

MIPRO 2001, Opatija, 21. - 25.5.2001

Technology Park “Teknikby” in Västerås, Sweden – Modern technology for small companies

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Summary

Technology Park “Teknikby” is a project in Västerås, Sweden initiated by Swedish government, local authorities, industry and academia. The basic idea of the project is to help people to start new companies and start business in small scale, but based on modern technology. Technology Park is an area built from old heavy industry-factories. The area is used to attract new companies which can hire the offices and can get a professional help in starting a company, introducing new technologies, building networks of interests groups and building relations with big companies. Although the help is of great importance, the small companies build their business on economical bases. So far the project has shown amazing result. During two years more than 100 new high-tech companies have started with more than 300 new employees. The seminar report how the model works, how it was possible to start that project, which risks still exist in that project. The intention of this report is to start a discussion if a similar model is possible to apply in Croatia.

1 Background

Västerås, with its 120 000 inhabitants is a middle-small town in Sweden, but significantly smaller than the largest towns such as Stockholm, Gothenburg or Malmö. For almost a century Västerås has been associated with ASEA company, where about 30% of citizens were employed by it. Also some metallurgy companies were placed in Västerås. Västerås was a typical industrial town.

In the beginning of the nineties big changes reached the town. Firstly ASEA and BBC, a company from Switzerland, joined together and build a giant company ABB. Even before ASEA was a large company, but now it became one of the largest companies in the world with around 230 000 employees. The headquarter of the company was placed in Zurich which had a consequence that Västerås was not any more the decision center. Many activities soon moved from Västerås to other places in the world.

At the same time, the infrastructure of ABB has been changed. While previously dominated by workers, as the main activity was the production, the main activity became development, and the dominated type of employees becomes officials. The factories were replaced by offices. This change introduces several problems – there was no need for low-educated workers and a need for well-educated people increased. At the same time the unemployment grew and the qualified people were missing. The similar situation was in other places in Sweden.

The Swedish government realized that something must be done to modernize the industry. The modernization does not mean only to modernize the equipment, but first of all to achieve better level of know-how, which requires a modernization the school system, modernization of the infrastructure and modernization of the society in general. The state needed more well-educated people, and that was the reason that the government opened several new universities and technical schools outside the largest cities. However the financing came not only from the state, but also from local authorities and local industry. In this way the government wanted to secure the close relation between the education, local society and the industry. As a result of new Swedish policy, Mälardalen University, which existed previously as a school has grown rapidly in the latest ten years. From several hundred students it has grown to 13000 and there are plans to reach a number of 20 000 within next ten years. In the last decade Västerås has got a new image – from a typical, somewhat boring, industrial place, it became a student city.

In late nineties ABB has changed its image once again: The focus is directed towards automation of industrial processes, and Internet infrastructure. Many ABB companies were sold to another companies, and Västerås is not more an ABB-town, but there exist several large international companies.

At the same time the philosophy of the employment has been changed. Today is more and more important “Just in time competence”, and it is difficult for a company to keep all the time all knowledge. Instead a concentration to core-business has taken the place. Consulting and hiring people became a standard way to achieve business result. This change caused start of many consulting companies, and small companies serving large companies or providing the services to the society.

2 Technology Park, Academia and Industry

The basic idea beyond the technology part is to modernize small companies. Technology Park is a place where many small and middle size companies are placed. The basic idea was to put together many small companies that will share facilities, and that will have opportunity to meet, discuss and build common projects. The ambition was however larger than just to bring small companies together. The ambition is also to give support to these companies in form of giving them access to the latest technology and research, and to help them to establish contacts with large companies. For this reason cooperation with Mälardalen University and ABB (and other large companies in Västerås) is established. One of the goal of Mälardalen University is to increase the competence of small companies and to help them with knowledge, but also to follow the trends on the market in order to be updated and have contacts with the “reality”. ABB was also interested in cooperation since it needed support from consultants specialized in different areas. This “triangle” relation is used to spin-off new companies, to increase the number of employees in the existing companies and in general to increase the competence, and in this way make companies more competitive, not only in the region, but also in the state and entire world.

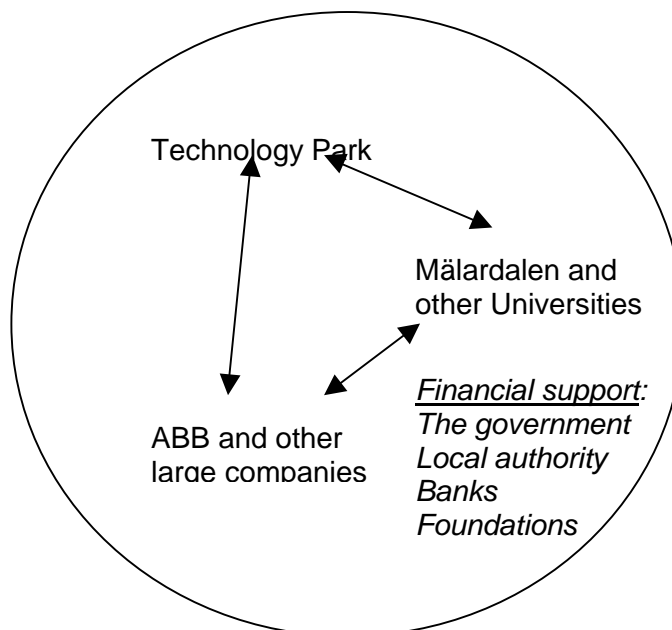


Figure 1. Cooperation between technological part, university and industry

3 Västerås Technology Park

Västerås Technology Park has been founded in 1997, and opened in 1998. It started with ten companies and today it has 100 companies. The offices are placed in an old factory (Copper Grove).



Figure 2. Old factory converted to a modern office landscape

The owners of Västerås Technology Park are ABB and 3 other companies placed in Västerås, a bank, City of Västerås and Regional Research and Development Council Foundation. They are also main financiers. They own the place and are responsible for the infrastructure. In addition to them there are a number of other financiers. Mälardalen University is one of them and it partially finances some common projects.

Västerås Technology Park is a creative and expansive technology park with companies operating in fields corresponding to those in the undergraduate programme and the research activities of Mälardalen University.

The following fields and activities are represented:

- Electrical engineering
- Computer science
- Energy and environmental engineering
- High-tech humanities and the arts

The main focus of the Technology Part is:

- Continued development of the ties between Mälardalen University and the companies in the Technology Park
- Promotion of entrepreneurship and enterprise among students, researchers and entrepreneurs
- Establishment in the Technology Park of companies operating in the above-mentioned fields

- Addressing space problems for the expansion of the Technology Park's companies
- Establishment and development of the Technology Park's contact network in industry, the academic world, public administration, the financial world, organizations and political parties in the region, in Sweden and abroad
- Marketing of the Technology Park regionally, nationally and internationally
- Funding of project-related advertising campaigns, displays and other joint projects through sponsorship

3.1 Relation to Mälardalen University

Västerås Technology Park's ties with the University at the undergraduate program level cover above all the following fields:

- Guest lectures at, and study visits by students to, the companies in the Technology Park
- Examination projects on behalf of the Technology Park's companies
- Space for students wishing after graduation to become entrepreneurs in the Technology Park
- Workplaces for students hired after graduation by the Technology Park's companies

The corresponding ties to the University at the research level include:

- R&D seminars and guest lecturers
- Research assignments for the University from the Technology Park's companies
- Space for researchers wishing to become entrepreneurs in the Technology Park
- Workplaces for researchers hired by the Technology Park's companies

The third tie between the Technology Park and the University concerns above all:

- Arrangement of the "Copper Lunch Meetings" and other regular events for representatives of the University, the business community, political parties and public administration
- Recruitment of companies to the Technology Park operating in fields covered by the University, but not yet established in Västerås
- Initiation of new educational and research programmes needed to boost the growth of the Technology Park's companies, but not yet available at Mälardalen University

3.2 Benefits for the companies

One of most important tasks for the Technology Park is to help companies to start business. Thecnological Park offers the following benefits:

- Central location and an attractive environment facilitate the recruitment of skilled staff in an increasingly tough competition
- Computer network
- A large number of contracted suppliers which gives a 10% - 80% discount on their offers to companies of the park.
- The ties with the University make it easier to recruit staff with an academic education and offer better opportunities to create strategic alliances with educational and research partners
- Västerås Technology Park is a really 'hot' prestige address

4 The companies in the Technology Park

Technology Park started with few companies, but very important step has been done from the very beginning when ABB Research Center, Industrial IT department moved to it. The number of companies have been grown rapidly after that, much faster than it was planned.

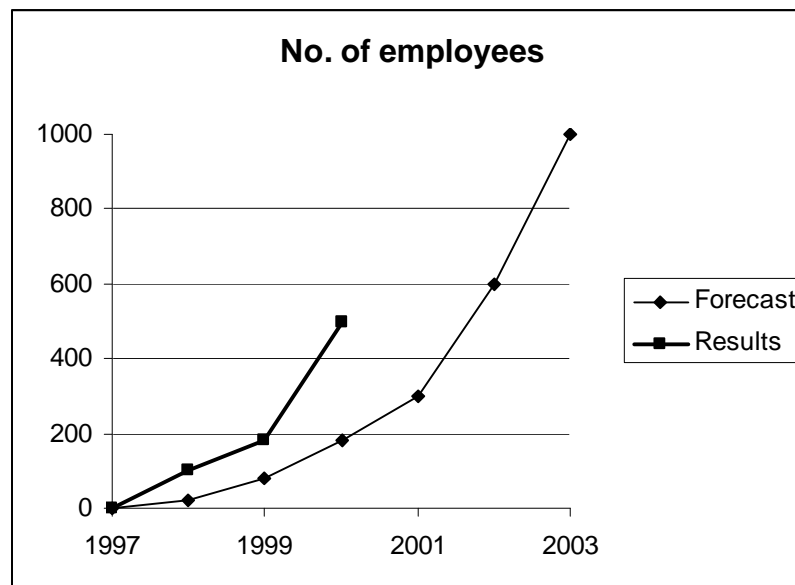


Figure 3. Number of employees in companies at Technological Park

4.1 Educational Level

73 % of the employees in the park companies have a university education. 54 % have more then three years of education at a university. 8 % of the employees have a postgraduate Licentiate or PhD-degree. The entrepreneurs in seedling companies in the park have a slighter higher education level then the average employee in park companies. This is higher then the education level for the 25-64 years old population in

the community with the highest education in Sweden – the Stockholm High-Income-Suburb of Danderyd – that has 63 % with university education. The average in Sweden is 38 % with university education in the age group 25-64 years.

4.2 High growth rate

Sofia Antipolis, Europe's first and (together with Kista Science Park in Sweden) biggest science park, has since the inauguration in 1969 grown with 1.200 companies during approx. 1.500 weeks of operation. The French park with totally approx. 22.000 employees among its tenants is now growing at a rate of one company per week. This is the highest known growth rate among Europe's science parks. Västerås Technology Park has since June 1999 had the approx. the same growth rate with 78 new companies (net) during a period of 86 weeks.

In March 2001 Västerås Technology Park passed the limit of 100 companies on site in the Park, thereby becoming one of the five Science & Technology Parks in Sweden with more than 100 companies. The other four Swedish parks are Kista Science Park in Stockholm, Uppsala Science Park in Uppsala, Mjardevi Science Park in Linköping and Ideon Science Park in Lund.

4.3 The Incubators Program

Västerås Technology Park runs campaign to attract potential high-tech & knowledge intensive entrepreneurs to our Incubators six month long Kick-Start-Program. A record high number of 70 entrepreneurs have this year applied. Halfway into the interviews with the applicants, the forecast is that approx 40-50 entrepreneurs with 20-30 different knowledge intensive business ideas will be accepted to the Program. By experience from previous years this indicate "a harvest" of 15-20 new high-tech or knowledge intensive companies starting up their business in the park at the end of the year.

5 Conclusion

Technology Park is an example of a successful initiative of support of small companies with high-tech profile. The investment from the state, community and the industry has been return many times. The importance of the project does not lie only in the fact that 600 people have a job, but in the fact that the climate for starting small, and high-tech companies is very positive. Many students start their companies directly after their studies, and to start a company is not a strange idea. This climate has impact on better climate for the education, easier reconstruction of old-fashioned companies, and it generates new jobs.

There are many technology parks in Europe and US and they have been shown as very successful. Certainly, similar projects can be started in smaller countries, in particular Croatia, adjusted to the local environment and local needs.