swedish government decided to make a major change in its policies regarding the National Defence. This decision meant that the region's regiment was moved to the northern parts of Sweden. To compensate for the loss of job opportunities the government gave the governor of Värmland an assignment and funding to look in to which regional investments would generate most growth and innovation. The answer was competence centres in three strong industry areas. By working together with Karlstad University, Region Värmland and Compare the idea of an independent software test laboratory was born. This idea led to the establishment of Compare Business Innovation Centre and the building of Compare Testlab at one of the premises that the National Defence left during the transfer. In this process both Karlstad University and the Municipality of Hammarö, where the premises was situated, was highly involved in the planning of a new independent ICT test laboratory. The latter also invested about €1 million in infrastructure to support the investment.

It is also worth mentioning that Karlstad University in both its vision for the period up to 2015 and in its strategy on education and research until 2012 emphasized the university's ambition to collaborate and participate in the regional innovation system and to link the region to the international science community. The university and Region Värmland also have a letter of intent regarding research collaboration between both parties.

"The co-operation between the university and Region Värmland, and the joint letter of intent we have about how our world class research benefits the region, are just some examples of how we work together to help business in Värmland."

Kerstin Norén, Rector, Karlstad University

EU funding works like a catalyst for business development

EU funding has acted as a catalyst for business development both within Compare companies and the Computer Science department at Karlstad University. During the years when public bodies such as Region Värmland, the municipalities of Karlstad and Hammarö, the County Administrative Board, Karlstad University and Compare had networked, created meeting points and developed strategies that aligned and at the same time strived to create the right economic conditions, they have developed a unique capability to cooperate. It was in this climate that the first application for joint EU funding was made. When the C-BIC (Compare Business Innovation Centre) project was granted support from the EU Structural Funds, cooperation and business opportunities exploded.

The university is moving its Kaunet network emulator as well as its OZ-lab to the Compare Testlab. The latter is an environment that makes it possible to study persons while working in front of a computer. The university has premises available and has both students and researchers there on a daily basis.

Tieto, with approximately 16,000 employees, is among the leading ICT service companies in Northern Europe and has been active since the planning of Compare Testlab. It has most definitely been of importance for the company strategy and the efforts to continue development and keep competence in the region.

Compare Testlab has been vital for how Tieto has further developed the business regarding tests and labs. Cooperation in the region with Compare and Karlstad University is an example of a win-win situation for all parties.

Cristina Petrescu, Head of R&D Sweden, Tieto

Calmark is another example. This small company, based on an innovation for micro volume, rapid detection of cell damage markers, is doing clinical test and research and is on its way to commercializing the discovery. In this work Compare Testlab is the key to success.

FIVES – research, business and EU-funding at its best

During the last two years Karlstad University has increased its ambitions to commercialize research results. The collaboration with Compare is one way to help researchers to see business opportunities. One of the projects on its way to commercialization is an algorithm discovered by Johan Garcia. This finding can identify pictures and films from very small data fragments and will be very useful in the work to prevent the distribution of child pornography on the Internet.

One of the first tests in the new Compare Testlab was Johan Garcia's algorithm. It is now on its way to be patented. It has also functioned as a basis for creating a new EU project, engaging partners from law-enforcement, academia and industry. The purpose is to enhance tools for investigating child sexual abuse.

To come in the future

The activities at the Compare Testlab are intense and at the department of Computer Science and Compare the staff is very pleased. In just two years the cooperation has reached a level beyond all expectations. The success has been noticed nationally, and since Testlab is the most modern you can find in the area it has been established as a node in OpenSweden, a Swedish competence centre for open source software within the public sector.

“Our dream right now is a professorship in the area of testing. That would establish Compare Testlab internationally.”

Göran Österman, President, Compare

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