
UTILIZATION PRACTICES OF SOME INTERNET TECHNOLOGIES IN SOME DEVELOPED COUNTRIES AND THE WESTERN BALKAN REGION

VANJA VARGA

ABSTRACT

In this paper I will try to display the importance and implications of possibilities that some of the emerging trends in Internet Communication Technologies (ICT) have for civil society. Shared data and social networks will be mentioned.

Firstly, facts and existing practices of shared data utilization in more developed countries in the Western Europe (WE) and USA will be pointed out and, secondly, facts on social networks and tendencies of personal usage will be shown. The former will be pictured by providing examples of those practices in WE and the USA and the latter by displaying usage tendencies and trends regarding social network utilization. The results of the research conducted on student population in Croatia regarding usage of the social networking site Facebook will be an example for the WBR. It will be argued that the similarities in utilizing social networks display personal and social susceptibility for new ICT and can be treated as a contributing factor that would facilitate utilization of (lacking) shared data practices in the WBR if such existed.

INTRODUCTION

Context: Emerging trends in Internet Communication Technologies – What are they?

In today's modern world, the Internet is ubiquitous. According to the World Internet Users and Population Stats' latest statistics, nearly two billion people have access to the Internet (latest data: 1.966.514.816). Even though that means that only between 15 and 20 percent of the world's population is on the Internet, and there's a long way to go in order to connect the rest, the numbers that indicate Internet usage growth show that up until now the process has been rather fast. In figures, 444.8% between

¹ <http://www.internetworldstats.com/stats.htm>

2000 and 2010. Furthermore, the less developed regions like Africa, the Middle East and South America / Caribbean seem to be the fastest growing (2.357,3%, 1.825,3% and 1.825,3% respectively) in comparison to more developed ones like North America and Europe (146.3% and 352.0% respectively). On the one hand, these statistics should be interpreted with caution because there are big differences within one region. For example, in Europe, growth for the mentioned period for Germany, France and the UK as examples of more developed countries within Western Europe is much lower (171.3%, 425.0% and 234.0% respectively) than in Albania, Bosnia and Herzegovina and Macedonia as examples of less developed countries of the Western Balkan Region (51.900,0%, 20.485,7% and 3.424,7% respectively). On the other hand, the same pattern of growth regarding the level of development is shown in the world's regions purely on the regional level.

Today's Internet is radically different from what it used to be and it's constantly changing.

Since its creation in the early 1960s, from commercialization to private use in the 1980s and its expansion to popular usage in the 1990s, the Internet has become a global network with a drastic impact on culture and the economy. Connecting between people started in the 1970s, with emails and discussion groups, and the possibilities for interaction are improving along with the development of new Internet applications like on-line real-time games (1978), chat (1988) and blog (1993), sites that provide a range of services (Yahoo!, GeoCities, Ebay, ... ; 1994.) and social networking sites (Six Degrees.com; 1997)². The development of Internet technologies has led to the conversion of Web 1.0 to Web 2.0. As opposed to Web 1.0, Web 2.0 is technically an ideal platform and context for social networking enabled by different social media. Continuing evolution points towards Web 3.0, or the Semantic Web, which will enable what previously was lacking on the Internet - personalization, true portability, interoperability... It will be semantic—it will 'understand' the information on the Internet.

Features of Web 2.0 are already enabling remarkable opportunities regarding access to information, data sharing, communication and collaboration in comparison with what was possible a decade ago. For the purpose of this paper, two examples will be introduced: data sharing and social networking.

² http://en.wikipedia.org/wiki/Timeline_of_popular_Internet_services

Data sharing philosophy is chosen because it is the result of numerous good practices, it is enabled by existing computer and Internet technologies and it is already being used in the developed world so it would be useful to start implementing it in the WBR. Here differences in existing practices of shared data utilization between the more developed countries in Western Europe (WE) and the USA in contrast to those in the Western Balkan region (WBR) will be mentioned.

Social networking is chosen because it too is a good practice enabled by existing Internet technologies and is being used both in the developed world and the WBR, with the difference that in the WBR it is still being dominantly utilized for personal purposes. Similarities in motivation behind the use of social networks will be shown by comparing usage tendencies and trends regarding social network usage and by using the results of the research conducted on the Croatian student population's application of the social networking site Facebook as an example for the WBR.

The point that will be argued is that the similarities in utilizing social networks show personal and social susceptibility for new ICT which can be treated as a contributing factor that would facilitate utilization of (lacking) shared data practices in the WBR if such existed.

SHARED DATA

Shared or Open Data is a philosophy and practice requiring that certain data are freely available to everyone, without restrictions from copyright and patents or other mechanisms of control. It has a similar ethos to a number of other "Open" movements and communities such as open source and open access. The data that the emphasis is on is the data from scientific research, government data and from the data-driven web³.

The approach of opening data has been recently pioneered by governments in the United States and the United Kingdom (with the launch of two web portals - www.data.gov and www.data.gov.uk respectively). These practices have substantial social and economic gains: the combination of geographic, budget, demographic, services, education and other data, publicly available in an open format on the web, promises to improve services as well as create future economic growth.

The research commissioned by a consortium of funders and NGOs under the umbrella of the Transparency and Accountability Initiative (Hogge, 2010) sought

³ http://en.wikipedia.org/wiki/Open_science_data

to explore the feasibility of applying this approach to open data in relevant middle income and developing countries. Its aim was to identify the strategies used in the USA and UK contexts with a view to building a set of criteria to guide the selection of pilot countries, which in turn suggests a template strategy to open government data.

The report found that in both the USA and the UK, a three-tiered drive was at play. The three groups of actors who were crucial to the projects' success were: civil society, and in particular a small and motivated group of "civic hackers"; an engaged and well-resourced "middle layer" of skilled government bureaucrats; and a top-level mandate, motivated either by an outside force (in the case of the UK) or a refreshed political administration hungry for change (in the USA).

Based on these findings, and on interviews conducted with a selection of domain and region experts to refine these observations for a developing and middle-income country context (where a fourth tier of potential drivers towards open data has been identified in the shape of international aid donors) the report presents a list of criteria to be considered when selecting a pilot country in order to test this strategy. The Open Data Study provides "An open data strategy checklist".

The awareness of the efficacy and the endeavour to inform about and facilitate shared data practices is rising. One of the main topics of the Lift conference⁴ held in July 2010 in Marseilles, France, was on shared data. The session "Web – squared; making sense of the world through shared data" focussed on ideas and practices surrounding the re-use of public-service information and the massive flows of data produced both by people and sensors, pointing out the huge opportunities that arise for knowledge production, value creation and citizen participation.

Furthermore, different organizations have been formed with the aim of making regulations about shared data. Examples of these are the Open Data Foundation and the Open Data Commons.

The Open Data Foundation⁵ provides a place where the members of different communities can come together and work on the alignment of technology standards and software tools which will facilitate visibility and re-use of data at all levels of the statistical information chain. By promoting automated access to statistical data and metadata in this way, better decision-making becomes possible in many fields of research and policy-making. The Open Data Commons exists to provide

⁴ <http://liftconference.com/lift-france-10>

⁵ <http://www.opendatafoundation.org/?lvl1=about&lvl2=organization>

legal solutions to open data and is an Open Knowledge Foundation project run by its Advisory Council which, like the Foundation, is a not-for-profit effort working for the benefit of the general open knowledge community⁶.

Apart from the two government sites www.data.gov and www.data.gov.uk there are numerous other web sites that use shared data.

CKAN (Comprehensive Knowledge Archive Network)⁷ site is a registry of open knowledge packages and projects. Here, open knowledge resources can be found or your own registered. Infochimps.org⁸ is a project attempting to assemble and interconnect the world's best repository for raw data. MusicBrainz.org⁹ is a user-maintained community metadatabase site which collects music "metadata" like artists' name, release titles, lists of tracks, etc. DBpedia.org¹⁰ is a community effort to extract structured info from Wikipedia and make that data publicly available on the web, essentially turning Wikipedia into a database you can query. mySociety.org¹¹ runs most of the best-known democracy and transparency websites in the UK, sites like TheyWorkForYou and WriteToThem. It is a not-for-profit company that builds websites of a democratic bent for other people, such as the No 10 Downing Street Petitions Website for the Prime Minister's Office. mySociety has two missions. The first is to be a charitable project which builds websites that give people simple, tangible benefits in the civic and community aspects of their lives. The second is to teach the public and voluntary sectors, through demonstration, how to use the internet most efficiently to improve the quality of life.

In these and other similar projects Internet communication technologies are used to a great extent since they enable advanced communication and collaboration. The example of those technologies that is going to be mentioned here is the social network. Today, people spend twice as much of their on-line time on social networks than in any other activity. According to new statistics from Nielsen, sites like Facebook and Twitter now account for 22.7% of time spent on the web¹².

To the author's best knowledge, such practices do not exist or at least are not common in the WBR.

⁶ <http://www.opendatacommons.org/about/>

⁷ <http://ckan.net>

⁸ <http://infochimps.org/>

⁹ <http://musicbrainz.org>

¹⁰ <http://dbpedia.org/About>

¹¹ <http://www.mysociety.org/>

¹² <http://mashable.com/2010/08/02/stats-time-spent-online/>

SOCIAL NETWORK SITES

Since their introduction, social network sites (SNSs) such as MySpace, Facebook, Cyworld, and Bebo have attracted millions of users, many of whom have integrated these sites into their daily practices. At the time of writing there are already hundreds of SNSs, with various technological affordances, supporting a wide range of interests and practices. While their key technological features are fairly consistent, the cultures that emerge around SNSs are varied. Most sites support the maintenance of pre-existing social networks, but others help strangers to connect based on their shared interests, political views, or other activities. Some sites cater to diverse audiences, while others attract people based on common language or shared racial, sexual, religious, or nationality-based identities. Sites also vary in the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo/video-sharing.

Boyd and Ellison define social network sites as web-based services that allow individuals to 1. construct a public or semi-public profile within a bounded system, 2. articulate a list of other users with whom they share a connection and 3. view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site. (Boyd – Ellison, 2007)

What makes social network sites unique is not that they allow individuals to meet strangers, but rather that they enable users to articulate and make visible their social networks. This can result in connections between individuals that would not otherwise be made, but that is often not the goal, and these meetings are frequently between “latent ties” (Boyd – Ellison, 2007) who share some offline connection. On many of the large SNSs, participants are not necessarily “networking” or looking to meet new people; instead, they are primarily communicating with people who are already a part of their extended social network. To emphasize this articulated social network as a critical organizing feature of these sites, we label them “social network sites.”

While SNSs have implemented a wide variety of technical features, their backbone consists of visible profiles that display an articulated list of Friends¹ who are also users of the system. Profiles are unique pages where one can “type oneself into being” (Boyd – Ellison, 2007). After joining an SNS, an individual is asked to fill out forms containing a series of questions. The profile is generated using the answers to these

questions, which typically include descriptors such as age, location, interests, and an “about me” section. Most sites also encourage users to upload a profile photo. Some sites allow users to enhance their profiles by adding multimedia content or modifying their profile’s look and feel. Others, such as Facebook, allow users to add modules (“Applications”) that enhance their profile.

After joining a social network site, users are prompted to identify others in the system with whom they have a relationship. The label for these relationships differs depending on the site—popular terms include “Friends,” “Contacts,” and “Fans.” Most SNSs require bi-directional confirmation for Friendship, but some do not. These one-directional ties are sometimes labelled as “Fans” or “Followers,” but many sites call these Friends as well. The term “Friends” can be misleading, because the connection does not necessarily mean friendship in the everyday vernacular sense, and the reasons people connect are varied.

The public display of connections is a crucial component of SNSs. The Friends list contains links to each Friend’s profile, enabling viewers to traverse the network graph by clicking through the Friends lists. On most sites, the list of Friends is visible to anyone who is permitted to view the profile, although there are exceptions. For instance, some MySpace users have hacked their profiles to hide the Friends display, and LinkedIn allows users to opt out of displaying their network.

Beyond profiles, Friends, comments, and private messaging, SNSs vary greatly in their features and user base. Some have photo-sharing or video-sharing capabilities; others have built-in blogging and instant messaging technology. There are mobile-specific SNSs (e.g., Dodgeball), but some web-based SNSs also support limited mobile interactions (e.g., Facebook, MySpace, and Cyworld). Many SNSs target people from specific geographical regions or linguistic groups, although this does not always determine the site’s constituency. Orkut, for example, was launched in the United States with an English-only interface, but Portuguese-speaking Brazilians quickly became the dominant user group (Boyd – Ellison, 2007). Some sites are designed with specific ethnic, religious, sexual orientation, political, or other identity-driven categories in mind. There are even SNSs for dogs (Dogster) and cats (Catster), although their owners must manage their profiles.

While SNSs are often designed to be widely accessible, many attract homogeneous populations initially, so it is not uncommon to find groups using sites to segregate themselves by nationality, age, educational level, or other factors that typically segment

society (Hargittai, this issue), even if that was not the intention of the designers. Along their basic utilization for social networking, due to their availability, simplicity and cost (they are free of charge), SNS are used for networking and marketing activities of business subjects and communication and collaboration activities of scientific and academic subjects.

Scholars from disparate fields have examined SNSs in order to understand the practices, implications, culture, and meaning of the sites, as well as users' engagement with them. Besides issues concerning impression management and friendship performance, research on SNS is dominantly taking place in two fields. One concerns itself with privacy issues and information security, and the other is motivation in using SNS.

Regarding privacy, results unambiguously show that users provide a large amount of information on their profiles. Identity information is revealed to a greater extent than information about different preferences. Information that showed to be most frequently displayed in various research is: correct name and surname, gender, birth date, address, schools attended, favourite books / movies / music, relationship status and political orientation. In addition, the majority of users have uploaded their photograph/s (Acquisti – Gross, 2005; Acquisti – Gross, 2006; Debatin – Lovejoy – Horn – Hughes, 2009; Ellison – Steinfield – Lampe, 2007; Jones – Soltren, 2005; Lampe – Ellison – Steinfield, 2006; Lampe – Ellison – Steinfield, 2008; Taraszow – Aristodemou – Shitta – Laouris – Arsoy, 2010). Alongside such user tendencies, there is a trend of low knowledge and negligence in protecting personal information as well as false beliefs about privacy issues.

Regarding motivation, the potential of SNS to maintain so-called “weak ties” (similar as the concept of bridging social capital) has been shown to be probably the most important benefit of SNS utilization (Valenzuela – Park – Kee, 2008). Most common identified motivations include maintaining contact with people with whom contact in physical reality is not possible, virtual surveillance, re-establishing lost contacts, communication, photographs (uploading, sharing, ...) simplicity of use and lastly, establishing new contacts.

UTILIZATION OF FACEBOOK IN CROATIA: MOTIVATION AND PRIVACY ISSUES*

The aim of the study was to examine some aspects of the use of the social networking site Facebook. The participants were students $n = 530$ from the faculties of Humanities and Social Sciences (FHSS) and Electrical Engineering and Computing (FEEC) of the University of Zagreb, Croatia.

Differences between users (72.5%) and non-users (27.5%) were assessed; motivation for initiating usage and ongoing usage was questioned as well as knowledge, opinion and performance as regards privacy and safety of information. The relation of perceived benefits and risks was examined.

A series of One-way ANOVA tests that were completed showed there were differences between users and non-users as well as among four groups of users (two Faculties x two sexes). The most frequent difference was that between group FFHSS (Females from FHSS) and MFEEC (Males from FEEC). The results of examined ratio indicate that perceived benefits outweigh perceived risks. The most frequent motivations for initializing the SNS usage mentioned in open ended questions were: curiosity, majority of people had a profile, invitation / suggestion, communication / interaction and maintaining contact. These are considered as indicating to a type of social pressure in relation to SNS usage becoming a social norm.

Ongoing usage was found to be dominantly motivated by communication, giving an receiving information and maintaining and re-acquiring contacts. Questions about privacy and safety of information reveal low levels of knowledge, distorted opinion and little movement toward gaining more privacy. Furthermore, perceived benefits outweighed perceived risks.

All of the findings can be considered in line with the previously mentioned research.

CONCLUSION

The aim of this paper was to point out the benefits of shared data practices that exist in the more developed countries (e.g. UK, USA) but are not common in the WBR. As was mentioned, there are initiatives that seek to refine observations made in more developed countries in order to shape them for developing and middle-income countries.

* This article is the author's Thesis. It is not published by now, but is available on demand via e-mail: vvarga@ffzg.hr.

The author used social networks as an example that may serve as an analogy to how individuals and society react to new possibilities enabled by emerging Internet (communication) technologies. A comparison of social network usage tendencies between developed countries and the WBR (based on the findings of the research of Facebook usage tendencies on a student population in Croatia) was made. It was shown that the usage tendencies, motivation and privacy issues are practically the same, so the line of the argument here is that these similarities in human behavior can be considered as an important contributing factor in the adoption of different data sharing practices in the WBR. Hopefully, this article will be of some help for the initialization of those practices in the WBR.

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