



# WT2.7: Blekinge Institute of Technology, Karlskrona, Sweden

## Report

Activities performed during the visit

in Karlskrona, Sweden

period: 22.11.2014. - 30.11.2014.

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## Personal Information

Mr./Ms. Stanisław Saganowski, faculty member of Politechnika Wroclawska, Poland visited Blekinge Institute of Technology, Sweden in the period from 22.11.2014. to 30.11.2014. in order to carry out research and training activities in the field of social group evolution, dynamic social networks, predicting changes in social networks, dynamic time windows.

## Information about Seminars

The seminar presentation was organized on 27.11.2014.

It was entitled: Predicting community evolution in social networks



## Description of scientific activities

(Please describe value added to the ENGINE project i.e. new knowledge, new skills with respect to the objectives of the project, the assigned common area of future cooperation with the partner, plans for common research, projects, publications and how it could be used in the scope of ENGINE)

During the visit several meetings took place. On the first two days general talks about my research area was carried out with Dr. Henric Johnson, Prof. Bengt Carlsson and PhD student Fredrik Erlandsson. The goal was to identify common research problems. Thanks to the fact that both sides were familiar with the research area of the other partner side the talks were very relevant.



During the talks I have become more familiar with Fredrik Eslandssons Facebook data crawler and with analysis of the gathered data - e.g. using data from the political pages it is possible to divide involved users into two groups (pros vs. cons) based on the hierarchy of their likes.

As a result of the talks we found interesting problem of tracking dynamics of the likes on the Facebook fan pages which will be investigated in collaboration. The partner side will provide the data, while I will be responsible for providing the methodology to track evolution. The work was divided into three main stages:

1. Tracking evolution of likes on pro Obama fanpage - the stage was already done over the last three days of the visit, we could observe that users are persistent in making actions to the following posts.
2. Tracking evolution of likes on several Obama related fanpages to see if there are any greater side changes between different pages, e.g. if the users committed to the pro Obama page turned their opinion and started to like posts on the pages against Obama - the stage will be conducted on the distance over the following month.

3. Tracking evolution of user opinions about Obama (pros vs. cons) based on their likes and comments - the stage will be performed either at WrUT or at BTH as a mid-term or long-term visit in 2015Q1, since it requires close collaboration.

Both sides agreed that the results of the research should be published in JCR-listed journal. During the research the detailed knowledge about the Facebook crawler and the GED method (of which I am co-author) will be exchanged between both sides. The exchange will cover programming code of the tools and implementations as well as know-how on how to effectively use the components.

## Information referring to the intellectual property

(the generally binding law in this area in the visited country and procedures of patenting);

Regulations concerning intellectual property in Sweden are very attractive for the researcher since anything created by the researcher (a method, results, or even an idea) belongs to the researcher, whether he is a professor or a student. This rule is so important that it has specific Swedish word “Läroarundantag” describing it. However, if the research is done in collaboration with an industrial partner an agreement on the intellectual property rights has to be written between the partners.

The BTH university created BBI - Blekinge Business Incubator, which main task is assisting researchers who wants to commercialize their idea. The process consists of several steps, one of them is help in patenting. Unfortunately during my visit all members of the BBI institution were attending a conference in California. However another Engine member, Łukasz Falas, was staying at the BTH university a week longer than me and had scheduled a meeting with BBI, therefore I believe he will provide more details on the process of patenting and BBI institution.

The model of commercialization at BTH consists of three main stages:

1. Idea phase - student or researcher invents an idea and discuss it with a set of advisors. The university also offers a possibility to make a prototype of the idea (for example using 3D printers) and discuss the idea with other researchers in the “idea club”. At the end of this stage researcher can obtain a proof of concept issued by the BTH innovation advisors.
2. Incubator phase (BBI institution) - at this stage the idea is being guided and financed by the incubator. In the meantime the idea changes into company.
3. Growth phase - happens when the company exits the incubator to grow and stay on its own.

## Description of the cooperation between universities and industry

(how it is organized in partner’s organization, the sources of funding, the opinions about drawbacks and strengths of existing solution).



Since the beginning of existence the BTH university had around 500 cases of collaboration with external partners (companies and government institutions). The number refers to all kinds of collaboration from simple visits (e.g. seminars) to 6-years long projects.

Collaboration is a strategic tool for the BTH education and research therefore the university elaborated a model of collaboration that includes the establishment and operation of various types of partnerships and various forms of personal exchanges. The main goals of collaboration are:

- strengthening the quality of education and research
- strengthening the innovation capacity of BTH students, researchers and partners

The BTH university defined two types of partners: strategic partnership and area-related collaboration. The collaboration process has three main phases: initiation, operating and lastly follow-up and development. The collaboration often involves master students and facilities of the university (e.g. labs).

Whenever there is a possibility of collaboration the university takes into account following factors for researchers:

- resource allocation models at the organizational level
- reward systems at the individual level and merit value of collaboration
- terms and forms of personal mobility

The BTH university takes many actions to establish structured relationships with partners:

- meetings and activities to develop collaborative relationships
- establishing regional and / or topic oriented platforms for collaboration with multiple partners
- establishing formal partnerships with individual companies, agencies and organizations

In summary collaboration with business is very important for the BTH university.

## Other activities

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**REMARK:** Apart from this information also a program of the visit and the presentation in electronic version should be given to the project office (please send all of them to Urszula.Markowska-Kaczmar@pwr.wroc.pl). Please respond to the points 1-5 for outgoing visit and points 1-3 for incoming visit. Point 6 is for extra activities that are not put in points 1-5.