

Geography and culture of online social networks

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Work plan for 2012-2013

I. General objectives

The ‘*Geography and culture of online social networks*’ project investigates the relationship between online and offline behaviour of users of online social networks from a double research perspective.. First, we provide new insights into the geography of these networks that has been less analysed by the international scientific community. Second, the link between offline and online values and attitudes and behaviour in the social media environment is also analysed

II. Expected results

The above mentioned two overlapping areas will lead us to new understandings of online communities with strong orientation to the location of these communities and their online behaviour. Besides ‘academic’ knowledge creation, we will work on establishing a research lab at IBS with skills for business cooperation and teaching as well. Business applications might be valuable in location-based services and teaching-related outcomes might be used in the Online Marketing module.

III. Expected outputs

Final product: a comprehensive research report published in English and Hungarian

Internal products:

- 2 published papers in leading international journals (English)
- 3 published papers in Hungarian peer reviewed journals (Hungarian)
- numerous smaller non-academic publications, press releases, blog entries

IV. Detailed Research plan including methodology

A. Summary of key activities

Phase No.	Timeframe	Activity to be carried out
Phase 1.	2012.01. – 2012.10. (10 months)	Preparation, collection of available secondary data, fieldwork

Phase 2.	2012.11. – 2013.03. (5 months)	Data analysis
Phase 3.	2013.04. – 2013.08. (5 months)	Dissemination of results

B. Detailed description of each planned research activity, including necessary resources and expected outputs

1. Phase 1: Preparation, collection of available secondary databases, fieldwork: January 2012 – October 2012

In the first phase of the project we define the final research design according to the availability of data sources. This requires several meetings with experts and other research companies. Our aim is to acquire both primary and secondary data for the analysis. We plan to use the following two sources of data:

1. Online social network relational data from iwiw (www.iwiw.hu), the largest Hungarian SNS (social networking site). Currently iwiw holds data from around 4,5 million people mainly from Hungary. We plan to have access to users's demographic data (gender, age, city/town, education), and to all of their connections.
2. VMR is the largest online survey in Hungary analysing online media using habits of Hungarian internet users carrier out the NRC Ltd. The sample size of the survey (carrier out by NRC Ltd.) is 10 000, it is carried out twice a year and the topics cover all relevant fields of creation and consumption of content, social media use, membership and user habits on social networks, general attitudes, etc. We plan to have access to this database and we also try to include our own research-specific questions to the questionnaire.

The first phase of the project also includes some theoretical and practical preparatory work. We will collect and review the relevant literature (from peer reviewed journals,

publicly available commercial and non-commercial research reports, blog entries, etc.)

2. **Phase 2:** *Data analysis: November 2012 – March 2013*

In the second phase of the project we will implement a multi-purpose and multi-method analysis of our databases.

The analysis of the iwiw database will require (1) expertise in the science of highly mathematical network analysis, and (2) massive hardware infrastructure. We will seek for both internal (from IBS) and external (outside IBS) support to carry out these tasks.

Using iwiw data we will focus on answering the following research questions:

- 1) A mathematical model of virus/innovation diffusion will be tested. What were the typical development phases of the evolution of the Hungarian commercial internet?
- 2) What were the main trends according to the offline geographical diffusion. What are the characteristics of the intra-city topography in the iwiw network? To achieve this goal: relatively homogenous sub-systems will be identified by cluster method and the search for centre-periphery structures.

By using the VMR2012 dataset we will answer to the following questions:

- 1) What are the typical user segments in Hungary according to social media and network usage, communication and browsing habits?
- 2) What are the demographic profiles of these user segments?
- 3) Using estimation models what is the absolute number of users in each segments?
- 4) Are there any differences among user segments in terms of their basic attitudes and values? (For this question we will use other 'offline' databases as well.)

3. Phase 3: *Dissemination of results: April 2013 – August 2013*

In the third phase of our research project we will focus on the 'multi-channel' dissemination of the results. It means that the target group of the publications will not be solely academic audiences, but wider public (media, companies, etc.)

The main output of the project will be a comprehensive research report in English and Hungarian. This will be published as an IBS Working Paper. (At this stage of the project we may decide to split the final report into two or three separate smaller publications.) A conference/workshop will be organized upon publication of the report. We will also issue a press release summarising the main findings.

Besides the final report our aim is to publish several articles in peer reviewed Hungarian and international scientific journals, and we will also launch a 'topline' series for the dissemination of the most interesting results. (Some of these topline could be published earlier, during Phase 2.)