Ana Maria Moreira
Gregory Gerhardt
Mathias Möller
Andreas Ladner

Swiss Democracy on the Web 2010

Society and Politics in a Connected Age

Cahier de l'IDHEAP 259/2010

Chaire Administration suisse et politiques institutionnelles

idheap

Institut de hautes études en administration publique
Swiss Graduate School of Public Administration

L'Université pour le service public

The rapid adoption of online media like Facebook, Twitter or Wikileaks leaves us with little time to think. Where is information technology taking us, our society and our democratic institutions? Is the Web replicating social divides that already exist offline or does collaborative technology pave the way for a more equal society? How do we find the right balance between openness and privacy? Can social media improve civic participation or do they breed superficial exchange and the promotion of false information? These and lots of other questions arise when one starts to look at the Internet, society and politics.
The first part of this paper gives an overview of the social changes that occur with the rise of the Web. The second part serves as an overview on how the Web is being used for political participation in Switzerland and abroad.

Le développement rapide de nouveaux médias comme Facebook, Twitter ou Wikileaks ne laisse que peu de temps à la réflexion. Quels sont les changements que ces technologies de l'information impliquent pour nous, notre société et nos institutions démocratiques? Internet ne fait-il que reproduire des divisions sociales qui lui préexistent ou constitue-t-il un moyen de lisser et d'égaliser ces mêmes divisions? Comment trouver le bon équilibre entre transparence et respect de la vie privée? Les médias sociaux permettent-ils de stimuler la participation politique ou ne sont-ils que le vecteur d'échanges superficiels et de fausses informations? Ces questions, parmi d'autres, émergent rapidement lorsque l'on s'intéresse à la question des liens entre Internet, la société et la politique.
La première partie de ce cahier est consacrée aux changements sociaux générés par l'émergence et le développement d'Internet. La seconde fait l'état des lieux de la manière dont Internet est utilisé pour stimuler la participation politique en Suisse et à l'étranger.

Ana Maria Moreira
Gregory Gerhardt
Mathias Möller
Andreas Ladner

Swiss Democracy on the Web 2010

Society and Politics in a Connected Age

Cahier de l'IDHEAP 259/2010

Chaire Administration suisse et politiques institutionnelles

ISBN 978-2-940390-36-6

Institut de hautes études en administration publique
Swiss Graduate School of Public Administration
Quartier UNIL Mouline – CH-1015-Lausanne
T: +41(0)21 557 40 00 – F : +41(0)21 557 40 09
idheap@idheap.unil.ch – www.idheap.ch

This report is a public private cooperation between Amazee Labs (amazeelabs.com) and IDHEAP (idheap.ch). It is part of an ongoing research project (10440.1 PFES-ES, e-participation and e-democracy) funded by Amazee Labs and CTI (bbt.admin.ch/kti), the Swiss Confederations's Innovation Promotion Agency.

Amazee Labs is a Swiss Web agency specializing in the development of community and e-participation solutions. Amazee Labs is one of Switzerland's leading think tanks on the interface between society, politics and the social Web. For more information on Amazee Labs please visit amazeelabs.com or contact Gregory Gerhardt: gregory@amazeelabs.com

The **Swiss Graduate School of Public Administration** (IDHEAP) is the Swiss institute of graduate and postgraduate education that prepares students for the most senior positions in the country's public and para-public administrations. For more information on IDHEAP please visit idheap.ch or contact Prof. Dr. Andreas Ladner: andreas.ladner@idheap.ch

TABLE OF CONTENTS

LIST OF FIGURES

1 INTRODUCTION

Two billion people around the globe use the World Wide Web. In Switzerland the most visited website is google.ch, followed by facebook.com, google.com, youtube.com and wikipedia.org. Almost two and a half million Swiss citizens have registered on Facebook. Twitter, a new breed of information and communication channel, shows more visits from Switzerland than the online version of one of Switzerland's major daily newspapers, tagesanzeiger.ch (Alexa 2010a, Hutter 2010a).

Beyond these big players, a multitude of specialized e-participation platforms[1] like number10.gov.uk, epetitionen.bundestag.de or smartvote.ch are evolving. The providers aim to offer new forms of political information and foster interaction between (and among) citizens and governments. On the Web, politically relevant information can be made available at any time. Citizens can give feedback and share their ideas with their government and other citizens in real time and in some cases even vote online. With Web 2.0 tools the democratic process can be made more transparent, inclusive and accessible (Rosa/Guimarães Pereira 2008: 16).

The rapid adoption of social media, however, leaves us with little time to think where information technology is taking us, our society and our democratic institutions. Is the Web replicating social divides that already exist offline or does collaborative technology pave the way for a more equal society? How do we find the right balance between openness and privacy? Can social media improve civic participation or do they rather breed superficial exchange and the promotion of false information?

These and lots of other questions arise when one starts looking at the interface between the Internet, society and politics. This paper has been written as a road map for those interested in the changes that social media bring to Swiss democracy.

[1] *Democratic political participation must involve the means to be informed, the mechanisms to take part in the décision -making and the ability to contribute and influence the political agenda (Caddy/Vergez 2003: 23). E-participation projects enable democratic political participation online.*

The first part "Internet and Social Change" (Chapter 2 and 3) gives an overview of the social changes that occur with the rise of the Web. The second part "Web 2.0 in Top-down and Bottom-up Politics" (Chapter 4) serves as an overview on how the Web is being used for political participation. Both parts can be read independently.

2 INTERNET AND SOCIAL CHANGE

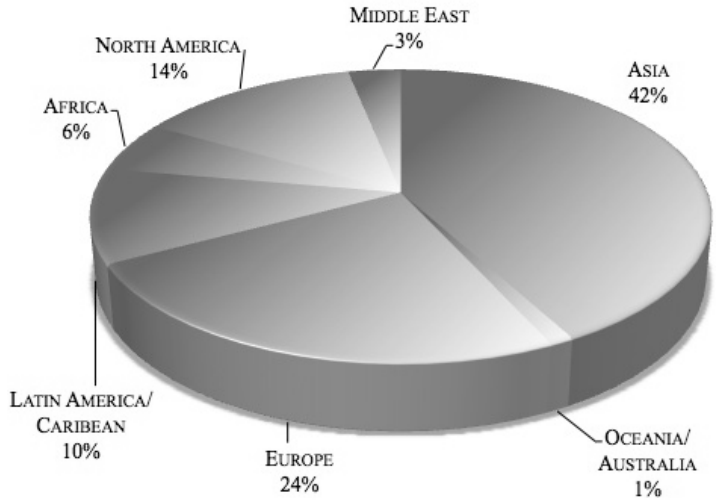
2.1 GROWTH OF INTERNET USAGE

In order to give a concise overview of the social media (e.g. Facebook or Twitter) spread and advancement, we first have to look at Internet usage on the whole. Boiling the multitude of definitions down, an Internet user is an individual who (a) has technical access to the Internet and (b) has the basic knowledge to navigate in it, meaning that he knows how to receive e-mails, send e-mails and apply a Web browser and a search engine.

With this definition in mind we can examine the worldwide spread of Internet usage. With an estimated world population of close to 6.86 billion, the "population of Internet users" has grown to about 1.97 billion people (as of June 2010), from nearly 361 million at the end of 2000 (Internet World Stats Usage and Population Statistics 2010a). This translates into a growth of roughly 445%. Of course, great regional disparities exist in both Internet access growth and penetration.

Whereas the largest overall Internet population today lives in Asia (42.0% of all Internet users worldwide), only very small segments come from Africa, the Middle East and Australia/Oceania (5.6%, 3.2% and 1.1% respectively). Europe makes up almost a quarter of the World's online population, while North America accounts for 13.5%, Latin America and the Caribbean for 10.4% (Internet World Stats Usage and Population Statistics 2010a).

Figure 1: Internet Users by Region

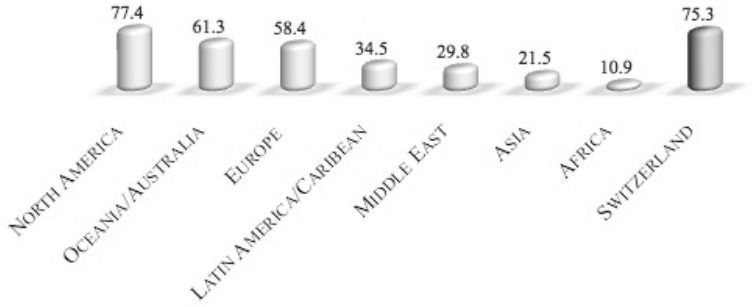


Source: *Internet World Stats Usage and Population Statistics 2010a*

Given that Africa has an estimated population of over one billion people, the Internet penetration rate is only 10.9%, by far the lowest of all continents. Although Japan and South Korea have long been major players on the Web and China has been experiencing a boost in Internet access Asia still lags far behind the West with only 21.5%. Europe has reached an Internet penetration rate of 58.4%, while Australia/Oceania are already at 61.3%. North America leads this chart with 77.4% (see figure 2) (Internet World Stats Usage and Population Statistics 2010a).

Looking at the German speaking countries, Germany has a penetration rate of 79.1% and Austria of 74.8%. Switzerland ranks in between the two with 75.3% of its population having Web access (see figure 2) (Internet World Stats Usage and Population Statistics 2010b-c).

Figure 2: Internet Penetration by Region in % of total Population

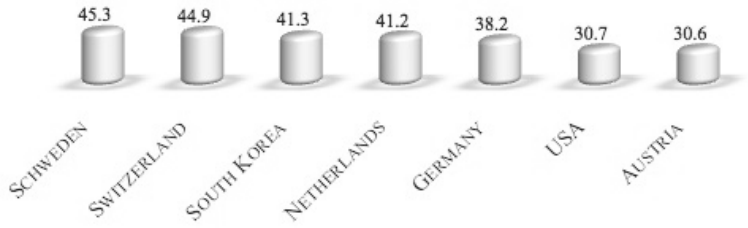


Source*: Internet World Stats Usage and Population Statistics 2010a-b*

Broadband Internet is increasingly becoming the standard type of Internet connection in the West. The reason why this type of connection is important for our findings is the speed of data transfer it allows. It enables the user to send and receive large packages of information. Listening to radio stations and to watch television online has only become possible because of Broadband technology.

In general the numbers of Broadband subscriptions run along the same lines of Internet connectivity. The West is also in this regard far more advanced than most of Asia and Africa. Figures in Western countries range from fifteen to over forty per cent of total Internet penetration. It is interesting to note that the United States range in the average of the West with 30.7% (06/2009) while South Korea (41.3%, 06/2009), Sweden (45.3%, 06/2010) and the Netherlands (41.2%, 12/2009) range significantly higher (Internet World Stats Usage and Population Statistics 2010c-e).

Figure 3: Broadband Subscriptions by % of Internet Users



Source*: Internet World Stats Usage and Population Statistics 2010b-e*

Looking nearer again, Germany, in 2009, had a Broadband penetration rate of 38.2% while in mid-2010 Austria stood at 30.6% and Switzerland, back in 2008, at 44.9% (Internet World Stats Usage and Population Statistics 2010b-c). For more on regional disparities as well as a closer look at other categories like age, location and sex, see chapter 2.2 on the Digital Divide.

2.2 DIGITAL DIVIDE

The Digital Divide refers to the gap between people with effective access to digital and information technology and those with only limited or no access at all. Whether we talk about a Digital Divide or a Digital Gap (which shall be treated as equal terms describing the same phenomenon), it has to be acknowledged that divides or gaps have existed before the digital one, rooting in the same inequalities. The Information Divide and the Knowledge Divide, for example, are very similar to the Digital Divide (Zillien 2006: 56). All these divides are the consequence of unequal access to and/or availability of information, to knowledge or to the (digital) means to acquire such information or knowledge. These inequalities can exist within the borders of one country, but also across borders, for example from industrialized nations to the so-called Third World. Very basically speaking, the Digital

Divide is defined by Internet access, logistically and technically: Does one have online access at home, at school, at friends' places, be it Dial-Up or Broadband. But there are further layers of the Divide which build upon this first one.

2.2.1 THE DIGITAL DIVIDE – A MATTER OF CLASS

In her study, Nicole Zillien (2006: V) comes to the conclusion, "that the usage of the Internet depends highly upon the socio-economic status". The same goes for a more overall Digital Competence. While Zillien (2006: V) thus clearly states that Internet usage is a question of social class we found other determinants when it comes to defining the Digital Divide: Internet usage is also a question of age, sex and location. Statistics on Internet usage still show that younger people are more inclined to go online than their elders, and women are still slightly underrepresented in the virtual world (see below for numbers concerning Switzerland). As for location, Internet access and more specifically Broadband access, is still more widespread in urban centers than in rural areas. Zillien (2006: 3) goes on to argue that the introduction of new media might lead to a greater exclusion of certain parts of society rather than spur widespread societal participation, and thus hardening existing social inequalities. Furthermore, those who have no access to the Internet cannot develop and practice the skills needed to navigate online, thus falling even further behind. Others, like the Digital Gap critic Benjamin Compaine (2001: xii), on the other hand, state that technology-related gaps are relatively transient because people develop the ability to adapt to the challenges and changes brought by new media. Compaine (2001: ix) also argues that "perceived gaps are closing among various ethnic, racial and geographical groups in access to the Internet" simply due to decreasing digital communications cost as well as the general increase of use. Although singular voices argue that the Digital Divide is at least an exaggeration or simply does not exist, sufficient empirical proof exists to underpin the claim that the Digital Divide is indeed a reality.

It is important to note that it would be a crass simplification to break the Digital Divide down into a gap between those with access to the Internet

and those without. It is rather implied that there are various stratifications of divides. As Zillien (2006: 99) demonstrates, the Korean sociologists Kim and Kim for example differentiate between the Opportunity Divide (access or none), the Utilization Divide (acquired technological skills needed to use the Internet) and the Reception Divide (ability to judge and choose the right sources). Especially the Reception Divide in this model tends to be overlooked but is, in our opinion, important. Clement and Shade (quoted in Zillian 2006: 101), on the other hand, have developed a rainbow model with even more dimensions: *type of access* (Broadband vs. Dial-Up), *technological means* (what device is being used?), *software* (browser, additional programs, encryption technology), *content* (is relevant content accessible?), *provider* (reliable Internet connectivity), *(computer) literacy* (media competency, access to technological support) and *structural decisions* (ability to help design the technological infrastructure).

2.2.2 SWITZERLAND AND THE DIGITAL DIVIDE

Looking at the various determinants of the Digital Divide and comparing them with figures for 2010 retrieved from "Medienindikatoren – Indikatoren – Internetnutzung", published by the Federal Statistics Office (BFS 2010a), we can conclude that:

1.) The older the population, the less it goes online. Among those who use the Internet more than once a week, the 14 to 19 year olds are the strongest group with 94.1 per cent, closely followed by the group of 20 to 29 year olds with 93.8%. Only 53.4% of Swiss aged 60 to 69 are online regularly with the rate dropping sharply for those over 70 – here it is down to a mere 22.6%.

2.) Women are underrepresented in the online world. Of all Swiss men 82% go online regularly, while only 67.2% of the women do so.

3.) Education is a key factor in Internet usage. When it comes to education, Zillien's theory seems to be confirmed: In Switzerland, in 2010, only 53.1% of those with the lowest formal education (compulsory schooling) used the Internet regularly. Those with a high

school diploma (matriculation) went online at a rate of 73.4%; 82.4% of those with a higher formal education were only beaten by those with a tertiary degree: of this group 92.9% are online.

4.) The higher the income, the more likely one goes online. Online usage seems to depend on income (remember, Zillien referred to socioeconomic status). Of those earning 3.999 Swiss Francs or less per month, only 40.5% use the Internet once a week or more often, while those with salaries of 10.000 CHF and higher were online at a rate of 94.3%.

Another very interesting finding of the Federal Statistics Office is that when it comes to Internet usage in the three major language regions in Switzerland, the Italian region lags by more than ten per cent behind the German and the French region. This is partially explained on the Federal Office's homepage with the fact that demographics for the Italian part of Switzerland show a significantly higher percentage of elderly population.

2.2.3 HOW TO OVERCOME THE DIGITAL DIVIDE

Katz and Rice (2002: 65), who have been investigating the Digital Divide since as early as 2002 (the term is dated back in various monographs to the mid-Nineties), then concluded that the Digital Divide, though narrowing, is remaining. This still seems to be true today. One part of the 2008 ACTA survey of the German Allensbach Institute for example hints at a more rapid growth of Internet usage by older population groups in Germany (Süsslin 2008: 3ff), which still means, however, that they are only catching up, not drawing even.

Providing broad and open online access is merely laying the cornerstone for equality in a digitalized society. We see it as vital that state institutions put education onto their agendas. As Lisa J. Servon (2002: 77) states in her work "Bridging The Digital Divide": "An access-focused policy works for the telephone, but is inadequate for the Internet". What needs to be done is to enhance digital literacy, a somewhat complex mix of "professional knowledge, economic resources, and technical skills" (Kling quoted in Zillien 2006: 96) which

enables the user to navigate through the Internet unharmed. National as well as supranational telecommunications institutions need to solve the problems of accessibility, while state (and international) educational institutions need to acknowledge the fact that the population (not just the young) needs to be educated in how to use the hardware and software and needs to be taught the necessary skills which enables them to navigate and to evaluate information drawn from the Web. Because, as Zillien (2006: 85) puts it correctly: The Digital Divide is not about how many per cent of a population have online access, it is about how many can profit from it.

Excursus: An expert on digital education in Switzerland[2]

Hanspeter Füllemann works at the Pädagogische Hochschule (Teachers' Training College) Thurgau and draws from his experience in the canton of Thurgau. He says that although the schools are eager to implement technical novelties and offer computer science as a subject, the ever-changing modalities pose a great challenge to the teaching staff. However, cantonal institutions offer advanced training programs and assist schools in finding answers to questions arising from the usage of computer technologies.

Asked if he felt that teachers were aware of the importance of the field of computer technologies, Füllemann replied: "Many don't live in the digital world and with new media yet. The awareness is growing, however, that schools need to deal with this topic." Obviously, time management is an issue here. And also: "Further education regarding the use of Web content or a pedagogically sensible utilization of the cell phone are not very popular. There still are staff members who harbour fears or think they can get around this. But many are starting to improve their competences."

Regarding the technical setup, schools in the canton of Thurgau are well equipped for the digital age. The staff, on the other hand, must keep

[2] *The excursus is based on an Interview conducted by Mathias Möller on 6 September 2010*

pace and will still need some time to catch up. It can be assumed that this will change once tech-savvy digital immigrants are coming of age and start to work as teachers.

3 RISE OF SOCIAL MEDIA AND SOCIAL IMPLICATIONS

3.1 SOCIAL MEDIA SEGMENTATION

When it comes to societal and political participation on the Web, so-called social media play an integral role. We define online social media as web based services, which allow users to create content and interact with each other through features like comment functionalities. This so-called user generated content can be anything from uploading a picture to the photo sharing platform Flickr to writing lengthy blog entries on blogging software like Wordpress to updating one's status on Facebook. Online social media are furthermore characterized by the fact that they involve very little cost, usually little time and few technical skills and that they enable the user to broadcast to many other users.

If the Web can be seen as the communication hardware, social media are the corresponding social software. They do not only challenge traditional ways of networking, communication and participation, they reshape them. Therefore, governments and politics, for instance, will have to adapt to social media, not the other way around.

Excursus: Interview with Mathias Menzl, Multimedia Project Manager at the Swiss National TV (SRF, Schweizer Radio und Fernsehen)[3]

Mathias Menzl, where in your opinion is Switzerland leading to with regard to social Web, and where does it lag behind other countries? *Leading: In percentage of overall population with a Facebook account. Not leading: In the merging of social media and traditional media. Here I see a huge potential for optimization. The leading media enterprises and their management do not know how to deal with it.*

Do you think the Web enhances social exchange or does it hinder it? *The social Web intensifies social exchange. Whether this translates into*

[3] *Interview conducted by Mathias Möller on 24 August 2010*

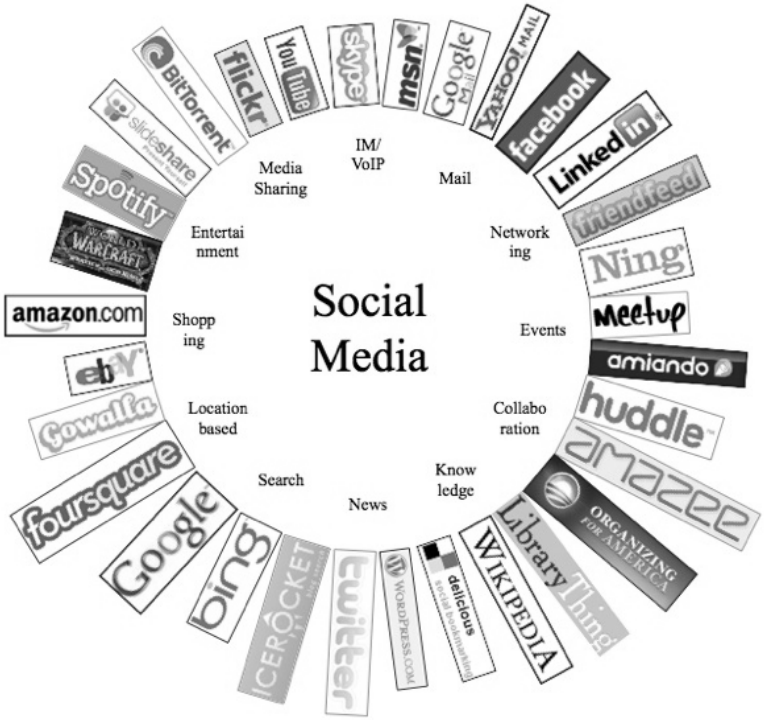
an enhancement or a weakening would have to be judged individually. For those who know how to use the social Web for their goals it will be an enhancement. But for every individual or group which is reinforced, there is another which is weakened. Overall I am certain social media represent an improvement, at least I feel this way without really being able to prove it.

In which area of social media do you see the most potential for Switzerland? *Here we deal with three aspects: Education, in other words countering the Digital Divide, Law-making and Workplace. Social media can lead to a better life. Social media connects people, enhances collaboration and entertainment as well as knowledge transfer. As discussed before, it all depends on whether one knows how to use social media. Although social media is a commonplace term, it requires media competence which not all parts of the population possess to a similar degree. In my opinion social media should be taught at schools. The Facebook privacy discussion has exemplified this very clearly: Very few know how they can configure their account in the way they want it to work. The Web, especially the social Web, is all encompassing and interdisciplinary and should be handled this way. Web no longer is mere informatics. Web is everything, and the social Web penetrates every aspect of life. Furthermore, social media has accomplished something special: people are more and more using their real identities on the Internet. This is the post Second Life, the post Myspace age. In this there lies much potential for new applications, but there lurk many new dangers, for example for privacy. In a transnational context, which the Web represents, this poses a huge challenge for law making.*

Young people are beginning to choose their employers by how flexible they are. social collaboration tools, flexible working hours, home office days and so on have become important components of work, but most of the large companies are still lagging behind in this respect. Switzerland as a country which relies heavily on the services sector could one day take on a leading role in this regard.

To gain an overview of the different types of online social media we divided the social media sector into a wheel-like structure displaying some representative providers.

Figure 4: Social Media Wheel



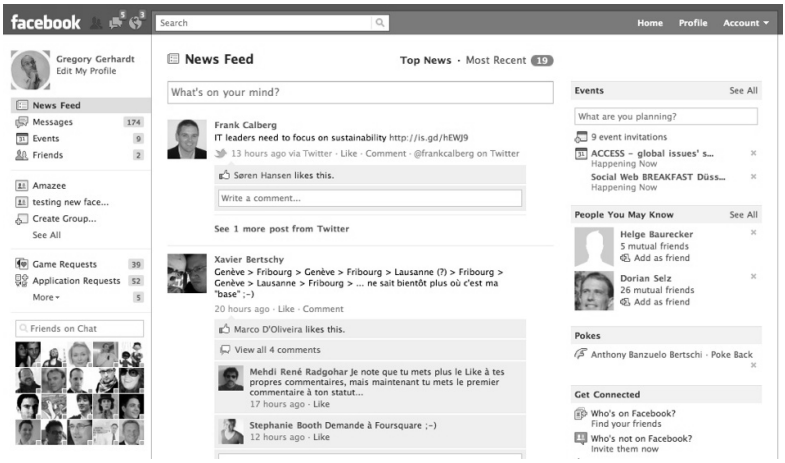
Source: *own illustration*

3.2 IDENTITY, IDENTIFICATION AND AUTHENTICATION

Since the beginning of their explosive growth in 2005, social media such as Facebook, Xing or Twitter have become hubs for virtual identity construction. Social networking sites allow personal self-expression and at the same time provide opportunities for connecting and relationship building (Stern 2008: 98). Whereas real-world identities are generally

unitary and socially constructed according to institutional values – family, community, church, profession, nation and so on, cyberspace creates a wider horizontal space for the personal fabrication of identities and allows a cleaner segmentation of multiple identities (Fraser and Dutta 2008: 20ff). A Xing profile will usually represent the "professional" identity, a Facebook profile will show the "casual" identity and an Amazee profile the "socially engaged" identity.

Figure 5: Facebook Profile



Source*: www.facebook.com/home.php#/gregory.gerhardt?ref=profile*

In more extreme cases the quest for uniqueness or confidentiality can also inspire highly imaginative and "false" forms of self-presentation, including fabrication, invention and identity theft (Fraser and Dutta 2008: 36). In the real world the self is presented; in the virtual world it can easily be invented (Fraser and Dutta 2008: 39).

Whereas Fraser and Dutta (2008: 32) claim that the online construction of multiple identities is becoming the expected norm, our observation is the opposite. Of 1.528 randomly selected Facebook friends, 1.486 (97%) used their true user name and only 42 (3%) used a pseudonym. Independent of identity experiments and the changing nature of personal

and institutional identities, the Internet generation is increasingly using the Web to reflect a unitary identity using their real name. This for two reasons: First, multiple identities with multiple names are equal to a spreading loss in the daily human competition for attention, or in other words, the more I use the same name, the easier it is to build an online reputation. The Web is more and more turning from an experimental playing field into a system that is instrumental for maintaining a competitive advantage in most areas of daily life. Focused online interaction therefore requires a coherent "personal brand". Second, the usage of real identities is driven by the fact that virtual bodies are mostly embedded in social networks. This means that online identities are also governed and validated by other people and organizations that add their patches to our "social performance" (Fraser and Dutta 2008: 40), e.g. by publicly tagging and uploading pictures of other people or commenting on other online profiles.

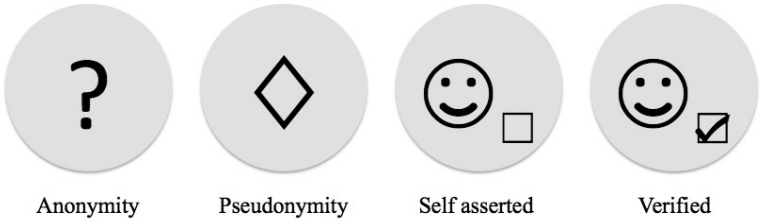
Identification is a basic prerequisite for social interaction. Identification allows a relationship to pick up where it previously left off. The word authentication, on the other hand, acknowledges that there is a risk that a comparison might show inaccuracies. When we authenticate somebody, we review his or her provenance, doing our best to make sure that this specific person is the person he or she claims to be (Harper 2006).

Government-citizen transactions that require identification but no authentication/verification can be defined as "low-security interactions". They primarily have a service character. Imagine you are repeatedly visiting a government website. If you use a pseudonym or self asserted identity, the website will "know" it was you and help you resume your search where you left off the last time or provide you with information that could be of significance for your type of profile – just as Amazon does with personalized book recommendations (Hamlin 2009a).

The Japanese and the U.S. administration have already initiated significant steps for the adoption of open identity systems and trust frameworks such as OpenID and InfoCard. On 9 September 2009 the ten industry leaders Yahoo!, PayPal, Google, Equifax, AOL, VeriSign, Acxiom, Citi, Privo and Wave Systems announced that they will support

the first U.S. governmental pilot programs designed for the American public to register and participate in government websites – without having to create new user names and passwords. By working with the private industry, the U.S. government will allow individual citizens to login to government websites with their existing accounts (Hamlin 2009b, Thibeau 2009, IDManagement.gov 2010).

Figure 6: Identity Spectrum



Source: *Hamlin 2009b. Own illustration*

For "high-security" interaction between governments and citizens such as online voting or the signing of online initiatives, e-government will require systems that assure digital identification and authentication of participants (verified identity) or, in other words, an electronic equivalent to a signature.

Within the third level of macroeconomic stabilization measures the Swiss Federal Council has initiated the accelerated introduction of SuisseID by 3 May 2010. SuisseID is Switzerland's first standardized product for electronic authentication. Besides the authentication with online services, SuisseID serves as a qualified electronic signature which is legally binding when used to sign documents online. In addition, an electronic proof of function can be added to the SuisseID – available as chip card or USB stick – which allows to show proxies, membership with professional associations etc.

3.3 PRIVACY

For decades people have feared the use of surveillance technology as a tool of repressive social control by totalitarian states – just think of "Big Brother" in Orwell's "1984" (Rheingold 2002: 186). Nowadays computing and communication technologies seduce consumers into voluntarily trading privacy for convenience. Social media users are already living parts of their lives in public, creating vast lists of online "friends". Through Facebook, Twitter etc. they can learn of births, deaths, parties, new friendships, broken engagements and much more just by checking their activity stream which consolidates all friends' online updates (Watson 2009: 81). No group has a more intuitive approach to this life in public than the so-called Digital Natives, the demographic slice of our society that is "net native" and has never known life without the Internet (Watson 2009: XV). Loss of privacy therefore is one of the most discussed aspects when it comes to the rapid spread of social media (Rheingold 2002: xxi): All information which has been fed into the Web is persistent (content is recorded for posterity), searchable (finding content is just a matter of keystrokes), replicable (content can be copied from one place to another so that there is no way to distinguish the original from the copy) and can be consumed by invisible audiences across all space and time (boyd 2008: 126)

Excursus: Interview with Prof. Dr. Didier Sornette, ETH Zurich[4]

Practically overnight, the study of human behavior and social interaction has switched, from having virtually no data to drowning in the digital traces and patterns we all leave behind. Will this social data explosion convert social sciences, like physics or biology, into a "hard" science? *Yes, we are living a scientific revolution, fueled by both the flood of data and the possibility of performing controlled experiments using the new e-tools as well as new machines (fRMI) that probe the inner working of the brain in decision making tasks, and their mutual interplay and fertilization.*

[4] *Interview conducted by Gregory Gerhardt on 23 August 2010*

As a Professor in physics you are engaged in quantitative research into complex social systems. What are some of your most exciting discoveries in studying social data? *My first great (for me) discovery was the quantitative and predictable relationship between (a) statistical properties of endogenous fluctuations of financial prices such as financial volatility and (b) the response of financial prices to an exogenous shock such as 9/11. Then, we discovered that this endo-exo correspondence works remarkably well quantitatively for a host of other social systems, including the dynamics of commercial sales, YouTube video successes, bursts of cyber-risks, social conflicts and crises, epileptic seizures, earthquakes, landslides, climate dynamics and so on. My most exciting research concerns the predictability of social crises, in particular of the burst of financial bubbles, which I view as "phase transitions", "bifurcation", "catastrophies" (in the sense of Rene Thom) or, in laymen's words, the tipping points. We found that, around a transition, social systems see their dimension collapse to be reducible to a few universal normal forms. In other words, most of the time, complex social systems are unpredictable... except for pockets of predictability associated with change of regimes, transitions, bifurcations.*

Just as the discovery of nuclear fission raised moral dilemmas for physicists, and genetic modification is now doing for biologists, so the ability to predict human behavior is presenting new quandaries to social scientists. Will we soon see a social data board that governs over the (ab)use of social data? *There are already many such issues and lawsuits raised by the business models of Google, Facebook and many other leaders of the new technologies. I believe that the provided gains and services will outweigh the attempts to regulate. I see more point in addressing specific issues and special problems than in a general social data board. The issues are too complex. Like the Glass-Steagall act in 1933, regulations and boards could indeed address the danger by stopping creativity. While I believe a return to a modern adapted form of the 1933 Glass-Steagall act would be a good idea for regulating the financial system, I think that this is not a good solution for the science* and technology based digital platforms.

The rise of social media has not only increased the scale of the public but also the openness of people, especially when it comes to the Net Natives (Fraser and Dutta 2008: 77). Indeed, online social interaction does not defer to conventional norms and notions of privacy. Most of us would never think of making the same gestures to mere acquaintances in the real world as we do on Facebook. The advent of social networking sites has created virtual norms which no longer apply to previous notions of privacy (Fraser and Dutta 2008: 80). In the constant trade-off between privacy and the benefit of publicity, we often decide in favor of the benefits such as attention, access to information, new acquaintances etc. This explains why the Internet generation is being so indifferent to the reputation risk through self-exhibition. The Web has become the key medium for the presentation of self in everyday life. Secondly, behaving according to the norms of one's peer group, the loss of privacy goes at little cost whereas not being online does go at high cost. One thing is certain: the private self is shrinking, the public self is rapidly growing (Fraser and Dutta 2008: 81ff).

As online activities are woven into the fabric of our physical world, governments and especially corporations are gaining ever more power over our behavior and beliefs. Michel Foucault (quoted in Rheingold 2002: 188) stated about the relationship of knowledge and power: "Knowledge once used to regulate the conduct of others, entails constraint, regulation and the disciplining of practice. There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time, power relations". Their logos might look cuddly, but social media corporations such as Google, Amazon, Facebook or Twitter are evolving into informational superpowers.

Excurse: Interview with Hanspeter Thür, Switzerland's Federal Data Protection and Information Commissioner[5]

[5] *Interview conducted by Gregory Gerhardt on 30 August 2010*

Hanspeter Thür, until recently, the main task of the Federal Data Protection Commissioner was to protect citizens from data abuse by the state. It now appears that with the growing popularity of the Internet, you are primarily engaged in preventing data abuse by large Internet companies. Does this impression correspond with reality? *The Internet and the new possibilities it offers have indeed altered the priorities with regard to data protection. The technological applications available today have generated vast privately-owned data collections. In no time at all, this data can be mined according to given situations and interests. However, this does not mean that potential infringements by the state have decreased or become less significant. The state uses the Internet and exploits databases as well, which is why the government has to be monitored as carefully as ever to ensure the protection of citizens' privacy. In other words, these days breaches of privacy may happen at any level and be committed both by private citizens and by the state.*

The Internet generation increasingly makes information considered "private" by older generations freely available not only to friends but to the world in general. What is dangerous about this, and can this development be influenced at all? *If it were merely a case of individuals exchanging information, we would not be concerned. However, this communication takes place in forums owned by global companies that have held a (quasi) monopoly for a long time. These companies mine the available data for their own profit, earn vast sums of money with it and collect unimaginable quantities of information about hundreds of millions of users – and this trend is rising unrelentingly. This data can easily be used to put together extensive personality profiles. Such monopolies are dangerous because, as in former time, knowledge is power, and history has taught us that power can always be abused.*

It often seems that the call for the protection of privacy originates from personal inhibitions and not real dangers. Could it be that the older generation is clinging to an antiquated notion of privacy, which is now defined much more narrowly by the Internet generation? *I have witnessed that the younger generation, as their experience with the Internet and especially with social networks increases, is also becoming*

more interested in and concerned about personal privacy and its protection. All the same, people, being curious, feel they have to try everything out first and learn by doing. This also applies to experimenting with the Internet and social networks. I am absolutely convinced that the majority of the public wants their privacy to be protected as it always has been. Whether this will be possible at all given the technological advances is a different matter altogether. But for such an eventuality Google CEO Schmidt already has a remarkable "solution" at hand: he predicts, apparently seriously, that every young person one day will be entitled automatically to change his or her name on reaching adulthood in order to disown youthful hi-jinks stored on their friends' social media sites. I hardly need to comment any further on that idea.

3.4 STATUS

Traditionally, social status has been conferred by institutionalized values based on attributive criteria such as wealth, education, title, rank and so on. From the beginning of human history, status has been socially organized as a vertical system of values – in most cases, in pyramidal form: The small group at the top enjoys a higher social status than the vast majority at the bottom. Status therefore is an attribute that confirms domination – and is instrumentally linked to power (Fraser and Dutta 2008: 114). Even though the basic impulses of status attainment have not changed, social media have brought one important change to the social architecture of status: In the online worlds, status is dematerialized (Fraser and Dutta 2008: 122). Virtual environments create level playing fields where material attributes such as a fashionable handbag or a sizable car are regarded as inefficient and irrelevant (Fraser and Dutta 2008: 22).

In cyberspace status is primarily conferred on the skill to verbalize standpoints, expertise and informational advantages and to share and spread this content in a multitude of online formats. Trading know-how is not new, but the online distribution of high-quality recommendations is probably the most effective way to attain social status (Rheingold

2002: 116). The more your content is being re-tweeted, the more viral your video becomes, the higher your name and your content ends up in a Google search query, the higher your status. In cyberspace, it is not what you own that counts, but the relevance of what you share.

Figure 7: Twitter Stream

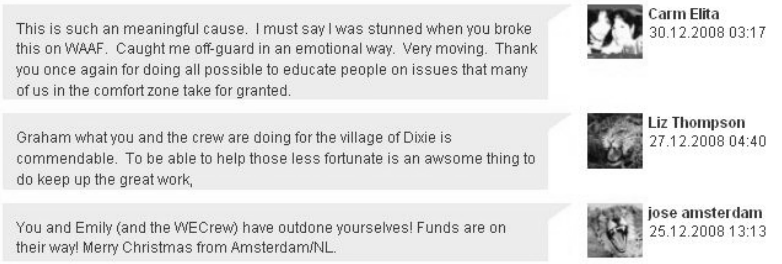
Source: *Twitter.com*

Online status is furthermore measured based on the possession of social capital: In cyberspace social capital is reflected by the number of online "friends", blog views or Twitter followers. Social capital is the factor that defines how far your content travels and who you can introduce to whom; without "friends" nobody will hear you, even if you are an expert on a relevant issue. If you have lots of influential friends you will be able to reach "tastemakers" and "multipliers" and make yourself heard

(Fraser and Dutta 2008: 126). In cyberspace, it is not who you are, but who you know (boyd 2008: 130).

Ten years from now, a new kind of Digital Divide will separate those who know how to use new media to initiate or lead powerful collaborative units from those who do not (Rheingold 2002: xix). Albert Einstein said that "Imagination is more important than knowledge." Leaders create things that did not exist before. They do this by giving their group, tribe or network a vision of something that could happen, but has not yet done so (Godin 2008: 116). The more of these networks will emerge as a dominant form of social organization, the more managers of hierarchical organizations will be replaced by persons who can lead from the "bottom" (Godin 2008: 24), people who can convince others to follow their movements, flash mobs and "ad-hocracies". This power will be reflected in a third layer of online status: online leaders will enjoy a higher status than online followers.

Figure 8: Compliments to Graham Wallington



Source: *www.amazee.com/user/3088/compliment*

Summing up it can be said that in cyberspace real-world status oligarchies have been deposed by online democracies which base their status assignments on informational efficiency and effectiveness. Fraser and Dutta (2008: 114) call this phenomenon the democratization of status. However, since online networks are mostly replications of real life networks, there can be no dichotomous separation between an on- and offline status. "VIP"-Networks such as "A Small World" even base

their business model on the replication of traditional forms of social organization, enforcing closure rules to create dense social interactions according to real-world status hierarchies (Fraser and Dutta 2008: 123). There is some evidence that in India, members of the Orkut social network are organizing themselves along that country's traditional castes' lines. In the United States it has been observed that MySpace and Facebook use mark class differences among America's youth. While Facebook tends to attract middle-class kids, MySpace seems to be more popular among teenagers from ethnic, working-class and other marginalized social groups (Fraser and Dutta 2008: 123).

3.5 REPUTATION

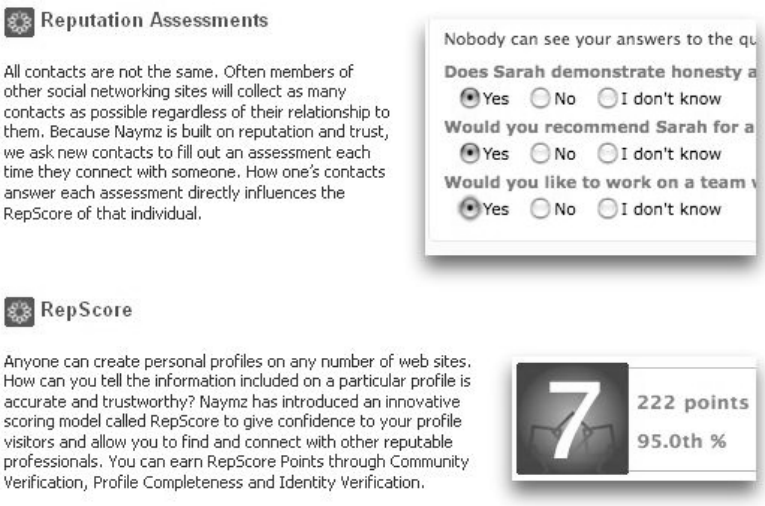
Reputation and trust allow us to engage in basic activities in society. We depend on others to engage in transactions with us, to employ us, and to listen to us. As social activities move online they require trust- and reputation-building in the virtual environment (Fraser and Dutta 2008: 6-181).

Already in 2007, Britain's Information Commissioner estimated that in the UK nearly 5 million young people had online profiles featuring content that could, if consulted by universities or potential employers, damage their higher education career prospects (Fraser and Dutta 2008: 79, Information Commissioner's Office 2007). This example reminds us of our responsibility to sensitize children and adolescents to the reputation risks of an online life. Much more though it demonstrates the lag between the openness of the Net Natives and the privacy norms of the preceding generations whose social performance has been and still is mostly dictated by a cleaner, more conscious separation of the private from the public self. This lag between real and online values can still produce serious consequences – especially in the form of a tainted reputation. Extensive narcissistic exhibition can make one a star on one's social network, but it can also damage one's standing in a professional environment (Fraser and Dutta 2008: 81). Before long, however, most of us will leave a digital trail. When that day comes, a new generation of CEOs and HR managers, unburdened by outdated

norms, will have a refreshingly different attitude towards recruitment, probably challenging those candidates that have a low search engine ranking and little information available online (Fraser and Dutta 2008: 91).

The more Online Media empower social collaboration and civil participation between people who have never met before, the more computer-mediated trust systems will grow in importance. Google lists those websites first which have the most links pointing towards them – an implicit form of a recommendation system. Naymz.com is a professional social networking platform that allows users to network with other users and at the same time provides utilities for online reputation management (see figure 9). Other online reputation management tools include platforms like LinkedIn, reputationdefender.com, trackur.com, brandseye.com or google.com/alerts. Online brokers such as eBay already strongly rely on proprietary reputation systems to help their clients judge the trustworthiness of transaction partners (Rheingold 2002: 114f). eBay users "may never buy an item from the seller again, but if they share their opinions about this seller on the Feedback Forum, a meaningful history of the seller will be constructed (...). Through the mediation of a reputation system, assuming buyers provide and rely upon feedback, isolated interactions take on attributes of a long term relationship. In terms of building trust, a vast boost in the quantity of information compensates for significant reduction in its quality" (Resnick et al. Quoted in Rheingold 2002: 125). Reputation systems require three properties in order to function: First, the identities of the transaction partners must be long-lived, whether or not they are pseudonyms, in order to create an expectation of future interaction. Second, feedback about interactions and translations must be available for future inspection by others. Third, people must pay enough attention to reputation ratings to base their decision on them (Rheingold 2002: 126).

Figure 9: Naymz.com



Source: *www.naymz.com/about.action?section=compare*

3.6 ONLINE SOCIAL NETWORKS

Complex social networks have always existed, but recent social media have afforded their emergence as a dominant form of social organization (after tribes, hierarchies, and markets) (Rheingold 2002: 57). According to Sociologist Barry Wellmann (quoted in Rheingold 2002: 195), it is easier for individuals to connect with multiple social milieus where people can change fluidly from network to network, using their communication media to contact the social network needed for each moment. As we have seen in chapter 3.2, the composition of our "friends" network has become a key identity signature. "It's a social barometer that validates self-esteem and confers status. It allows us – if we have loads of "friends" – to project ourselves into the cyber world with greater self-confidence" (Fraser and Dutta 2008: 41). Indeed, in the virtual world, hyper-friendship inflation doesn't seem to have any limits.

Is there a maximum number of friends that any one person can reasonably claim to have? Yes, there seems to be a cognitive limit to any one person's close circle of friends. It is called Dunbar's Law – named after British anthropologist Robin Dunbar. In the early 1990s he calculated, based on a complex analysis of non-human primates and the size of the human neocortex, that the maximum number of people with whom any human being can maintain stable social relationships is about 150; and that the core circle of friends with whom anyone can maintain "intense" relations generally does not exceed a dozen people (Fraser and Dutta 2008: 48).

If the differential between 12 and 150 separates close friends from acquaintances, what about those who belong in the group beyond Dunbar's number? Extending these categories beyond 150, as we shall see, has meaningful consequences, not only for individuals but also for organizations. We are referring here to the often-discussed distinction between "strong" and "weak" ties (Fraser and Dutta 2008: 49).

In his groundbreaking 1973 essay entitled "The Strength of Weak Ties", American sociologist Mark Granovetter argued that "weak ties" frequently play important social roles in our lives, even though, in many instances, we hardly know these people. Granovetter's definition of "weak ties" includes social relationships characterized by infrequent contact, an absence of emotional closeness and no history of reciprocal favors. In other words, you know who they are, but you don't really know them. According to Granovetter we rely on "weak tie" connections much more often than we think. Classic examples of "weak tie" networks are "old boy" networks, alumni allegiances, secret societies and other loose-knit cliques (Granovetter quoted in Fraser and Dutta 2008: 49f). Collecting online "friends" is therefore not merely a hollow ritual for the vain, insecure and narcissistic. Those who know how to tap into social network Capital will gain advantages. Those who do not, will not (Rheingold 2002: 195).

3.7 THE DIFFUSION OF POWER AND INNOVATION

3.7.1 HORIZONTAL DIFFUSION OF POWER

"Social interaction is not an end in itself. We interact socially in order to achieve goals. And the achievement of goals implies a power relationship. Traditional forms of power, especially in organizations, are exercised through centralized, top-down, command-and-control systems of domination" (Fraser and Dutta 2008: 23). The classic example of institutional power is the modern nation-state, formally defined as a sovereign exercising a monopoly of legitimate power over a defined territory. In the virtual world, power is shifting from institutions to networks, from hierarchies to heterarchies, from bureaucracies to individuals, from center to periphery, from bordered territories to cyberspace. While institutional power is generally authoritative, intensive and exercised through coercion, network power is diffused, extensive and exercised through cooperation. This challenge to centralized organizations has well been demonstrated by Barack Obama and his team who used social media as an integral element of the presidential campaign in 2008: my.barackobama.com allowed electoral mobilization, fundraising and voter feedback to become more direct and effective. As could be witnessed, Obama's team understood that power is shifting away from political organizations towards networked people (Fraser and Dutta 2008: 7ff).

There is no doubt that networked social power and the horizontal dynamics of the Web are challenging the archaic logic of vertical power structures. By drawing the parallel to medieval forms of social interaction and organization INSEAD researchers Matthew Fraser and Soumitra Dutta (2008: 10ff) show that the resurgence of networked power today comes after a long dormancy of several centuries during which centralized institutions have been the pervasive and dominant forms of social organization. In their view we are witnessing a critical "e-rupture" point in which neo-medieval forms of networked loyalty and social organization emerge – shifting power from states to local and global networks, namely to non-governmental organizations, foundations, religions, cults, mafias and so on.

An interesting indicator that underlines this development is the fact that ever more companies such as galaxyadvisors[6], provide services based on the analysis of social networking structures. Companies and institutions have long mined their data to improve sales and productivity. Broadening data mining to include analysis of social networks, however, allows to go further and spot the top influencers or risk carriers within the context of their social network. The capture of Saddam Hussein in 2003 was due in large to the mapping of the societal networks of his former chauffeurs, according to Bob Griffin, the chief executive of i2, a British firm which developed the software used in the manhunt (quoted in The Economist 2010: 12f). Senior members of the Iraqi regime were mostly clueless about the whereabouts of the former president, but modeling the social networks of his chauffeurs who had links to rural property eventually led to the discovery of his hideout, on a farm near his hometown in Tikrit (Economist). The next step beyond mapping influence between individuals is to map the influences between larger segments of society. Country analyses have great potential, for example, in peacekeeping and counterinsurgency operations, according to Kathleen Carley of Carnegie Mellon University in Pittsburgh (Economist: 2010).

3.7.2 HORIZONTAL DIFFUSION OF INNOVATION

Like power, innovation is evolving more and more from horizontal networks. Companies, governments and other organizations are increasingly using software tools like Wikis and polling systems to foster the formation of collective intelligence, open innovation and "entrench the values of democracy in corporate DNA – namely mechanisms for accountability" (Fraser and Dutta 2008: 2-253). Charles Leadbeater (quoted in Fraser and Dutta 2008: 247), an associate at the UK-based think tank Demos, writes in his book "We-think": "Our preoccupation in the century to come will be how to create and sustain mass innovation economy in which the central issue will be how more people can collaborate more effectively in creating new ideas." The fact

[6] *www.galaxyadvisors.com*

remains that despite growing enthusiasm about web based peer-to-peer innovation, open innovation tools such as atizo.com or ingagenetworks.com have not yet benefited from a widespread "buy-in" from most corporations and government bureaucracies. Fraser and Dutta nicely frame this dilemma: "In the short term, Web 2.0 will continue to be regarded in the same way that many contemplate heaven: everybody wants to get there, but nobody wants to die first. Social facts tend to race ahead of institutionalized values" (Fraser and Dutta 2008: 256).

3.8 WEB AND SOCIAL MEDIA DEVELOPMENT IN SWITZERLAND

For many parts of the digitalized world, it is safe to say that major impulses in the development of social media have come from the Internet hubs within the United States of America, namely Silicon Valley. Of the top twenty websites (traffic-wise, Alexa 2010b), only three are not headquartered in the USA and only five not located in California. Most of the social media websites which have had a major worldwide impact on Internet usage, or at least a mass-mediated and thus perceived international impact, like YouTube, Flickr, Blogger, Wordpress, Google, Wikipedia, Myspace, Facebook and Twitter are based in the USA.

Looking at Switzerland, the same picture applies. Whereas some Swiss platforms like local.ch or search.ch rank among the twenty most used Web services in Switzerland, it is the USA that rules the field in serving Swiss Web users.

Nevertheless, there have been some promising signs that Switzerland is about to evolve into a leading European hub for Web and social media innovation. Whereas big ICT players like IBM or Google are extending their innovation bases in and around Zurich, a new generation of Web startups, again mostly in Zurich, is pushing to create business models with web based products. The following is a non-comprehensive list of young Web and social media companies which have started their venture in Switzerland:

amazee.com, aktionis.ch, appbrain.com, atizo.ch, blogwerk.com, cmsbox.com, cocomment.com, cofundit.com, deindeal.ch, demandit.ch,

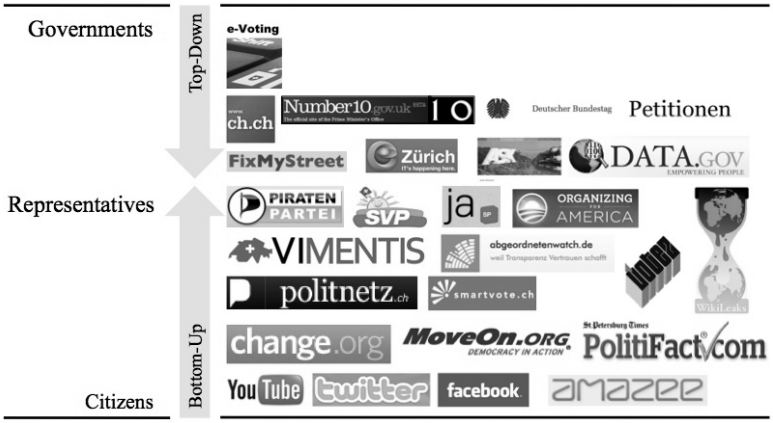
dixero.com, doodle.com, exsila.com, flow.li, gbanga.com, getyourguide.com, gryps.ch, guzuu.com, housetrip.com, hyperweek.com, imusiciandigital.com, jobzippers.com, kooaba.com, kyte.com, lautundspitz.com, local.ch, memonic.com, modelbase.ch, minsh.net, mixin.com, netbreeze.ch, newscred.com, partyguide.ch, poken.com, politnetz.ch, quevita.com, rapidshare.com, restorm.com, runmyaccounts.com, semestra.ch, sobees.com, spontacts.ch, smartvote.ch, starmind.com, streamforge.com, suxedoo.ch, tallyfox.com, tilllate.com, trigami.com, usekit.com, usgang.ch, wilmaa.com, wuala.com, you.do, zattoo.com, zeeyoo.com

4 WEB 2.0 IN TOP-DOWN AND BOTTOM-UP POLITICS

4.1 STARTING POINT

When examining the Web 2.0 landscape for its political potential to add value to political participation, the e-participation platforms can be divided into two main categories: The ones that are built or owned top-down by official political actors such as governments, parliaments or administrations and the ones built or owned bottom-up by citizens (see figure 10).

Figure 10: Exemplary Top-down vs. Bottom-up Platforms



Source: *own illustration*

In Switzerland the use of Web 2.0 applications to facilitate political e-participation is still in its infancy. Most Swiss projects, both top-down and bottom-up, focus on providing citizens with a better information basis prior to ballots and elections, supplying them with important facts or allowing them to discuss political topics online with others. Citizens are, at least in some cantons, allowed to take an active part in the decision making process by voting online using e-voting systems.

Some of the opportunities and challenges of these e-participation platforms are being listed by the IGCo:llaboratory report 2010 (Internet & Gesellschaft Co:llaboratory 2010: 35ff):

Opportunities: the stronger involvement of citizens in the policy-making process; transparency of the democratic process; the stronger identification of citizens with their community; opportunities of horizontal and vertical networking and discussion; inclusiveness; innovation through expertise and ideas of citizens which are accessible to governments; better acceptance of political decisions and the fact that governments know better what their citizens want.

Challenges: the digital divide; the use of participatory tools just as alibi-tools and the lack of quality; problems in reaching and defining the stakeholders; the excessive supply of e-participatory tools which can lower participation; a possible lack of responsibility; the need of time to administrate the projects and the lack of commitment and non-binding character of results.

The next few chapters provide an overview of the political e-participation field, including Swiss case studies and some more advanced projects in the USA, UK and Germany.

4.2 TOP-DOWN INFORMATION AND THE OPEN GOVERNMENT

Open Government means to open the government and state administration to public scrutiny, thereby ensuring transparency of governmental work, a better discourse, more participation as well as collaboration between citizens, companies and the government. Hence, letting the citizens act as prosumers. Open Government can technically be supported with blogs, wikis, IT-dashboards, mashups und apps, thereby using open standards, APIs and open source software (Internet & Gesellschaft Co:llaboratory 2010: 34ff).

Since the emergence of Web 2.0 and the notion that the afore mentioned innovative tools could improve the communication between citizens and their representatives, many "top-down" political platforms, initiated either by politicians or governments, have gone live, delivering

information in different facets and on different topics. British and American governmental portals such as number10.gov.uk or whitehouse.gov, for example, go as far as to aggregate different Web 2.0 applications such as Facebook, Twitter, YouTube or Flickr to promote open government. This signals the will to give citizens different forms of participation tools to stay connected and embed them on different levels of participation. A look at the UN e-participation performing index (United Nations 2010: 124) shows that the UK and the USA figure among the top 6 in the list of countries.

Of course, the mere *provision* of Web 2.0 tools and applications does not account for more political participation. But a survey conducted by the Pew Research Center shows that online governmental information is in demand: 48% of Internet users in the USA have looked for online information from their local, state or federal government about a public policy or issue and 46% have looked up what services a government agency provides (Smith 2010: 10). Furthermore, citizens are using Web 2.0 technologies for a more direct contact with their representatives. 15% of Internet users have watched a video on a governmental website, 13% of Internet users have read the blog of a government agency or official, 5% of Internet users have followed or become a fan of a government agency or official on a social networking site, and 2% of Internet users have followed a government agency or official on Twitter (Smith 2010: 26). 23% of the surveyed Internet users in the USA have "contributed to the online debate around government issues" for example by posting a comment on a governmental social networking fan page or blog, uploading a video or commenting on a governmental issue (Smith 2010: 31).

Statistics provided by the UK governmental website number10.gov.uk support these findings. A look at the figures for September 2010 shows the frequent use of the site: 179.395 visits from 129.724 unique users (Number 10 2010). Number10.gov.uk had 1.74 million followers on Twitter. Its photos were viewed a total of 850.634 times and the videos on YouTube were watched a total of 97.841 times to date (as of September 2010).

Switching focus to Swiss governmental websites we can state the following: In Switzerland almost all administrations at communal level have their own Internet presence (BFS 2010b). Moreover, the Swiss Federal Administration and the cantons post important political information on the *central* platform www.ch.ch. This website aims to be the "electronic business card" of Switzerland. It guides citizens to the different websites of the Federation, cantons as well as communities and provides links to further documentation and information. According to Froidevaux/Täube (2006: 33) administration websites are visited by almost 50 percent of Internet users in Switzerland. But in terms of online services provided to citizens (such as tax documentation, personal documents, matriculation possibilities etc.), Switzerland does not meet the OECD average. In October 2009 Swiss administrations provided only 32 percent of the surveyed services online (BFS 2010c). Hence, Switzerland is not yet at open government level although some experimental advances are carried out in the field.

A short interview with Mr. Brüllmann, Head Section Cyber Administration at the Federal Chancellery, gives an idea on what the further steps towards a new formulated Internet-strategy will be[7]: *"The Confederation is currently implementing its Internet Strategy 2010 [Internetstrategie Bund 2010; A.M.]. The goal of this strategy is to make the broad range of information of the Federal Administration even more transparent and usable than it is today. The issue of participation will also be dealt with specifically in this setting. Moreover, the Federal Chancellery has prepared a report to the Federal Council on e-participation. The long-term goal is to use the knowledge and the network of internal and external users in the development and spreading of information and to cooperate more closely with them. For the daily communication and informational work, participative tools are already in use."*

The following three examples show how the Swiss government is working with participative tools:

[7] *Interview conducted by Ana Maria Moreira on 3 February 2010*

1.) From 2007 to 2010 the former Federal Councilor Moritz Leuenberger and director of the department blogged about actual political issues, his thoughts and opinions. Considering that political blogs mostly live a shabby existence in Switzerland, Leuenberger's blog was relatively popular. Some of his posts generated over 100 comments.

The same department also administrates a Twitter account with 475 followers (status November 2010). The platform is being purely used to broadcast information. The department does not follow other Twitter accounts, thus does not use this Web 2.0 tool for the exchange with citizens, which is one of the central purposes of Twitter.

2.) Since March 2010 the Swiss Parliament has a presence on Facebook[8] with 796 fans and a Twitter account[9] with 77 Followers (as of November 2010). Daniel Schweizer (quoted in Schenkel 2010), chief of the Internet Service of the Federal Assembly [Leiter Internetdienst; AM] sees Facebook as a good opportunity to reach new user groups and to inform them about the parliament's work and structure. Besides the spreading of information, Swiss Parliament also uses Web 2.0 tools to get feedback from the citizens. In November 2010, for example, the Swiss Parliament asked citizens to give their input on the Parliament's new website on Twitter and Facebook.

3.) The Swiss Federal Chancellery has implemented antworten.admin.ch. This platform features answers to a list of questions frequently asked by citizens. Citizens can rate the answers given by the respective office, thereby indicating whether the answer was of any help.

4.2.1 OPEN DATA

Open data means to make public sector information and data available for public use. Open data is made available raw, for free and is provided

[8] *http://www.facebook.com/pages/Bern/Schweizer-Parlament-Parlement-suisse-Parlamento-svizzero/345958796467*
[9] *http://twitter.com/chparlament*

in a machine-processable format as well as through APIs and not individual-related (Internet & Gesellschaft Co:llaboratory 2010: 51ff).

The American and British governments have opened thousands of machine-processable federal datasets to the public on their open data portals[10]. The goal of these platforms, besides more transparency, is the promotion of innovation, competition and economical effectivity (Domscheit/Matten 2010).

User statistics provided by the American portal Data.gov (Data.gov 2010) reveal that since the launch of the portal in 2009 over 2.026.050 visitors have come to the site and 1.194.922 documents were downloaded (as of October 2010). The potential of such an offer is in the fact that third parties do not have to wait for governments to structure the information. As a consequence of this, 253 new applications from Data.gov have so far already been developed in the USA.

A recent example of how the US government itself used Data.gov to inform citizens, is the explosion of the BP drilling rig in the Gulf of Mexico. The oil spill, during the period preceding the fixing, caused significant environmental damage to the US Gulf coast. Due to the high interest in the ongoing oil spill, data.gov provided US citizens with all relevant raw data and also with a new website, the GeoPlatform.gov, where data had already been put into graphs (Elektrischer Reporter 2010). As the NOAA (2010) describes, GeoPlatform "integrates the latest data the federal responders have about the oil spill's trajectory with fishery area closures, wildlife data and place-based Gulf Coast resources, such as pinpointed locations of oiled shoreline and current positions of deployed research ships, into one customizable interactive map".

[10] *http://www.data.gov/; http://data.gov.uk/*

4.2.2 CITIZENS AS DATA PROVIDERS

In contrast to the above-mentioned websites which provide centralized data for public use, there are also platforms that only function because citizens themselves provide the data. Fixmystreet.com for example, represents a type of website that enforces governmental accountability and responsiveness and at the same time enhances participation. On this platform, launched in 2007, citizens can report defects in their neighborhood to the local administration by locating them on a map. Contributors can enter the issue directly on the website and track its status until the problem has been fixed by the municipality. Actual status reports of solved and unsolved problems which are published on the website allow to monitor the government agencies' work.

Other countries have built up equivalent portals. In Germany Maerker[11] is available for citizens in the region of Brandenburg. The difference between Fixmystreet and Maerker is that Fixmystreet was initiated by a private NGO while Maerker is an initiative of the local administration and can therefore much better control the processes in the administration much better (Polke Majewski 2010). Again, this kind of transparency of governmental processes helps citizens to gain trust in the administration.

A short list provided by the IGCo:llaboratory shows some of the opportunities and challenges of the provision of open data (Internet & Gesellschaft Co:llaboratory 2010: 56ff):

Opportunities: transparency of social and political processes; new possibilities of participation; collaboration between different stakeholders; innovation; efficient administration work that is oriented towards citizen needs.

Challenges: concerns about data privacy; the quality of data; and the misinterpretation of data as well as the loss of control by administrations.

[11] *maerker.brandenburg.de*

4.3 TOP-DOWN ENABLED PETITIONING

German and British governments allow a more active role and more transparency with their e-petition systems by giving the citizens a campaigning tool[12]. These governmental tools permit the petitioner to make his petitions public for other citizens who can sign them online (Toncar 2007: 230). Petitions are listed on a website and are taken up by the government. In the UK it is even possible to send petitions directly to the Prime Minister (PM). The government or, in the case of the UK, the PM provides a response to all e-petitions and, by doing so, increases the transparency of and information about the political process. There are some remarkable cases where these online services managed to mobilize large masses: One of the biggest petitions in Germany against censorship in the Internet, for example, has been entered online via the e-Petitionen website of the German Parliament. In 2009 134.000 people signed an e-petition against Ursula von der Leyen's (Federal Minister for Family Affairs, Senior Citizens, Women and Youth) law on Internet regulation.

Statistics from the British e-petition system (Number 10 2008) show that in the first year over 29.000 petitions had been submitted and over 5.8 million signatures, originating from over 3.9 million different email addresses, were collected. The amount of signatures has since risen to over 10 million (Wakefield 2009).

The mobilization of people to sign e-petitions can be seen as a signal of an evolving movement of Digital Natives, ready to engage in a political cause using other instruments than the classical ones; a movement that normally would not participate in the traditional party-guided political process (Prüfer 2009: 13-14).

On the other hand some criticism has to be voiced about these systems: Although the British e-petition system has gained a lot of popularity with citizens and the media, the positive quantitative participation rate is not matched by the quality of the petitions. Often the tool is being used

[12] *https://epetitionen.bundestag.de/; http://petitions.number10.gov.uk/*

for mere protest, and real deliberation is missing (TAB 2009: 69ff). Furthermore, "one of the biggest problems with the Number10 e-petition scheme is that it bypasses parliament, meaning that there is little obligation to follow through on the campaigns raised" (Wakefield 2009). The German system, too, although acclaimed, faces some criticism concerning security, effectivity and usability (e-demokratie.org 2008). The success of the tool is due to the fact that it exists (Biermann 2009). All in all, the number of petitions has not increased, and in terms of inclusion there is no progress. As the TAB (2009: 106ff) states, women, citizens with less education and younger citizens remain underrepresented. Furthermore, the debates in the forum are not tracked or processed by the administration (Biermann 2009).

In contrast to Germany or Great Britain, Switzerland has no institutionalized e-petition system. However, in some cases e-petitions have been started by NGOs and political parties to reach Swiss citizens. The most popular example is the mobilization of citizens against the introduction of the biometric passport. 64.000 signatures were collected online. The campaign is being referred to as the first "Internet referendum" ever in Switzerland. Also the emotionally driven debate to show solidarity with Swiss Federal Councilor Eveline Widmer-Schlumpf in 2008 prompted 126.422 people to sign a petition online on the website of alliance F[13] within three weeks. On the other hand, a debate driven by the Swiss Christian Democrats (CVP) concerning ICT-issues has only mobilized 1.500 signatures, 900 of which were collected online (Studer 2008: 7). Nevertheless, as Trechsel et al. (2004: 36) state in their report: "(...) there is no reason to believe (…) that e-petitions will become popular in countries which do not have a tradition of such political practices". Two more preconditions for mobilizing people online are issue awareness and timing.

[13] *Alliance of Swiss women's organizations*

4.4 TOP-DOWN INITIATED CONSULTATION

Consultations are formal, government-initiated activities where stakeholders are asked to submit comments in response to proposed or draft legislation, policy formulation or implementation of legislation coming into force (Kitcat 2010: 9). Consultations allow governments to openly innovate with a top-down system that invites citizens to collect, group and rate ideas that are being submitted by fellow citizens. It allows a better understanding and insight into the communities' preferences and ideas and at the same time increases accountability and identification.

Governmental institutions can increase public outreach, involvement and accountability with open innovation almost as easily as corporations or software developers. A good example is the consultation regarding Germany's sustainability strategy involving the platform mitreden-u.de. For this consultation, different Web 2.0 tools were applied and used for reaching out and to create a modern dialogue-website. Between February and March 2010 26.718 page views were counted and 1.437 citizens registered. The 1.022 articles were commented 4.456 times and supported 8.337 times.

An other example is eZürich[14]. The goal of this e-consultation project is to publicly raise ideas on how Zurich can be further strengthened as a leading European region for ICT services and infrastructure. Currently citizens can submit their ideas in the course of an idea competition and discuss and rate already submitted ideas. The three most popular ideas will then be evaluated and further processed in the subsequent workshops conducted by the government.

So far 8.481 visitors have come to the site, and 92.309 pageviews were counted. Moreover, 497 users are registered and 384 ideas have been submitted (as of November 2010). The competition will end in December 2010.

[14] *http://www.ezuerich.ch*

As seen above, e-consultation platforms can focus on very different issues and include different features for participation, like discussion forums, chats etc. Despite all technical progress it has to be noted that participation on the platforms is still at a low level and dominated by males and opinion leaders, regardless of the politicians' responsiveness (Trechsel et al. 2004: 33). Trechsel's observation made six years ago still holds true, although to a lesser extent.

4.5 TOP-DOWN EMPOWERED DECISION-MAKING

Whereas open government, e-petitioning and e-consultation systems serve government-citizen interaction by improving the opinion forming process, e-voting systems allow for the next step: Political decision making online.

E-voting debates are inevitably accompanied by debates about authentication tools. Authentication tools promise to facilitate the interaction of citizens with the governments and some of their services, like submitting tax forms for example.

Developments in the field of authentication tools have recently been initiated on a federal level. In May 2010 the authentication system SuisseID has been launched by the State Secretariat for Economic Affairs SECO and is now available for use (see chapter 3.2). First implementations have taken place in private as well as public-private contexts and have been accompanied by lively debates on blogs and public collaboration platforms like amazee.com. Criticism has mainly come from the side of the pirate party and concerns the tool's security and usability (Steier 2010, Amazee 2010). Despite the current criticism, Christian Weber, project Manager of SuisseID, sees a significant political potential in the future use of SuisseID.

One way to apply SuisseID would be in e-voting. However, according to Christian Weber, the side of the political stakeholders shows little interest in SuisseID. *"So far the current processes are mostly in control of the political parties. With more e-participation options citizens would no longer vote on the basis of a predetermined list, but assemble their*

preferred candidates themselves. Referendums could be easily organized, as has happened for example with the biometric passport."[15]

With regard to the electronic collection of signatures the Federal Council states in its report about Vote électronique, that it will address this topic in the third stage of the e-voting process. However, a host of parties are interested in a solution, as the motion submitted by National Councilor Jacqueline Fehr to "develop e-collecting and reinforce democracy" shows (Curia Vista 2009; Bundesblatt 2002: 673ff).

Case Study 1: Project Vote électronique

Website:
http://www.bk.admin.ch/themen/pore/evoting/index.html?lang=de

The following case study is based on an interview with Ardita Driza Maurer. Ms Driza Maurer works in the project coordination of Vote électronique at the Swiss Federal Chancellery. The statements solely reflect Ms Driza Maurer's personal opinion.[16]

Background of the project: *Between 2004 and 2005, after the Swiss Parliament had requested that the Federal Council investigate the opportunities and risks of electronic voting in Switzerland the Swiss cantons Geneva, Neuchâtel and Zurich launched pilot projects. As prescribed in the Federal Council's Report, the project has been divided into four stages: 1st stage: Electronic voting. 2nd stage: Electronic elections. 3rd stage: Electronic collection of signatures. 4th stage: Electronic voting suggestions for the National Council.*

Objective of the project: *The core issue is the facilitation of voting, as has already been achieved with the absentee ballot. Switzerland is still in the first stage of the implementation of e-voting. The option to vote electronically shall especially ease the voting procedure for Swiss expatriates as well as the blind and visually impaired. It will allow*

[15] *Interview conducted by Ana Maria Moreira on 20 September 2010*
[16] *Interview conducted by Ana Maria Moreira on 8 October 2010*

future generations to participate in democratic processes and therewith guarantee the democratic legitimacy of political decisions.

Organization of the project: *The federal competence for project e-voting lies with the Federal Chancellery. It ensures the coordination with the cantons, supports the cantons which seek to introduce e-voting and supervises the process. However, the "service" respectively the e-voting system is provided by the cantons. Prior to offering this service for elections and ballots on the federal level, the cantons must obtain the official approval of the Federal Council.*

All e-voting trials conducted to date have been successful. E-voting pilots for Swiss expatriates started in 2008. Cooperation agreements between the cantons [so called "Beherbergungsverträge"] generated new dynamics and media resonance. The agreements offer cantons, which do not have their own e-voting system, the possibility to access the existing system of another canton.

User statistics and their demographic characteristics: *To date, about 120.000 Swiss expatriates are registered with e-voting. For the vote in November 2010, twelve cantons will offer e-voting, and 46.000 Swiss living abroad have the possibility to vote via Internet.*

The analysis of the report on the 2005 pilot project carried out by the canton of Zurich yields more numbers: the majority of e-voters are either middle-aged (40 to 49 years old) or belong to the younger (18 to 40 years old) age groups. Moreover, most users are male, in employment and have received some form of higher education (tertiary or on-the-job training). "Politically the Vote électronique is neutral. The so-called 'selective voters' are more receptive to the electronic ballot than the 'regular voter'. Interviewees with higher income, high trust in the Internet and with frequent and competent use of the new communications technologies (mobile phones and Internet) chose the e-vote particularly often."(Serdült/Trechsel 2006: 7)

Estimate of the impact of e-voting: *According to Ms Driza Maurer no dramatic increase in voter participation has been noted so far, but the participation was maintained at a stable level, however. There exists no*

official analysis commissioned by the Federal Chancellery. Additional research from our side produced further information from the analytical report on the 2005 pilot project in the canton of Zurich. The report states that "(...) traditional voters as well as absentee ballot voters are ready to switch to the electronic means of casting votes. Five per cent of the e-Voters who have been questioned declared that they would not have voted had the electronic option not been given. Although most of the voters remained with their habitual voting channel, there is a significant number of "switchers" to the e-alternative, stemming from those who usually went to the polling station, and those who voted by mail. Summing up, it can be concluded that evidence exists that some non-voters could be moved to vote because of the new channel." (Serdült/Trechsel 2006: 13)

The biggest challenges to the project: *Resistance from various groupings slow down the expansion. Objections include technical, societal (e.g. acceptance) and political reasons (in the canton Vaud for example, a motion is pending which calls for the termination of all preparations for e-voting).*

The argument most raised by e-voting sceptics is the verifiability, the transparency and the "observability" of the system. The Federal Chancellery has initiated studies into these fields in cooperation with interested researchers and engages in international exchange on these matters, e.g. with the Council of Europe and the OSCE ODIHR [the Office of Democratic Institutions and Human Rights of the Organization for Security and Co-operation in Europe; A.M.]. This enables the Federal Chancellery to enhance its knowledge and improve its systems step by step.

Furthermore, various informed quarters debate the use of Open Source for the e-voting system. The challenge for the Federal Chancellery here is to find a common denominator with the other stakeholders when it comes to defining the term "Open Source". According to the canton of Geneva, about 80% of the software used for its e-voting system is licensed as Open Source, a fact not sufficiently acknowledged by the critics.

No unanimity exists yet on how to proceed with regard to Open Source. Ms Driza Maurer points to a decision by the Federal Tribunal which supports a cantonal solution in this regard, whereby confidential documents can be accessed under certain conditions by signing a nondisclosure agreement (Reference: Arrêt du Tribunal fédéral 1P.29/2006 du 23 mars 2006 (not published)).

Internationally, things are beginning to happen in this field: Norway, for example, may for the first time publicize the code or protocols in relation to e-voting trials to be held in September 2011[17]*.*

Ms Driza Maurer concludes that the whole e-voting process is still in a "learning by doing" stage. Despite all the novel opportunities the new channel offers, e-voting still needs to be tested more.

E-voting for immigrants

Interesting in this context are the debates in Switzerland around the voting rights for immigrants. The Centre for Democracy Studies (ZDA), in cooperation with the University of Neuchâtel, has initiated an interesting e-voting research project. On the website http://www.baloti.ch immigrants can "test direct democracy" and cast their vote for the next five elections in Switzerland. The website offers all kinds of information about the elections and a voting tool. It is planned to run the project until the end of 2011. The goal of the project is to check, if migrants vote differently than Swiss citizens. The researchers reckon that this will not be the case (20 Minuten Online 2010).

4.6 BOTTOM-UP PROVISION OF POLITICAL INFORMATION

In the previous chapters we have looked at various *top-down* e-participation projects that aim to bring about a more efficient and

[17] *According to latest information from Norway (Council of Europe E-voting meeting in Strasbourg, 16-17.11.2010, http://www.coe.int/t/dgap/democracy/Activities/GGIS/E-voting/E-voting%202010/Biennial_Nov_meeting/National_reports_en.asp#TopOfPage), it is not yet clear whether the provider will publish the code on the Internet. It appears more likely that the code will be made available to a number of experts only.*

effective government-citizen interaction. In the following chapters we will give an overview of *bottom-up* initiated projects, created by citizens and seeking to improve citizen-citizen interaction and governmental and political accountability.

Firstly, we will focus on the provision of bottom-up information. Switzerland has a rather diversified media landscape. A look at actual WEMF (2010) shows that many Swiss newspapers and newsportals are available online. The online newspaper 20 Minuten tops the list with more than 2 million unique clients per month. At the same time there is also considerable criticism directed at the quality of the information provided in the Internet (Hasler 2010, Fög 2010)

Besides the traditional broadcasting channels, like TV or newspapers, today's citizens can also consult a variety of new media to obtain the desired information. In the Swiss debate about the deportation of criminal foreigners (Ausschaffungsinitiative), a wealth of new channels was being used to inform and influence opinion formation, such as www.ausschaffungsinitiative.ch, http://www.fdp.ch/Standard/hart-aber-fair/menu-id-108.html, http://www.ausschaffungsinitiative-2xnein.ch/, YouTube, Wikipedia, Facebook and Twitter (Hutter 2010b), to mention just a few examples.

In addition to these ad hoc information channels we can also find Swiss projects which aim to inform citizens about actual political issues on an ongoing basis.

Case Study 2: Vimentis

Website: http://www.vimentis.ch/

***Content of the platform**: Vimentis informs the public about political topics both on its platform as well as in its newsletter. Vimentis also conducts polls regarding specific topics, which are designed to be conducive to public discussion and to communicate public opinion to the political decision-makers. Finally, Vimentis enables citizens to enter into dialogue with politicians.*

The case study is based on an interview with Roman Tschupp, board member of Vimentis.[18]

***Objective of the project**: Vimentis seeks to support the whole political decision making process in Switzerland in order to improve the quality of decisions.*

***History of origins**: Vimentis set out as a platform supplying interested readers with better information about economic and political topics. Over time the focus has switched to inform the public about political topics and ballots in a neutral and comprehensible manner. It is important, however, that the whole political decision making process is supported by the information provided.*

***Encouragement of participation on the platform**: A good positioning in search engines as well as important links, for example with 20 Minuten, help generate reach for Vimentis. Vimentis also employs "Push channels" and writes directly to specific readers via mail. Vimentis seeks to ease and encourage young citizens from around 100 communes to enter into politics upon their 18th birthday (voting age). Promotion is also effected through the project "Städte kaufen"[19] ["buying cities"; A.M.], in which interested private parties can supply a commune directly with information on ballots.*

***User statistics and their demographic characteristics**: Vimentis has roughly 30.000 subscribers to its newsletter. The users of Vimentis are in general identical with those who are active in the e-politics arena. According to Roman Tschupp, the comments on the platform reveal that the users are mainly male, well-educated and between 25 and 45 years old.*

***Estimates of the impact of Vimentis**: Vimentis has grown steadily since the launch of the platform. In addition, Vimentis has a good reputation among the politically interested and also receives positive feedback from the 100 communes with which Vimentis cooperates in the young*

[18] *Interview conducted by Ana Maria Moreira on September 2010*
[19] *http://www.vimentis.ch/d/staedtekaufen*

citizens' project. Rather little feedback, however, is received from the young citizens the information is directed at.

A high impact is above all generated by the polls. This is not only reflected in the media coverage, but also in the interest of some political parties, which are keen on the analysis of the data. The poll results help these parties to better understand the needs of the population. A concrete example is the "Schulharmonisierung" [a political tabling to align schooling standards throughout Switzerland; A.M.]: the draft had been blocked in the federal parliament for a long time. It was only after the Vimentis poll which showed that the majority of the population favoured harmonization, that things started moving again. A matter of cause and effect? Whatever the case may be, the example shows how the sentiments of the population can be mapped.

Web 2.0 strategy pursued by Vimentis: *Vimentis does not pursue a deliberate Web 2.0 strategy. The providers of the platform expect from the new media first and foremost a better integration of the citizens into politics. According to Roman Tschupp the use of social media is very attractive and brings tangible benefits. A rich exchange between politicians and citizens is already taking place not only on Vimentis, but for example also on the platform Politnetz. Moreover, many politicians are present on social media sites with their own profile.*

Estimate of further e-participation potential in Switzerland*: [The answer to this question exclusively reflects Roman Tschupp's personal viewpoint and not that of the company Vimentis; A.M.]*

The Internet offers open access to information like nothing before. In the future, the biggest challenge will be to sift, structure and format this information. Especially in a democratic system, it is important to give citizens orientation through the information jungle. Information can thereby be edited to update the politicians about the population or to advise the population about political issues and the politicians.

The former means bringing information about the needs of the population into politics respectively thoughts about the structuring of a democratic debate (the initiative by Michael Sandel, for example:

(http://www.ted.com/talks/lang/eng/michael_sandel_the_lost_art_of_democratic_debate.html). The latter means on the one hand the sensible structure and communication of basic data like federal income and expenditure and on the other hand that information about political discussions respectively ballots should be centrally aggregated and formatted in a way that suits the citizen.

The better the reciprocal flows of information between the politicians and the population, the more effective the political decisions in a democracy. Efficient flow of information is the most important pillar of a democracy, as it promotes the participation of the population in the first place.

Case Study 3: NZZvotum

Website: *www.nzzvotum.ch*

***Content of the platform**: Experts are invited to blog about a distinct political topic within a clearly defined timeframe. The public can comment and take part in the discussion.*

The case study is based on an interview with Matthias Daum, editorial and technical supervisor of the online blog.[20]

***Objective of the project**: It is the goal to launch rich discussions on the blog about political topics. The quality of the journalistic standard is given preference to the quantity of entries. The discussion is supposed to lead to answers to the questions raised and to generate new insights. Most of all, the discussion should be more than a mere barometer of public sentiment.*

***History of origins**: On the occasion of the cantonal elections in Zurich in 2007 [Kantons- und Regierungsratswahlen 2007; A.M.] the blogging platform NZZvotum was launched as an experiment. Politicians of all major parties were invited to present their standpoints on campaign issues on the then still external platform.*

[20] *Interview conducted by Ana Maria Moreira on 14 October 2010*

As a consequence of keen interest, the NZZ platform was made available on a permanent basis with an adapted concept. Since 2008 political actors as well as debates about current ballots and issues considered of relevance by the editorial board, are the prominent features.

Encouragement of participation on the platform: *NZZvotum is aiming for more quality rather than quantity as is manifest in the choice of topics of discussion. NZZvotum does therefore not table topics geared simply to generate publicity in order to increase participation.*

Since NZZvotum is part of the media house NZZ, it profits from the reputation of the newspaper and is thus being consumed mainly by people with a conservative media consumption pattern, who read newspapers rather than seek information through channels such as social media or political blogs. Furthermore, the providers have no intention to open the commentary functionality (e.g. the possibility to write comments without having to register). The rationale: NZZvotum prefers rather fewer, but high quality commentaries. At the same time the commentary functionality shall be improved in the course of the coming year.

Interactive conversations between experts and readers are rare. In an ideal NZZvotum world, this would of course be different. Daum believes that this could be due to the political experts who are blogging. Only about 10% of these are truly Web savvy and know how to handle these new media. Those who are writing are of course asked to make use of the social media at hand, but usually, the invited bloggers have to go through a learning process first. As Daum states: "One can train somebody to use social media, but one cannot order it. If the awareness rises that one can really spread a message through online channels, over time the willingness to enter into a dialogue will also rise." A promising example was the current debate about the deportation of criminal foreigners. Philippe Müller, National Councilor, and Ivica Petrusic from Second@s Plus discussed lively with the audience.

User statistics and demographic characteristics: *In general, two user types can be differentiated: The readers and the commentators. No analysis of demographic data for NZZvotum has been compiled. Daum*

estimates that at least the commentators, however, are mostly male, elderly and conservative members who prefer newspapers to get informed and use Web 2.0 channels rather seldom or not at all.

Estimates on the impact of NZZvotum: *On the readers' side NZZvotum has registered a steady rise. In the summer of 2010 over 100.000 unique visitors (readers) per month have read the blog. Daum sees the reason for this increased interest the European debate (Switzerland and its affiliation with Europe), which was a topic then. Interesting regarding the audience is that the readers are not necessarily subscribers to the NZZ daily newspaper.*

Registered members use the commentary functionality with different frequency, depending on the topic of the discussion. A blog entry may generate between 3 and 500 commentaries. It is remarkable, that the commentaries stem for the most part from a few users who return regularly. Just as the readers, the commentators are not necessarily subscribers of the NZZ.

Web 2.0 strategy pursued by NZZvotum: *Facebook and Twitter are being used for user binding and the spreading of content. Facebook is supposed to give the participants a face and to generate a snowball effect. Still traffic towards an article is a lot higher if it is linked to from the traditional site and not from the social media presences. This means that NZZvotum readers are not really using new media. According to Daum, this low-level participation on social media sites could be due to the fact that although NZZvotum as a platform is represented on Facebook and Twitter, the participating persons are not. Thus, the users are not able to give feedback through these channels to the persons who are blogging on the platform. Daum expects an increase of Facebook friends and Twitter followers due to the recent registration of NZZ Online on Facebook and Twitter.*

Estimate of further e-participation potential in Switzerland: *The great challenge ahead will be to guarantee, maintain or even raise the standard of electronic and digital media. The quality of information is especially very important when it is supposed to motivate citizens to participate in upcoming ballots and elections. It would be disastrous if*

out of sheer economic pressure an opening of the discussion and the topics were to take place simply in order to attract the masses.

NZZvotum could gain by a weighting of commentaries. This could be done visually or via technical methods to underscore a commentary and giving it prominence, like techcrunch.com does, for example.

Case Study 4: Votez

Website: *http://www.votez.ch/*

Content of the platform: *Votez provides online information and a newsletter mailout with information about ballots and elections for the cantons of Zurich, Berne and Basel. For selected ballots and elections Votez gives voting recommendations.*

The following case study is based on an interview with Thomas Haemmerli (Text and Editorial) and Moritz Zimmer (Technology, Editorial), both in charge at Votez.[21]

Objective of the project*: The goal is to motivate citizens to vote in big, strategically important ballots and elections (e.g. EEA, UN) in which the outcome is predicted as close. The people in charge see the newsletter as an especially important instrument to counterbalance the national conservative forces in the country. In order to mobilize the votes needed, the newsletter provides short information and voting recommendations designed to support decision making.*

History of origins*: In 1998 there was a ballot in Zurich whether the city should contribute financially to an integration project for families with Kosovar/Albanian backgrounds. The SVP [a Swiss national conservative party; A.M.] ran a controversial campaign against the proposal and won. Friends and acquaintances of the people in charge at Votez (belonging to academia and the arts scene) were shocked, but had themselves neglected to vote. This triggered the first mass mailout.*

[21] *Interview conducted by Ana Maria Moreira on 14 October 2010*

The persons in charge at Votez organize themselves mainly virtually, for example via Skype, and discuss whether they should position themselves regarding current proposals. The direction of statements is always clear, however.

***Encouragement of participation on the platform**: The Votez concept works best in cities. The providers seek above all to mobilize people who share similar political standpoints on key questions. Votez does not aim for a neutral, but for a comprehensible information coverage.*

Votez guidelines prescribe that in general a journalist should be on-site ahead to votes, in order to come up with reliable information. For this information to be spread among citizens, dedicated people are needed who collect e-mail addresses. Therefore, smaller cantons are of less interest, since less e-mail addresses can be collected there.

To promote Votez, selective cooperations with other organizations are not ruled out. An example of such a selective cooperation is the UN voting party, to which only persons entitled to vote or with a residence permit were admitted.

***User statistics and demographic characteristics:** The target group comprises persons who are eligible to vote and close to the broad and open political perspective of Votez. Many are members of the middle class, and they range from the financial industry, large trade associations to the leftist green activists. Within these groups the Votez providers see the greatest potential, since these target groups are usually in opposition to the national conservatives. Furthermore, Votez reaches out to urban people who most often are liberal in questions concerning different lifestyles and minorities (gays, foreigners). Their complex lifestyles (one can be eco-conscious and at the same time favour branded goods, one can posses a car and a bicycle) prevent them to affiliate with the traditional political parties.*

Who is really using Votez has thus far not been analysed. The providers estimate, however, that the readers of Votez reflect all age groups and from all strata of education. The user group ranges from politically very

well versed persons (like editors) to persons who are hardly interested in politics.

Estimate of the impact of Votez according to the providers: *In 2005 about 10.000 people had subscribed to the newsletter, about half of them coming from Zurich. No more recent figures are on hand, but the Votez team estimates that the number of subscribers has remained about the same.*

They also assume, given the fact that page views rise before ballots, that non-subscribers inform themselves on the Votez site directly (the online information is identical with the information contained in the newsletter).

According to Thomas Haemmerli and Moritz Zimmer, Votez regularly receives positive feedback from their subscribers - not at all only young voters - who report that they actually went voting. Furthermore, the newsletter subscribers in general vote according to the recommendation given by Votez.

Web 2.0 strategy pursued by Votez: *In principle, the Votez team employs Web 1.0 technology. Trials to open discussion channels via Facebook or Facts [an online news aggregator: http://facts.ch/; A.M.] showed that the Votez users are not interested to discuss political topics online.*

When the site was redesigned about eight years ago a discussion forum was added, which, however, only mobilized the critics of the Newsletter. Nobody else seemed truly interested in a discussion. Because of the low standard and the lack of interest in a moderation, the forum was switched off. To this day Votez uses social media, Facebook and facts.ch along the lines of "nützt's nüüt, schad's nüüt" [Swiss German, translates to "if it doesn't help, it doesn't harm"; A.M.].

Estimate of further e-participation potential in Switzerland*: According to Votez classic mainstream media in Switzerland offer enough platforms for political information. Thus, the information needs of an interested voter are saturated. Additional online potential might lie with the highly interested voters. This group can be easily provided with a lot*

of background information about current political discussions at low cost. It remains to be seen if the mainstream media will also take over a leading role in this field and use the Internet as discursive media and moreover manage to maintain a high standard of online discussion.

E-voting is also a promising field. Votez detects most potential with young voters. With e-voting, if the system is simple and understandable, it will be possible to maintain the voter turnout.

4.7 BOTTOM-UP ENCOURAGEMENT OF POLITICAL DISCUSSION

Political discussion among citizens is crucial to legitimize political decisions. In the USA, blogs and Twitter have become influential sources for political exchange. They have established themselves as a more or less independent power along mass media (Rainie/Horrigan 2007: iii). Some of the popular political blogs are the huffingtonpost.com or DailyKos.com. On DailyKos or the Huffington Post articles are often commented by hundreds of people. Also in Europe, a remarkable number of tools for deliberation are available. However, they are not yet used to the same extend as they are in the USA. This could have different reasons: Schmidt (2006: 147f) points out that the relationship between parties and individual political candidates is different in the USA to that in Germany. Also the pressure to find and mobilize followers and financial resources for political campaigns is much bigger in the USA. This again fosters personalized websites.

In Switzerland we can find several projects that provide deliberative spaces on the Web. Among these is Politnetz.

Case Study 5: Politnetz

Website: *www.politnetz.ch*

Content of the platform: *Politnetz provides information about ballots, elections and candidates. It allows citizens and politicians to present their causes and opinions on the Web and to engage in debates about current political topics. Furthermore, information and visualizations on the platform assist the decision making process ahead of ballots.*

The platform is open to members of all parties and organizations as well as to citizens with diverse interests.

The following case study is based on an interview with the CEO of Politnetz, Andreas Amsler.[22]

Objective of the project: *The goal is to promote the communication, interaction and cooperation of citizens, politicians, political parties, public authorities and those generally interested in politics via online channels. Politnetz wants to enable these target groups to engage in the political process online and to increase their commitment to societal causes. Politnetz also seeks to bring younger generations closer to the democratic process. In general, the understanding of the potential of new media should be taught to all of these stakeholders as early as possible. This way, citizens and politicians would have equal chances to present their opinion in public and to develop political influence.*

A further goal is to keep Politnetz independent from advertising revenue and large donations.

History of origins*: Politnetz has been online since 2009. After various considerations regarding the most pressing gaps in the field of "democracy on the Web", the founders opted for an online debating tool, which was later supplemented with the "Politnetz profile". This profile, a type of virtual political business card, enables politically active people to present their causes and opinions on the Web. The cross-linking with popular social media like Facebook or Twitter is being used to spread content and attract new members.*

Encouragement of participation on the platform*: An important prerequisite for participation on the Web is the supply of interesting content that is presented to the public.*

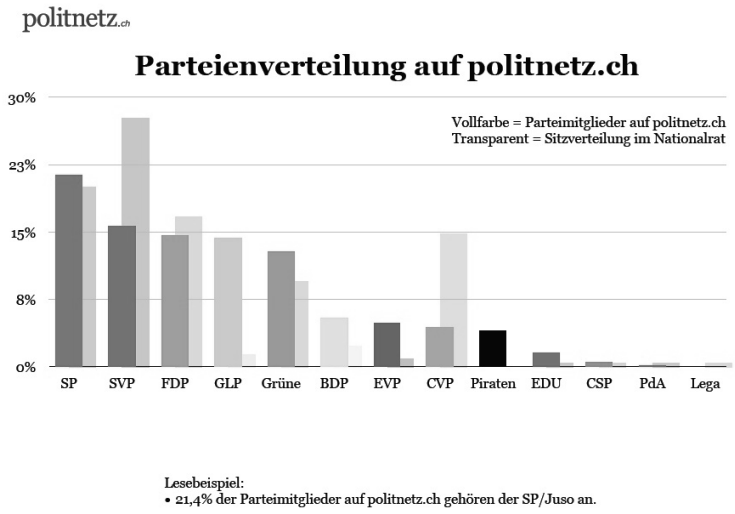
More specifically, Politnetz has developed various tools designed to improve the quality of information on political topics. For example, with regard to the communal elections in the canton of Zurich and the

[22] *Interview conducted by Ana Maria Moreira on 8 November 2010*

election of the cantonal parliament in the canton of Berne [Grossratswahlen; A.M.] in spring of 2010, the providers developed local election platforms. Along with the cross-linking to social media Politnetz also decided to team up with 20 Minuten Online. According to Andreas Amsler a cooperation with a newspaper is still indispensable in Switzerland if one wants to generate range effectively. As a result of these measures, Politnetz was able to win over a quarter of the candidates, which could then mobilize their supporters and compete in debates about the local and cantonal proposals on the platform. The media coverage in turn raised awareness for political content and discussions among citizens. Another tool was designed to help citizens make decisions in ballots at communal, cantonal and federal level. The users are presented with the pros and cons of proposals, which can be filtered by party, canton or gender. The goal here is to visualize the pro and contra boundaries within parties, whether preferences in particular cantons vary and whether a proposal is judged significantly different by women and men. Politnetz intends to specialize in this kind of political pulse taking and will develop its platform accordingly.

***User statistics and demographic characteristics**: About 100.000 readers visit Politnetz each month. Moreover, the platform counts about 10.000 registered users who generate content and rate the entries of other users. Among the registered users there are about 1.500 politicians and candidates. The activity of the users varies considerably. On average, the activity quote is about 25 per cent, but with strong peaks before elections and ballots. In September 2010, for example, 86.000 unique visitors have viewed 416.000 pages on Politnetz. Also interesting are the data by Politnetz about the party distribution on the platform as of October 2010 (see figure 11):*

Figure 11: Political Parties on Politnetz



Source: *Politnetz/ 11.10.2010*

Whether the same users participate actively in discussions over and over again, cannot be answered conclusively. For Politnetz only counts that once users are won over, they can be reached again, if they are interested in a specific topic.

***Estimates of the impact of Politnetz**: Amsler rates Politnetz as a success, with upward potential. The platform increases the possibilities to obtain information on the Web and offers high-quality content, made available to the public in new ways. Politnetz contributes specifically to democracy by acting as an open societal space for discourse (in the sense of Habermas). Particular attention is paid to the quality of entries; everyone who wants to participate in the debate at Politnetz must accept the rules of debate. At the same time the members implement these rules themselves.*

Those in charge at Politnetz practice a very open business culture which allows for a cooperation with all stakeholders who share the vision and goals of Politnetz.

Web 2.0 strategy pursued by Politnetz*: Politnetz is managed with a deliberate Web 2.0 strategy. The goal is first and foremost to generate range and awareness through mouth-to-mouth propaganda. A successful strategy, as Andreas Amsler stresses.*

Estimate of further e-participation potential in Switzerland*: True potential for Switzerland is being seen mainly in the election and ballot campaigns; whenever opinion forming is at the core. This can happen on any platform which people are using to get informed, entertained or connected.*

Case Study 7: Wahlbistro

Similar to Politnetz, the platform Wahlbistro tries to nurture a culture of debating on the Web. The difference being that the debates are opened only shortly before election dates and stay open only for a limited time. In a short interview with Mark Balsiger, the provider of the platform, the objectives of the project as well as the further potential in Switzerland in the field of e-participation were discussed[23]:

The virtual Wahlbistro [the name of the platform translates into election bistro; A.M.] was launched as a pilot project during the elections in the city of Berne in autumn 2008. Back then the need for a true and fair dialogue between citizens and candidates had become so obvious that it caused the continuation of the project. With the Wahlbistro, the providers not only seek to promote dialogue, but also to keep the quality of debates at a high level. This is supposed to set the platform apart from other fora, which for the most part are characterized by a poor debating culture. One way to guarantee this is to verify all participants via telephone.

The promotion of the platform is carried out via various media channels as well as directly getting in touch with the candidates. Balsiger notes, however, that up to the present the discussion forum could only be invigorated with a lot of effort. A lot of convincing still needs to happen

[23] *Interview conducted by Ana Maria Moreira on 20 September 2010*

before the masses can overcome their skepticism and ignorance of online debate. Nevertheless, Balsiger sees much potential for Switzerland in this area. But he states that the Confederation should – besides the expansion of e-voting – also support and engage in discussion fora and moreover provide such fora in the run-up to ballots and elections.

4.8 BOTTOM-UP MONITORING OF CANDIDATES, MEMBERS OF PARLIAMENT AND AUTHORITIES

There are some remarkable examples of bottom-up initiatives, which generate transparency and facilitate responsiveness of politicians. Online examples for such initiatives are projects like wikileaks.org the American website politifact.com or the German website abgeordnetenwatch.de.

WikiLeaks is a currently heavily debated not for profit media organization which aims to bring important news and information to the public. It publishes secret documents and information (also from anonymous sources) about governments and corporations and other organisations which affect political, diplomatic or ethical interests. As WikiLeaks describes on its website one of their most important activities is to publish original source material alongside with their own news stories so readers can see evidence of truth. Just recently WikiLeaks began to publish 251.287 leaked United States embassy cables that generated a high media resonance in the whole world. It is, according to WikiLeaks, "the largest set of confidential documents ever to be released into the public domain." (WikiLeaks 2010).

On PolitiFact reporters and researchers from The Times rate the accuracy of statements of political actors on a Truth-O-Meter and look at the constancy of public officials. Further, they keep track of more than 500 promises the President made and rate their progress on the Obameter.

The goal of abgeordnetenwatch is to track and display the political profile of politicians and representatives. Some volunteers have started this project in 2004 for the parliament of Hamburg. Two years later, in

2006, the platform was extended with information about the national parliament (Albrecht/Trénel 2008: 9ff). There is close cooperation with the German government. According to the website 400.000 visitors are counted per month. The politicians, too, can profit from the platform. It is a simple and economic means of engaging in public relations to strengthen their profile and publish their political positions and opinions (Gardiner 2007: 179ff). Abgeordnetenwatch is more than a mere information database. It also allows citizens to address questions to their representatives, or just rate the answers given by the representatives who normally do not hesitate to answer back. Because the dialogue is also published on the website, it generates more transparency and accountability since the politicians' answers are binding (Albrecht/Trénel 2008: 10ff). Furthermore, the platform serves as monitor of representatives' voting behavior and their involvement in other business. Abgeordnetenwatch can be compared with other international projects such as writetothem.com, hearfromyourmp.com, theyworkforyou.com and direktzurkanzlerin.de.

In Switzerland information about political candidates can be found on the voting application advice Smartvote. As Julien Fiechter, member of the Smartvote project team, states in a short interview[24], "*Smartvote was founded in 2003 in order to demonstrate and use the potential of the Internet for democracy in general and the processes of information and opinion making of the population ramping up to elections in particular*".

The platform gives voters some degree of orientation about the political profile of each candidate and helps them to make their final decision about which candidate or party they want to vote for. To help the voters to their individual voting recommendation the platform Smartvote works with the "issue-matching module"; each candidate running for office has to fill in a questionnaire of seventy questions about some of the important political issues, to generate his political profile. About six weeks before election day voters can login to the website and complete the questionnaire. With the answers given, the system matches them to

[24] *Interview conducted by Ana Maria Moreira on 20 September 2010*

different candidates, which correspond best to the voters' political profile (Nadig 2009: 6ff). In the interview Julien Fiechter also gives insight on how participation is encouraged on the platform: "*To spur participation, Smartvote accompanies elections in cooperation with media partners. This way it is ensured that the voters become aware of the platform. Furthermore a considerable amount of regular users have already discovered Smartvote and consulted it before they voted their cast. All users with user accounts are moreover informed about upcoming elections by a newsletter. In the last National Council and Council of States elections [National- und Ständeratswahlen; AM] a total of 375.000 persons who used Smartvote casted their votes. From these user stem approximately 1.000.000 voting recommendations. Most of the users vote according to the recommendation.*"

Julien Fiechter further states in the interview that as a result of the systematic setup, e-participation can attain great importance in Switzerland in two fields: "*First in the form of e-voting because of the regularity of ballots on all governmental levels; second in the form of initiatives and referendums because the admission and diffusion of the electronic signature would relocate the collecting of signatures from the street into the Web. An increase in popular initiatives can therefore be assumed.*"

4.9 BOTTOM-UP FORMATION OF PRESSURE GROUPS

Platforms such as moveon.org, avaaz.org, in the USA or campact.de in Germany gained many members and are successfully organizing campaigns with remarkable political impact. Moreover these new types of organizations, which have established themselves along traditional media-, party- and NGO systems, allow citizens to participate in political causes (Metzges 2007: 214ff). These organizations usually mobilize their users via email. Newsletters are sent to the activists informing them about new actions and campaigns and the different possibilities to participate (petitions, demonstrations, etc.). But the newsletters not only intent to mobilize and inform members, they are also meant to be forwarded and spread to other potential activists.

The success of these campaigning platforms is based on different factors:

1.) The ability to acquire members, maintain them and keep them active: MoveOn and Avaaz note up to 6.5 million members each. The German counterpart Campact can rely on more than 333.000 members, a remarkable basis to start campaigns. However, these figures[25] have to be interpreted with caution since it is not clear how many of the members have active accounts. The sites build long-term commitment by embedding different social media into the main platform. Via Twitter and Facebook friends of friends are mobilized to register on the platform. In addition they keep the community active by recommending members to connect with other members (with same interests or same domicile).

2.) The option of engaging in different intensity levels of participation: Users can sign e-petitions, donate small amounts of money, send e-mails to representatives or just rate, share and tag articles they read. All these online activities can be performed with barely an effort. Often there also is the possibility to participate in offline activities, such as demonstrations. However, far less members participate in offline activities. In the case of MoveOn we speak of 10-20% of the members. Interestingly, these are not core activists but rotating first timers (Eaton 2010: 177).

3.) The ability to influence the political agenda when windows of opportunities open up: In the case of Campact, before mobilizing their members, they ask them whether the issue is of any interest and if they would participate. If 1.000 or more members affirm, action is taken. So the agenda is really set bottom-up. Furthermore, campaigns are only organized for topics which are currently on the political agenda and the mobilization of citizens can potentially change the political result. This happens mainly when the public opinion does not correspond with the way that government is expected to act (Metzges 2007: 214ff).

[25] *as indicated on the website of the platforms*

In Switzerland campaigning activity is mostly organized ad-hoc. A good example is the viral video campaign Tagesnews[26], organized by the junior sections of the main centrist and left political parties (Junge FDP, Junge SP, Junge CVP), based on a video from the Obama election campaign in the US[27]. The campaigners wanted to mobilize people to vote for the freedom of movement and residence between Swiss and European citizens (Personenfreizügigkeit). The idea was to do this in a viral, funny and modern way. The committee created a video showing a fake scene of the daily TV evening news. In this scene one saw a demonstration against the one person who did abstain from voting. The surprising component of the fake video was that every citizen could send it to his/her friends and type in the respective friend's name. This name would then appear in the video on top of a banner held by the demonstrating people.

A mere 20 hours after the launch, already 7.000 e-mail addresses were registered. 70 percent of the viewers came across the video via Facebook. By the time mass media reported about the campaign, 800.000 people had already watched the video.

Main factors for success were the use of Facebook to start the campaign, the prominent face of a former TV news anchor and the fact that the boulevard newspaper Blick linked to the video after a few days. Later, other mass media reported about the story, too.

[26] *http://www.tagesnews.com/*
[27] *http://www.cnnbcvideo.com/taf.shtml?hp=1*

5 CONCLUSIONS AND OUTLOOK

5.1 SWISS SOCIETY

The world is counting two billion Internet users and over 500 million registered Facebook users. More than two billion YouTube videos are being watched every day; the age of the average Facebook and Twitter user is over thirty years. Facebook's fastest growing age group is 64 years and above (Hutter 2010a).

Considering the fact that ten years ago neither of these services existed, the above figures illustrate the rapid adoption of social media among all generations and raise important questions regarding the social implications. Social media is not just an umbrella term for new forms of online media. Social media change the way we build our identity, status and reputation, the way we learn, exert power and create new innovations. In other words: The Internet, the Web and social media are causing disruptive changes to our society.

Switzerland is doing comparably well when it comes to adopting and conducting research into these new trends. Our country has one of the highest Internet penetrations and Broadband subscriptions worldwide. Every third Swiss citizen has a Facebook account (not to judge on the civic value of this fact). Within just a few years, the greater Zurich area has become one of the leading European hubs for the accommodation of corporations that develop ICT products and services.

This is a promising outset for a radically new information era. However, Switzerland's strategic efforts will have to be reinforced to catch up with the best in Web and e-participation adoption, such as the USA or the UK, and give Internet and Communication Technology the weight it deserves in our information and media society, from education to production – without neglecting the protection of Swiss citizens against the potential downsides of our hyperconnected age, such as cybercriminality, the digital divide or privacy infringenments.

5.2 SWISS POLITICS

In the Western world most kinds of political information, discussion and decision making are already being accompanied by some form of online channel. As with the adoption of popular social media such as Facebook or YouTube, it is the USA that can be declared leader in the top-down and bottom-up use of political e-participation platforms.

Swiss *top-down* projects such as ch.ch focus mainly on the provision of information, i.e. making administrative information more accessible. Some projects go further and encourage citizen feedback, e.g. the Swiss Parliament's consultation about their new website on Facebook, public governmental communities on amazee.com or the eZurich.ch ideas competition which gathers ideas for the city of Zurich using an open innovation platform. When it comes to e-voting projects, Switzerland is among the most experienced countries worldwide. Statistics for the canton of Zurich show that at least 5 percent of the citizens who normally abstain from voting participate because of the new online channel. However, resistance from different stakeholders currently slows down further developments and a Switzerland wide implementation of e-voting systems. Still, there is significant potential for Switzerland in terms of the online collection of signatures, not only for e-voting but also for initiatives and referendums.

Swiss *bottom-up* initiatives focus mostly on political opinion forming. Switzerland has a diversified media-landscape, driven by the traditional media houses like Tamedia, Ringier or Edipresse. To this group belong platforms like 20minuten.ch, Newsnetz or the NZZvotum blog. In addition we can also see some smaller, independent platforms such as Vimentis or Votez, voting assistance applications like Smartvote or discussion fora like Politnetz and Wahlbistro. These bottom-up platforms can be consulted to gain an overview over actual political issues and candidates. In terms of *impact*, the selection of bottom-up case studies showed some interesting facts: For e-participation projects to have an impact, reach-out and participation are key. The partnering with mass media seems to be indispensable to attain this reach in Switzerland. Neither of the above mentioned platforms shows any

significant traffic. This also goes back to the fact that these niche projects cannot attract the mass market, but only those already interested in politics. However, the quality of discussions on NZZvotum and Politnetz as well as voter turnout generated by Smartvote and Votez are promising indicators for more to come.

Regarding gender and education, it is the higher-educated men that make up the lion's share in public e-participation platforms. All in all we can therefore not speak of *inclusion*.

As a country with a deeply rooted culture of direct democracy and federalist structure, Switzerland offers a wealth of *offline* possibilities to engage in politics. This is one of the reasons why Swiss online projects mostly cover the aspect of information opinion forming.

Whatever to come, e-participation tools will only spur or maintain political participation if they add personal benefit to the already existing possibilities to engage in politics; for example by being more accessible, easier to handle, more informative or interactive than offline media.

BIBLIOGRAPHY

Albrecht, Stefan and Matthias Trénel (2008): Abgeordnetenwatch.de – Mittler zwischen Bürgern und Abgeordneten? In: Büro für Technologiefolgen-Abschätzung beim Deutschen Bundestag (ed.). Varianten Digitaler Demokratie, Brief Nr. 34. 9-14.

boyd, danah (2008): Why Youth Love Social Networking Sites: The Role of Networked Publics in Teenage Social Life. In: Youth, Identity, and Digital Media. Cambridge MA: The MIT Press. 119-142.

Compaine, Benjamin M. (2001): The Digital Divide: Facing a Crisis or Creating a Myth? Cambrige, MA: The MIT Press.

Caddy, Joanne and Christian Vergez (2001): Citizens as Partners: Information, Consultation and Public Participation in Policy-making. OECD (ed.). OECD Publishing.

Eaton Marc (2010): Manufacturing community in an online activist organization. In: Information, Communication and Society, 13/2. 174-192.

Fög (2010) (ed.): Jahrbuch 2010 Qualität der Medien. Basel: Schwabe.

Fraser, Matthew, and Soumitra Dutta (2008): Throwing Sheep in the Boardroom. West Sussex: Wiley.

Froidevaux Yves and Volker G. Täube (2006): Internetnutzung in den Haushalten der Schweiz Ergebnisse der Erhebung 2004 und Indikatoren. Neuchâtel: Bundesamt für Statistik.

Gardiner, Angelika (2007): Per Mausklick zum Abgeordneten. In: Stiftung Mitarbeit (ed.). E-Partizipation Beteiligungsprojekte im Internet. Bonn: Verlag Stiftung Mitarbeit. 179-194.

Godin, Seth (2008): Tribes - We Need You to Lead Us. London: Piatkus.

Katz, James E., and Ronald E. Rice (2002): Social Consequences of Internet Use: access, involvement and interaction. Cambridge: The MIT Press.

Metzges, Günter (2007): Online-Bürgernetzwerke. Eine neue Organisationsform jenseits von Parteien, NGOs und Medien. In:

Stiftung Mitarbeit (ed.). E-Partizipation Beteiligungsprojekte im Internet. Bonn: Verlag Stiftung Mitarbeit. 214-230.

Nadig, Giorgio and Jan Fivaz (2009): Internet-based Instruments to Increase Civic Literacy, and Voter Turnout. Paper presented at the 5th ECPR General Conference Potsdam, Germany. 1-19.

Prüfer, Tillmann (2009): Vorsicht Opposition! Internetrebellen, Nichtwähler, junge Aktivisten – sie sind für die Politik zu gewinnen, aber nicht für die Parteien. Zu Besuch bei den Vorkämpfern eines neuen politischen Bewusstseins. Die Zeit, 27.9.2009. 13-14.

Rosa Paulo and Angela Guimarães Pereira (2008) "e-Participation. Promoting dialogue and deliberation between institutions and civil society", JRC Scientific and Technical Reports, EUR 23437 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen, Luxembourg: Office for Official Publications of the European Communities

Rheingold, Howard (2002): Smart Mobs. New York: Basic Books.

Schmidt, Jan (2006): Weblogs: eine kommunikationssoziologische Studie. Konstanz: UVK Verlagsgesellschaft.

Servon, Lisa J. (2002): Bridging The Digital Divide – Technology, Community and Public Policy. Malden: Blachwell.

Stern, Susannah (2008): Producing Sites, Exploring Identities: Youth Online Authorship. In: David Buckingham (ed.). Youth, Identity, and Digital Media. Cambridge Massachusetts: The MIT Press. 95-117.

Studer, Ruedi (2008): Politisieren per Mausklick - Im Internet liegt noch viel Mobilisierungspotenzial für die Parteien. Basler Zeitung, 1.11.2008.7.

The Economist Technology Quarterly (2010) (ed.): Untangling the Social Web. Volume 396, Number 8698, 4.9.2010. 12-13.

Toncar, Florian (2007): Der Petitionsausschuss des Deutschen Bundestages und die Edemokratie. In: Stiftung Mitarbeit (ed.). E-Partizipation Beteiligungsprojekte im Internet. Bonn: Verlag Stiftung Mitarbeit. 230-235.

Watson, Tom (2009): Causewired. New Jersey: Wiley.

Zillien, Nicole (2006): Digitale Ungleichheit. Wiesbaden: Vs Verlag.

INTERNET SOURCES

Alexa (2010a): Top Sites in Switzerland: http://www.alexa.com/topsites/countries/CH [10.11.2010].

Alexa (2010b): Top 500 Global Sites: http://www.alexa.com/topsites [10.11.2010].

Amazee (2010): SuisseID Community : http://www.amazee.com/suisseid-community [10.11.2010].

BFS (2010a): Medienindikatoren – Indikatoren – Internetnutzung: http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/03/key/ind16.indicator.30106.16020 4.html?open=309,5,6,302,1#1 [28.10.2010].

BFS (2010b): Verwaltung – IKT Infrastruktur: http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.indicator.30301.303.html?open=1,312#312 [10.9.1010].

BFS (2010c): Verwaltung – Online-Service-Angebot: http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.indicator.30303.303.html?open=2#2 [10.9.1010].

Biermann, Kai (2009): Online-Petitionen spielen kaum eine Rolle: http://www.zeit.de/online/2009/22/epetition-bundestag?page=1 [25.10.2020].

Bundesblatt (2002): Bericht über den Vote électronique. Nr. 5, Seite 645: http://www.admin.ch/ch/d/ff/2002/index0_5.html [19.10.2010].

Curia Vista (2009): 08.3908 Motion Stärkung der Demokratie durch E-Collectiong: http://www.parlament.ch/D/Suche/Seiten/geschaefte.aspx?gesch_id=20083908 [27.10.2020].

Data.gov (2010): Data.gov Monthly visitors statistics: http://www.data.gov/metric/visitorstats/monthvisitorstats, [25.5.2010].

Domscheit, Anke and Antje Matten (2010): Briten stellten Obamas Data.gov-Portal in den Schatten: http://www.gov20.de/?p=1683 [10.3.2010].

Edemokratie.org (2008): E-Petitionssystem des Bundestages gewinnt den "Politikaward"!?: http://www.edemokratie.org/e-partizipation/e-petitionssystem-des-bundestags-gewinnt-den-politik-award [9.3.2010].

Elektrischer Reporter (2010): ePolitik, Demokratie und Netz: http://www.elektrischer-reporter.de/labor/video/226/ [25.10.2010].

Hamlin, Kaliya (2009a): Government Experimenting with Identity Technologies: http://www.fastcompany.com/blog/kaliya-hamlin/identity-matters/why- identity-matters-0 [10.9.2009].

Hamlin, Kaliya (2009b): Open Identity for Open Government Explained: http://www.identitywoman.net/open-identity-for-open-government-explained [9.9.2009].

Harper, Jim (2006): Authorization = Identification or Alternatives + Authentication: http://techliberation.com/2006/07/14/authorization-identification-or-alternatives- authentication/ [10.9.2009].

Hasler, Ludwig (2010): Die Stunde der Laien: http://www.zeit.de/2010/43/CH-Internet?page=all [25.10.2010].

Hutter, Thomas (2010a): http://www.thomashutter.com/index.php/themen/statistiken/ [].

Hutter, Thomas (2010b): Die Schweizer Ausschaffungsinitiative aus social media Sicht: http://www.thomashutter.com/index.php/2010/10/politik-2-0-die-schweizer-ausschaffungsinitiative-aus-social-media-sicht)/ [25.10.2010].

IDManagement.gov (2009): Open Identity Solutions for Open Government: http://www.idmanagement.gov/drilldown.cfm?action=openID_openGOV [29.9.2010].

Information Commissioner's Office (2007): http://www.ico.gov.uk/ [].

Internet & Gesellschaft Co:llaboratory (2010): Bericht Offene Staatskunst. Bessere Politik durch Open Government?: www.collaboratory.de [25.10.2010].

Internet World Stats Usage and Population Statistics (2010a): Internet Usage Statistics. The Internet Big Picture: http://www.internetworldstats.com/stats.htm [26.08.2010].

Internet World Stats Usage and Population Statistics (2010b): Europe: http://www.internetworldstats.com/europa2.htm#ch [26.08. 2010].

Internet World Stats Usage and Population Statistics (2010c): Euopean Union: http://www.internetworldstats.com/europa.htm [26.08. 2010].

Internet World Stats Usage and Population Statistics (2010d): United States of America. Internet Usage and Broadband Usage Report: http://www.internetworldstats.com/am/us.htm [26.08. 2010].

Internet World Stats Usage and Population Statistics (2010e): Asia: http://www.internetworldstats.com/asia.htm [26.08. 2010].

Kitcat, Jason (2010): Online Consultation in a Democracy: Theory and Literature Review: http://www.jasonkitcat.com/writings/e-democracy/online-consultation-democracy-theory-literature-review/ [19.1.2010].

NOAA (2010): National Oceanic and Admosphearic Administration. Gulfresponse: http://www.geoplatform.gov/gulfresponse/ [25.10.2010].

Number 10 (2008): Epetitions: Facts, Figures and Progress: http://webarchive.nationalarchives.gov.uk/+/http://www.number10.gov.uk/Page1105 [10.3.2010].

Number 10 (2010): Website Traffic for September 2010: http://www.number10.gov.uk/news/latest-news/2010/10/website-traffic-for-september-2010-55453 [25.10.2010].

Polke Majewski, Karsten (2010): Wenn die Bürger mitregieren: http://www.zeit.de/politik/deutschland/2010-03/egouvernment-brandenburg-maerker?page=all [25.5.2010].

Rainie, Lee. and John Horrigan (2007): Election 2006 Online. The number of Americans citing the Internet as the source of most of their nolitical News and information doubled since the last Midterm Election. Pew Internet & American Life Project: http://www.pewinternet.org/PPF/r/199/report_display.asp [15.3.2010].

Schenkel, Michael (2010): Das Schweizer Parlament auf Facebook: http://edemokratie.ch/parlament-facebook/ [17.7.2010].

sda (2010): Hier geht's zur virtuellen Urne: http://www.20min.ch/news/schweiz/story/17425433 [27.10.2010].

Serdült, Uwe and Alexander H. Trechsel (2006): Umfrage bei Stimmberechtigten der Zürcher Gemeinden Bertschikon, Bülach und Schlieren anlässlich des Pilotversuchs zum Vote électronique vom 27. November 2005. Centre d'études et de documentation sur la démocratie directe de l'Université de Genève: http://www.c2d.ch/inner.php?lname=Research&table=Project&action=past&parent_id=8&link_id=1&sublinkname=past_projects#92 [25.10.2010].

Smith, Aaron (2010): Government Online. The internet gives citizens new paths to government services and information. Pew Internet & American Life Project: http://pewinternet.org/Reports/2010/Government-Online.aspx [25.5.1010].

Steier, Henning (2010): Wir sind lernfähig: http://www.20min.ch/digital/hardware/story/-Wir-sind-lernfaehig--19167393 [27.10.2010].

Süsslin, Werner (2008): Hightech-Märkte: Konjunkturen, Marken und Zielgruppen. München Institut für Demoskopie Allensbach: http://www.acta-online.de/ [28.10.2010].

TAB Büro für Technologiefolgen-Abschätzung beim Deutschen Bundestag (2009): Öffentliche elektronische Petitionen und bürgerschaftliche Teilhabe. Bericht des Ausschusses für Bildung, Forschung und Technikfolgenabschätzung (18. Ausschuss) gemäss §56a der Geschäftsordnung. Drucksache 16/12509: http://dipbt.bundestag.de/dip21.web/search/find_without_search_list.do?selId=19119&method=select&offset=0&anzahl=100&sort=3&direction=desc [10.3.2010].

Thibeau, Don (2009): Yahoo!, PayPal, Google, Equifax, AOL, VeriSign, Acxiom, Citi, Privo, Wave Systems Pilot Open Identity for Open Government: http://openid.net/2009/09/09/yahoo-paypal-google-equifax-aol-verisign-acxiom-citi-privo-wave-systems-pilot-open-identity-for-open-government-2/ [].

Trechsel, Alexander H. et al. (2004): Evalutation of the Use of New Technologies in order to facilitate democracy in europe. E-democratizing the parliaments and parties of Europe: http://www.ictparliament.org/fr/node/1448 [21.8. 2009].

United Nations (2010) (ed.): E-government Survey 2010 Leveraging e-government at a time of financial and economic crisis. UN Department of Economic and Social Affairs: http://www2.unpan.org/egovkb/global_reports/10report.htm [20.5.2010].

Wakefield, Jane (2009): Government e-petition give power to the people: http://news.bbc.co.uk/2/hi/technology/8380736.stm [9.3.2010].

WEMF (2010): Online Nutzungsdaten: http://netreport.net-metrix.ch/ausweisung.php3 [10.11.2010].

In der gleichen Reihe
Dans la même collection

N°	Autoren, Titel und Datum – Auteurs, titres et date
246	NAHRATH Stéphane, KNOEPFEL Peter, CSIKOS Patrick, GERBER Jean-David Les stratégies politiques et foncières des grands propriétaires fonciers au niveau national Etude comparée
247	KNOEPFEL Peter, NAHRATH Stéphane, CSIKOS Patrick, GERBER Jean-David Les stratégies politiques et foncières des grands propriétaires fonciers en action Etude de cas
248	ABUN-NASR Sonia Strategie für eine Informationsgesellschaft in der Schweiz Eine zehnjährige Politik im Lichte empirischer Analyse
249	SOGUEL Nils, BIZZOZERO Giordano, ZIEHLI Sonja Vergleich 2008 der Kantons- und Gemeindefinanzen Comparatif 2008 des finances cantonales et communales
250	PASQUIER Martial, FIVAT Etienne Crise à l'Université de Genève. Une étude de cas.
251	FIECHTER Julien Politische Gemeinden und lokale Autonomie in der Schweiz
252	LADNER Andreas, FELDER Gabriela, GERBER Stefani, FIVAZ Jan Die politische Positionierung der europäischen Parteien im Vergleich
253	MEILLAND Philomène Le principe de transparence dans le canton de Vaud
254	BERCLAZ Michel Le rôle des employeurs dans la réinsertion professionnelle
255	SOGUEL Nils, ZIEHLI Sonja Vergleich 2009 der Kantons- und Gemeindefinanzen Comparatif 2009 des finances cantonales et communales
256	FLÜCK Caspar Compliance im öffentlichen Sektor
257	SCHWEIZER Rémi Les bisses et leurs modes d'organisation au XXI^{e} siècle, un modèle de gestion durable?
258	KOLLER Christophe Services de migration et évolution de la population étrangère dans les cantons suisses 2002-2008 Migrationsämter und Entwicklung der ausländischen Bevölkerung in den Kantonen 2002-2008

L'IDHEAP en un coup d'œil

Champ

L'IDHEAP, créé en 1981, se concentre sur l'étude de l'administration publique, un champ interdisciplinaire (en anglais Public Administration) visant à développer les connaissances scientifiques sur la conduite des affaires publiques et la direction des institutions qui en sont responsables. Ces connaissances s'appuient sur plusieurs disciplines des sciences humaines et sociales, comme le droit, l'économie, le management et la science politique, adaptées aux spécificités du secteur public et parapublic. L'IDHEAP est le seul institut universitaire suisse totalement dédié à cet important champ de la connaissance.

Vision

A l'interface entre théorie et pratique de l'administration publique, l'IDHEAP est le pôle national d'excellence contribuant à l'analyse des mutations du secteur public et à une meilleure gouvernance de l'Etat de droit à tous ses niveaux, en pleine coopération avec ses partenaires universitaires suisses et étrangers.

Mission

Au service de ses étudiants, du secteur public et de la société dans son ensemble, l'IDHEAP a une triple mission qui résulte de sa vision:

- Enseignement universitaire accrédité au niveau master et post-master, ainsi que formation continue de qualité des élus et cadres publics;
- Recherche fondamentale et appliquée en administration publique reconnue au niveau national et international, et valorisée dans le secteur public suisse;
- Expertise et conseil indépendants appréciés par les organismes publics mandataires et enrichissant l'enseignement et la recherche.

Principales prestations

1. Enseignement: former les élus et cadres actuels et futurs du secteur public

- Doctorat en administration publique
- MPA (Master of Public Administration)
- Master PMP (Master of Arts in Public Management and Policy)
- CEMAP (Certificat exécutif en management et action publique)
- Certificat universitaire d'un cours trimestriel du MPA
- SSC (Séminaire pour spécialistes et cadres)

2. Recherche: ouvrir de nouveaux horizons pour l'administration publique

- Projets de recherche fondamentale ou appliquée
- Directions de thèses de doctorat
- Publications scientifiques (ouvrages et articles)
- Colloques et conférences scientifiques
- Cahiers et Working Papers de l'IDHEAP

3. Expertise et conseil: imaginer et mettre en œuvre des solutions innovatives

- Mandats d'expertise et de conseil auprès du secteur public et parapublic

4. Services à la cité: contribuer à la connaissance du service public

- Bibliothèque spécialisée en administration publique
- Sites Badac.ch, gov.ch, ivote.ch
- Renseignements aux collectivités publiques
- Interventions médiatiques
- Articles et conférences de vulgarisation