Encouraging Participation in Virtual Communities: The "IT-summit-blog" Case

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ABSTRACT

The first national IT-summit in Germany had the goal to communicate the common conviction and objective target of the German government as well as economic and scientific organizations that Germany is on its way to become the ICT-market number one worldwide. Critiques however soon started to complain about the inaccurate representation of SME's and the German public in general in the planning phase, the event itself, and the follow up process of the IT-summit. The offline community of the IT-summit was migrated into a virtual online counterpart – the "IT-summit-blog" weblog. The purpose of this approach was to improve the efficiency and ability to support the sharing of information and knowledge in a very timely fashion about summit topics even among all those that could not participate in the discussion yet. The collective knowledge generated out of this "think tank" is used by reintegrating and using it in the follow-up-process as regards content of the summit. The case at hand identifies the success factors needed to develop such a virtual communication platform.

The discussion is underplayed with a theoretical debate about the conceptual foundations concerning virtual communities in general, and weblogs specifically. This discussion shows that no virtual community is like another. Modern communication platforms need to be tailored towards the specific need they were built for. This counts especially for weblogs as the sort of platform chosen for the project at hand, as well as for the specific reason the platform was developed for – namely the discussion of IT-summit-topics. The need for control and moderation of user generated contributions conflicts with the grass roots democracy concept of weblogs in general. Thus, the goal of this paper is to find the appropriate standards, key issues, and requirements of a platform as envisioned by the summit participants in order to form a coherent basis for the development of the "IT-summit-blog". The mismatch between the initial conception of the blog and the identified need for structural changes after 6 month of operations will also be highlighted.

KEYWORDS

E-Government, web 2.0, social media, E-Citizenship, web-based services, virtual community participation, knowledge management, digital democracy

1. INTRODUCTION

The first national IT-summit in Germany was held on the 18th December 2006 at the Hasso Plattner Institute (HPI) in Potsdam. To reach the ambitious goal set beforehand of becoming the leading business, academic and research location in the ICT-sector worldwide, high-level representatives of the German government and the economy were called upon to clear the path for economic growth and employment, to develop seminal areas of growth and address areas of key interest in the course of the summit. In doing so eight task groups were formed, with each of them addressing different critical issues within the ICT-topic such as "IT and SMEs", "Service- and user-friendly IT", or "E-Government".

Every group had to contribute a working draft by the end of the summit, including a profound analysis of the initial situation, addressing the areas of key interest as well as the recommended course of action concerning the main topic each of the groups was working on. The summit was concluded with the so-called "Potsdam Theses", a commonly formulated declaration by all of the eight task groups, highlighting a first bundle of necessary measures that address the critical areas of key interest being identified in the respective working groups. The completion of these measures was understood by all participating parties as a common responsibility.¹

Early during the processing and the realization of the summit-results, critical voices increasingly caught public interest. The main point of criticism was the fact that the preparation of the summit, the event itself, and even more important the representation within the task groups was mainly restricted to the German government and the representatives of German big business companies. On top of medium-sized-businesses being highly underrepresented in the working-groups concerning their actual economic contribution and relevance in the Germany ICT-sector, representatives of the general public interest and their opinion were simply non-existent. Since the summit, and even in its planning phase before the start, critiques could rely on a growing number of important sympathisers like representatives of the parliamentary party of the Greens, the data protection commissioner of the German government, as well as numerous representatives of German SMEs. Surprisingly it should be noted that the German government agreed on the formulation of the Tunis Agenda as part of the World Summit on the Information Society, which says in article 97 that "[...] multistakeholder participation is essential to the successful building of a people-centred, inclusive and development-oriented Information Society and that governments could play an important role in this process. We underline that the participation of <u>all</u> stakeholders in implementing WSIS outcomes [...] is key to that success." ² [18]

Therefore, recognizing the fact that the German public without any doubt represents an important fraction of these stakeholders with respect to issues related to ICT, measures need to be taken, how they can be meaningfully and appropriately be incorporated in the follow-up process of the summit.

The social change in handling and using the internet as an information- and communication platform, a trend often referred to by the notion of Web 2.0, provides plenty of opportunities for this issue: It enables not only a substantially easier collaborative refurbishment of information, but also direct interaction and communication betweens users. The therefore triggered belief among numerous summit-participants that a public virtual communication platform might be a meaningful and necessary supplement to the efforts undertaken by the actual participants of the IT-summit, resulted in initial efforts by the HPI to develop the "IT-summit-blog". Success stories of communication platforms that were developed with a similar ultimate goal encouraged these efforts [21].

This paper analyses the potential of a tailored virtual communication platform generating substantial surplus values in form of visions, innovative ideas, and proposals to the existing efforts of the summitworking groups and ultimately to the political decision-makers, by filtering those meaningful contributions out of a public discussion enabled in that virtual platform. An online public-opinion survey³, set up specifically for this paper by the HPI about user-requirements and preferences concerning weblogs in general and moderation, control-issues and content specifically will also be discussed here [4]. The results of the survey's analysis are supposed to give important insights for the developers of the IT-summit-blog.

The paper is structured as follows: Section two focuses on the question of how participation in virtual communities can be elevated. In doing so success factors of virtual communities in general as well as the specific stimulating incentives for participation in these communities will be elaborated on. The unique situation of weblogs, as one sort of platform that can form a virtual community, is analysed in section three. The importance of community size as a special variable concerning weblogs is elaborated on in the first paragraph of that section, followed by a short discussion about why weblogs are the platform of choice for that project. Section four builds upon the preceding sections by drawing the conclusions on how the weblog should be constructed and operationally managed to adhere to the goals set for it. While the beforementioned sections give an overview about the initial conception, the ambitions and the goal of the project before its actual launch, the subsequent section number 5 provides a profound analysis about the experiences gained in the first 6 month that the blog has been set into operation. The comparison of how the HPI initially thought to achieve its ambitious goal with its discussion platform, and what fundamental changes were actually needed in the course of the project to reach them brings interesting insights about the project's management and evolution. The paper is rounded off by the conclusion in section six.

¹ http://www.hpi.uni-potsdam.de/fileadmin/hpi/source/press-articles/Download/Potsdamer_Initiative_19.12.06.pdf (in German)

² http://www.itu.int/wsis/docs2/tunis/off/6rev1.html

³ http://blog-umfrage.hpi-web.de (The analysis' results will be communicated on the same URL)

2. ELEVATING PARTICIPATION IN VIRTUAL COMMUNITIES

2.1 General success factors of virtual communities

What makes a web-enabled communication platform ultimately successful can be most meaningfully manifested through the level of participation by the users in that platform and its induced virtual community. Participation can be understood as the number of participants and the number of messages posted in the community [26]. There has been little study however, on what ultimately motivates people to use virtual communities. Extant studies have so far largely focused on factors such as trust, anonymity and sense of community as those factors determining the success and therefore the level of participation in a virtual community. When community members place trust on one another, they are more likely to open up and participate in the respective community [29]. The ability to remain anonymously in such platforms was likewise identified by the academic literature as one of the key characteristics of many virtual communities. Andrews for instance suggested that the possibility of hiding one's true identity through the use of pseudonyms would encourage participation in virtual communities [1,17].

Recognition, either in the form of financial rewards or simply elevated social status was equally identified as a substantial success factor within virtual communities [1,6,15]. Butler [5a,5b] noted that the visibility gained through participation in virtual communities provides recognition for a person's expertise and knowledge on a subject and gives rise to psychic payoffs such as self-efficacy and self-esteem [6]. Thus, the ambition for recognition stands in contrast to the already identified urge of users to participate anonymously. As will be discussed later on in this paper, different setups and visions of virtual communities and their web-enabled communication platforms might awake different needs among the users. This counts especially for members of weblog communities.

Scholars also found that the sheer sense of community, as well as the ability to identify with the virtual community enhance the likelihood of members contribution and participation [3,16,22]. Sense of community, obligation, self-efficacy and self-esteem, being effects of recognition, as well as trust and anonymity all have been shown to impact upon participation in a virtual community. However, in agreement with Jarvenpaa and Staples [19] the basic willingness for information sharing and therefore the willingness for participation in a virtual community is mainly context dependent – a notion rooted in the theories of information sharing and social exchange.

The extent of participation was however found to be moderated by the availability of time and the interest level on the topic being discussed, since participation in virtual communities can be quite time consuming [31]. Users not only need time to contribute knowledge about a certain topic in a virtual communication platform [7, 25], but also need time to get used to new technologies that enable the discussions in the platform. Especially for the "IT-summit-blog"-case at hand it is important to note that for those users not acquainted with the technologies incorporated in the communications platform, this time constraint can have a considerable negative impact on their willingness to participate.

2.2 Stimulating drivers for participation in virtual communities

But what exactly defines participation in virtual communities? According to the work of Koh [22] typical computer mediated community interaction includes news and information sharing (as, e.g. "what's new?, event announcements), problem solving (as, e.g. FAQs, Q&A, discussions), as well as routine communications via email and chat. While virtual community members may also interact and participate through telephone conversations and face-to-face meetings, this kind of interaction does not represent the major portion of virtual community activity. Contrariwise, most activity takes place in the form of posting or viewing options, questions and information requests within the community message boards. Therefore, posting or viewing of information is the fundamental element in the daily life of any virtual community. Based on prior studies [12,20,32] Koh proposed four incentives that stimulate the viewing and posting activity, and consequently elevate participation in virtual community [22]: leader involvement, offline interaction, usefulness, and IT-infrastructure quality (refer to Figure 1).

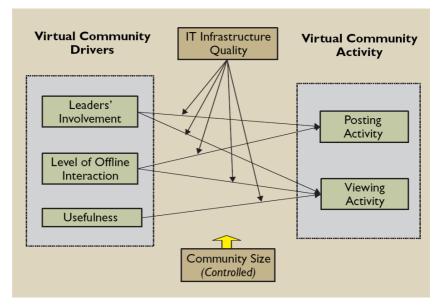


Figure 1: Virtual community drivers on participation (reproduced with permission from the digital library of ACM) [22]

Leader involvement is critical for building relationships and developing user-generated content [10]. Leader involvement is needed for fostering the member's active involvement in posting or viewing community content, because they can promote collaboration and trust among community members with a clear vision for their community.

Offline interaction increases the social presence of community members. According to the social presence theory, awareness of the online presence of fellow members, reinforced through offline interaction, can positively influence online community activity. A face-to-face meeting or telephone call may help virtual community members to understand, trust, and identify with one another, thus ultimately providing a stronger base for online activity.

The benefits provided by the membership of a community, or simply its **usefulness**, must surpass the costs of that membership [5a,5b]. An essential element of a viable virtual community is the ongoing provision of content that members perceive to be interesting and therefore valuable and useful [15]

IT-infrastructure quality stems from the fact that social presence, or the degree to which the medium facilitates awareness of other people and interpersonal relationships during an interaction [11] is critical for efficient communication in many social/work contexts. In a communication medium with low social presence like virtual communities, in which the dominant mode of communication is the exchange of textual information, developers and technical staff need to support community members with relevant graphical, textual, and video interfaces. This includes a satisfactory system response time, user-friendly interfaces, and system reliability on top. Thus, IT-infrastructure quality is expected to moderate the relationship between community drivers and the level of community activity.

Important to note at this point are the differential effects of the above-mentioned drivers on the different virtual community activity variables. With respect to this assumption Koh [22] identified offline interaction to be significantly related to posting activity, while community usefulness was significantly linked to the viewing activity. The differential effect of the posting and viewing variables highlight the importance of multifaceted strategies for modelling and managing the development of virtual communities. This fact points out the need that the projected communication platform needs to be tailored to the specific need and the goal it has ultimately been setup to reach.

3. ORIGINALITIES OF WEBLOGS

3.1 The size of virtual communities and their "power laws"

Referring to figure 1, a community's size is another very important factor in ongoing community survival [5a, 5b, 9], since it is related to the amount of the community's postings or viewings. Therefore, it seems to be essential to attract many community members, especially in the early phases of its development. This is also because in systems, where many people are free to choose between many options (as it is the case for weblogs), a small subset of the whole will get a disproportionate amount of traffic - meaning viewings or postings – even if no member of the system (users, moderators or authors) actively works towards such an outcome. This phenomenon is described by a notion called "power laws" and their respective distributions. A prominent example is the "Pareto Distribution" which observed that wealth follows a predictable imbalance, with 20% of the population holding 80% of the wealth. Several researches undertaken about modern communication platforms and virtual communities exhibited equal patterns [28]. The basic shape is simple – in any system sorted by rank, the value for the Nth position will be 1/N. For whatever is being ranked income, links, web-traffic and of course viewings and postings - the value of the second place will be just half that of the first place, and tenth place will be one-tenth of first place. Until recently, a theory to go with these observed patterns was missing. Thanks to a series of breakthroughs in network theory [2,14,30], we know that power law distributions tend to arise in social systems, where many people express their preferences among many options. It is also known now that as the number of options rise, the curve becomes more extreme. What should be noted here is the counter-intuitive finding that most of us would expect a rising number of choices to flatten the curve. But in fact increasing the size of the system increases the gap between the number one and the median spot.

In the case at hand, the freedom of choice, meaning that users can chose the virtual community they would like to join, power law distributions can similarly be expected [28]. With differences in the quality of writing, the difference in user taste, the choice of genres as well as diverse marketing effects from blog to blog, people's choices for one platform will affect one another. The system assumes that later users come into an environment shaped by earlier users. The thousands and the first user will not be selecting blogs at random giving the differences in basic prerequisite as explained before. They will be affected, even if unconsciously, by the preference premiums built up in the system previously.

Given the ubiquity of the above-explained power law distributions obviously the question arises, whether there is substantial inequality in the weblog world or indeed almost any other social system. The answer to that question would be in all likelihood no. Launching a weblog is free of charge. There is most of the time no vetting process. Thus, the threshold for having a weblog is only marginally larger as for getting online in the first place. Furthermore, blogging is a daily activity. Weblogs are not a good place to rest on your laurels, which means that as beloved as one can be at a point in time as an active member, if one stops writing, one will just disappear. This underlines the fact that it might be helpful to attract as many users as possible to a "system" just from the beginning. But without content that is meaningful to the user, and without constantly renewing that content with the same quality level, one will loose even a dominant position quite fast.

The reason to choose a weblog rather than a common forum, or a simple homepage as the communication platform for the IT-summit-topics was based on several reasons. All of them took into account the beforehand discussed drivers of participation in virtual communities and online discussion forums. Nonetheless, not all of the above-mentioned benchmarks apply for weblogs as we will see in the following.

3.2 Weblogs as the platform of choice for the IT-Summit-community

On top of the user requirements for a virtual community a potential communication platform for the public discussion of IT-summit topics needs to satisfy the needs of diverse parties and interest groups, all more or less linked to the IT-summit. The German government and its ministries (most notably the Ministry of Education and Research, the Ministry of Economics as well as the chancellery and the Ministry of the Interior), the interest groups of the German economy (mostly representatives of German big business companies), and the HPI as the host of such a platform all had different demands.

Due to the fact that the HPI started initial efforts on its own account without any support in form of financial or human resources, a potential platform needed to be cost-saving. Compared to complex content management systems (CMS), most weblogs allow substantial cost-savings. The mite that has to be paid to

software developers for the adjustment of the weblog to personal needs is a lot smaller than the fees due for the use of CMS. In case of the IT-Summit-Blog, the possible cost-savings by the host of such a platform are essential. Weblogs furthermore stand for topicality and promptness. Due to the strong linking between each other, and the creation of central linking-lists, information in weblogs spreads fundamentally faster than in traditional media. It could also been identified that ICT-related topics are picked up a lot faster by bloggers than by others. Additionally, weblogs still are a new technology for many internet-users – a factor that itself guarantees lots of attention in the public. Therefore, and also due to their interactivity weblogs are strong opinion-leaders and consequently spread news and information faster than the traditional media. The possibility is high that even journalists as being a highly important interest group for the IT-summit-project will be attracted to this platform for that reason. Not to forget that weblogs can be accessed from any location that has access to the internet.

Fundamentally important for the success of the blog-project is the simplicity of the technology, which equals out the negative factor of being a rather new technology for internet-users. Contributing to a weblog is highly intuitive, no expert knowledge is required and therefore, even laities can post their content to the weblog. With respect to the hosting of the blog by the HPI, simplicity of the technology of course equally results in less total investments.

4. INITIAL CONCEPTION OF THE IT-SUMMIT-BLOG

Goal of the projected platform is the gainful usage of new, creative, and visionary ideas in form of postings that are supposed to be generated by means of the weblog discussion platform by the German public about the topics discussed during and after the IT-summit. In this platform all eight summit-topics are integrated under the umbrella organization of the "IT-summit-blog" and discussed in different forums. "Think about IT" is the slogan of the platform, shown on the starting page. The blog-discussion about the different topics is split-up in tree-like sub-topics.

The weblog is supervised by free-lance editors with journalistic educational background. For the operational and contextual realisation of the weblog he has to work fair-minded and objectively. Depending on the workload in the community in the launch phase the editor can fall back on HPI-intern back staff with a similar educational background and expertise. Given that the German government already signalized their patronage of the IT-summit-blog, personnel might be essentially increased in the stages after the launch if the goodwill of the government or potentially attracted economic partners reflects in financial funding or the provision of human resources. Taken the best-case scenario with respect to the user acceptance for granted, one editor for each topic might be necessary.

Postings are not published in the weblog until the approval of the editor. Since the "blogging community" is known for the low acceptance of any editorial control of postings, this is the only real tightrope walk for the blog. This basic editorial control is however the minimum requirement given that parties like highest representatives of the German government relate to this platform.

The editor has three options: (1) Publication of the postings without changing anything, (2) deletion of postings in case they are completely impertinent and lack basic elements of good conduct ("Netiquette"). Negative or provocative postings that adhere to the basic principles of good conduct and that do not touch any human rights are empathically welcome – again, as long as they are objective and accurate. Finally, (3) postings can be modified by the editor. Changes are marked by "[...]" in the final published version (the cutback is contingently published in the archive and accessible via linking). Discussion-triggers in the respective discussions of the main topics will be provocative and thematically in line with the topic discussed. In the launch phase of the IT-summit-blog project, these statements address the following main topics of the IT-summit:

1.) Information-Society 2010 – German prospects	5.) High-tech-strategy for the information society
2.) Convergence of the media – Future of networks	6.) ICT in SMEs
and services	
3.) IT-based public services in Germany	7.) IT and health care
4.) Security and trust in IT and internet	8.) Service- and consumer-friendly IT
	9.) E-Justice (introduced for the second IT-summit in 2007)

In the course of the project topics may well be adapted, highlighted or deleted. New topics can always be introduced in case they provoke profitable discussions about ICT in Germany in general. The "discussions-triggers" mentioned earlier are authored by the editors of the HPI. The task-group leaders (high-level politic or economic representatives) of the eight IT-summit-working groups are furthermore expected to generate so called "expert-opinions" about their area of interest. In the course of the project the HPI will continuously address other persons of interest that can bring valuable add-ons to the discussions in the platform.

Users of the community are supposed to formulate their opinion about the diverse IT-summit-topics in form of postings. Direct communication between the users is enabled via email or live-chat. On a weekly basis summaries of so far posted contributions are provided by the editor(s) for each main topic. On top of the written version of this summary (which will be posted as a supplementary discussion trigger in the platform as well), a news show called "IT-Summit-Newsflash" is produced and integrated in the platform as a podcast. Next to the summaries of the content generated within the platform, usage and traffic-statistics of the platform ("posting of the week")"("user of the week") as well as the latest news related to ICT in politics, economy, research, and society are presented periodically. Other meaningful content for the newscast can be added later on in the course of the project. The goal of this news-show is to transport a modern and animated image of the community content, which might otherwise be hard to process due to its sheer amount and variety. The script for the news-show is contributed by the editors of the blog.

Since the German chancellery bindingly agreed to act as the protégé of the virtual IT-summit community, German federal chancellor Mrs. Dr. Angela Merkel will provide her personal greeting for the starting page of the platform shortly before the second IT-summit. Due to this enormous publicity effect of the blog, it is expected by the project managers of the blog that numerous celebrities from the political as well as the economical arena will indeed agree on providing the above-mentioned "discussion-triggers". However, in the starting phase of the project, the HPI was the only real contributor to the community in terms of human and financial resources. Therefore, promotional activities were limited in the launch phase to the use of existing mailing lists, current public relations of the HPI, and the proactive dispersion of the HPI to members of the blogging-community, online editorial offices as well as daily newspapers. Enormous potential lies in the linking via the official homepages of all German ministries and the economic companies that took part in the summit already or those that would like to join the platform. Mouth-to-mouth propaganda about the IT-summit and the related weblog will round off the promotional activities in the launch phase.

There is only a marginal user-control in the IT-summit-blog. It is limited to the input of the personal email address as well as a pseudonym. Even though any user-control stands in contrast to the free-minded character of weblogs, it is an absolute necessity to built up strong relationships within the community. The disclosure of the email address is furthermore not this critical with respect to privacy issues. Should web-vandalism of any kind reach an intolerable dimension, an elevated control-level in form of a request for more detailed personal data can be introduced later on – even though this is not preferable for a weblog. The main attention concerning the preservation of discussion quality lies on the self-monitoring of the users themselves. Through a voting and/or ranking system (valuation-scale from 1 [very good posting] until 6 [very inappropriate posting]) users can penalize others for their incongruent postings and call the editor's attention accordingly. Every single posting is analyzed according to the following statistics: (1) number of linking's to the post from other pages ("track-back" and "ping-back"-option), (2) number of positive commentaries about the posting by the users and (3) the amount of the users that read the posting in general. The best postings and most-rated users will be presented as mentioned before, in the newsflash, which gives users extra motivation to participate actively in the blog-discussions.

Even tough the general setup of the IT-summit-blog stands in line with already successfully completed similar projects like the "Innovations Jam" of IBM [21] regarding the structure, content generation and

moderation as well as the preservation and encouragement of discussion quality among others, the HPI performed an online survey to assure initial acceptance of the potential users upon the launch of the platform⁴ [4]. The achieved sample of more than 250 participants cannot be called statistically representative. But, the feedback received after the appeal for participation in several well-known German weblogs⁵ provided direct insights from an essential target group: bloggers themselves. In general, the survey supported and encouraged the efforts so far undertaken by the HPI on the project as the following survey-extracts clearly document:

Are you aware of the general objectives of the summit?

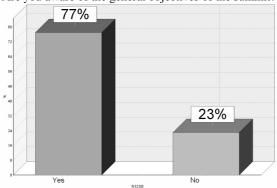


Figure 2: Awareness of summit-objectives

Would you support the development of an IT-summit-blog?

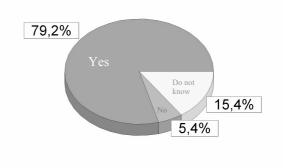


Figure 3: Support for blog-development

The need for a communication platform like the IT-summit-blog could be convincingly supported. 23% did not even know what the summit was all about (Figure 2). Even more alarming, nearly 80 % of all respondents did not know which topics have been discussed in general. Not surprisingly 80% clearly voted for a platform such as the summit-blog to be developed (Figure 3).

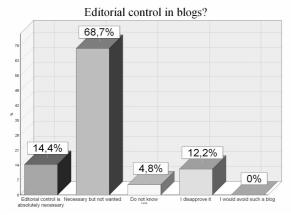


Figure 4: Opinion on editorial control

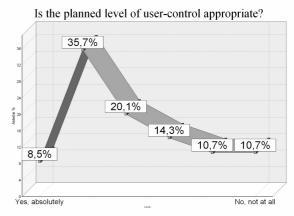


Figure 5: Opinion on appropriate level of user-control

The respondents confirmed the expectations related to the critical issues of editorial and/or user control in weblogs. Figures 4 and 5 clearly show that users indeed do not like control hurdles in weblogs in general, they however understand that virtual communities with special stakeholders (government, companies, etc.) sometimes do only work under special circumstances. That is why more than 80% in total either say that editorial control is a necessity for the IT-summit-blog. Furthermore, roughly 50% would even accept to give away their email-address. The results presented above only represent a very small fraction of the whole survey. Interested readers are welcome to contact the authors for the complete summary of the survey.

⁴ http://blog-umfrage.hpi-web.de/ (in German)

⁵ http://www.media-ocean.de, http://www.bamblog.de, http://mm.smile-to-me.de/blog/, http://moresemantic.blogspot.com/, http://textundblog.de/ among others

5. STATUS QUO OF THE PROJECT

Which effect can the choice of a public communication platform have on debates about sociopolitical topics? To what extent will the discussion-triggers (expert-opinions, interviews) be accepted by the user community, and do they really contribute to a measurable surge in usage-statistics (e.g. elevated discussion-activity)? Did conceptional or organizational flaws surface in the course of the project? Can the IT-summitblog be referred to as a successful endeavor regarding "E-Government", "Social Inclusion" and "E-Democracy", and can it provide seminal insights in this regard? As expected, interesting findings regarding the above-mentioned questions could be gained. These will be discussed in the following.

Regarding the complicated coordination between the HPI and the rest of the project partners and interest groups, it can already be declared as a success that the project was realized and put into practice in consensus with all participants of the first national IT-summit after all. Due to systematic and well-directed press releases after the start of the platform on June the 15th, 2007, intensive discussions and contributions in numerous forums, portals, blogs and online editorial departments became manifested through broad medial echo. User-registrations and posting activity ascended correspondingly, adding up to already 60.000 page hits by 35.000 different users in the first month.

IT-Gipfelblog: Usage statistics

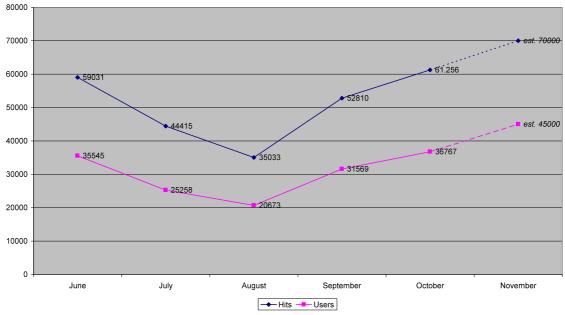


Figure 6: IT-summit-blog usage statistics from June 2007 till November 2007

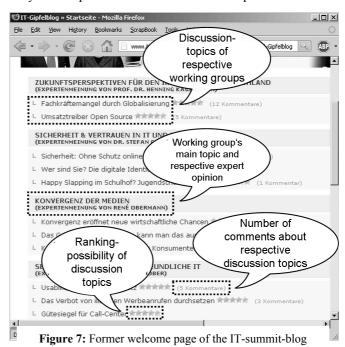
An issue however soon became apparent when public interest in the summit-blog increasingly diminished in the second and third month of operations without the strong initial medial coverage (refer to figure 6). Two month after the launch, visits consequently dropped to 35.000 hits by 20.000 users – a cutback of 42% and 57%, respectively. The question hereafter was to what extend this decline is common for a recently created blog after the initial euphoria and curiosity. It might just be a fact that it takes some time for a blog to become commonly accepted by the community, or – and this possibility seemed to be a lot more alarming – the decline of public interest has to be attributed to the offered content and its form of presentation.

Even the addition of the new top-category "Discussion-impulses", in which up-to-date press-releases are picked up by the editorial staff and put up for discussion, did not result in the expected improvement of the situation. The project team came to the conclusion that the decrease of interest was not due to the content provided, but rather in its presentation and the limited means of user participation. The "Heute" online

editorial staff of ZDF⁶ supported this assessment. They declare that the content provided should actually suffice for lively discussion, but the users apparently do not play along [24]. An undertaken profound analysis of the usage-statistics also exhibited the need to differentiate between "active" and "passive" users. Of all those thousands of users visiting the blog regularly (refer to figure 6), only 180 are registered authors that contribute own posts or comments. Only those count as "active" users of the IT-summit-blog, since they, if any, show interest in really contributing content to the blog. For just reading the content of the platform, no registration is needed. Consequently, most users that accessed the blog so far belong to this "passive" usergroup. Even though both types of users are welcomed, registered "authors" do have a particular important status for the summit-blog due to their pro-active will to generate content. As a result it seems, as if ways and means need to be taped in order to make the delivery of own posts also more attractive for "passive" users.

Figure 7 partially depicts the former static welcome page of the IT-summit blog. Here, the topics of the eight working groups (refer to table 1) are presented with a selection of 2-4 matching discussion topics. Users however complained about the drab presentation that did not at all correspond with the topicality of modern web-offers and that are so essential in time-critical and dynamic media such as blogs. A first approach that informed users about new comments or postings via a liveticker did not suffice as expected. Also the indication of the current number of comments besides the respective posts did not result in higher usage-numbers.

The direct feedback from the user community was exceptionally helpful regarding the ongoing optimization of the platform. In this regard users explicitly stated their desire to post their own contributions and topics in the blog. They did not like being only limited to write comments on posts that were written by the editorial staff. This in today's *blogosphere* more than



common option was left out in the pre-launch conception- and coordination phase in order to guarantee control as regards content as well as independence of the IT-Gipfelblog in general. The awareness however that editorial control about user postings could have been easily achieved through the moderation function of the editorial staff clearly shows the conceptional flaw of the first IT-summit-blog-version in this regard. This mistake was however solved in the subsequent version. The reaction of the community on the idea of using such a platform in order to enable a public discussion about sociopolitical, ICT-relevant topics was exceedingly positive. The applicability of the medium blog can be boiled down on its decentral form, which merges the criteria of public and interpersonal communication and pools social networks with diverse coverage and reach [27].

The subsequent changes regarding the conception of content and technical solutions had to be carried out as soon as possible: User-postings will consequently be accepted in the future. Accord to the collaborative keynote of blogs, users should be able to bring in their own ideas into a discussion. However, due to the fact that users can now bring up new topics into the platform themselves, editorial control needs to be extended concordingly.

The presentation of the welcome page needs to be reengineered as well. Usually, the chronologically latest post is put at the upmost position, which means that any blog starts with the most recent contribution. This chronological order inheres a special relevance: with every visit on a blog, a user is faced with the latest and most up to date information first. This expectation causes users to come back to a blog more often and on a more regular basis, whereby this behavior is even more encouraged in case the user actually finds the new

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⁶ http://www.heute.de

and relevant information [13]. The welcome page of the IT-summit-blog however remained unchanged for more than 2 month – an unacceptable circumstance that left its potential largely unused.

The solution was straightforward: the chronological arrangement of the by now possible user-postings guarantees a novel appearance of the blog with any new post and furthermore animates the user to visit the IT-summit-blog more regularly. To not only give consideration with the so important interest groups of the blogproject, but also to master the beforementioned necessity of actuality, we added a meta-navigation to the blog. This navigation panel - apart of parts of the sidebar - represents the only static element in the blog (refer to figure 8). Positioned above the dynamically changing blog-posts, this navigation panel allows the user in a graphically appealing way to only have those posts shown that were written about a specific topic (working-group topic "IT and SMEs" for instance). The presentation as regards content can therefore now be tailored towards the personal interest and preferences of the user. To complement the list of all working groups of the IT-summit in section 4, a ninth working group dealing

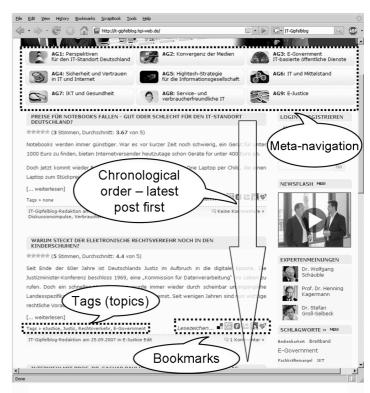


Figure 8: New welcome page of the IT-summit-blog

with "E-Justice" has been added. It is chaired by the Federal Minister of Justice, Mrs. Brigitte Zypries. This working group and all respective content have already been introduced into the blog.

There are also other useful Web 2.0 applications and tools that found way into the IT-summit-blog, e.g. podcasts: By now podcasts can be considered as powerful means of communications that should not be underestimated and that gained access to a mass-audience triggered by the iTunes⁷ software. Adding this trend up to the surge of popular video- and image-platforms like youtube⁸ or Flickr⁹ it seems as if the internet incrementally changes into a broadcasting platform [8]. This opportunity will be extensively used in the upcoming months in order to reach a much broader public with the audiovisual formats of the IT-summit-blog (Newsflash, Interviews, greetings). Also webfeeds are used for content syndication. With today's variety and oversupply of information, webfeeds and their aggregators pose an efficient filter mechanism for users to only get the information they want to. The offering of newsletter-subscription similarly falls into the above mentioned category of pro-active information services (also known as push-services). Bookmarks or tags - user-annotations with which interesting content can be regained – can also be subscribed through RSS-feeds. Additionally, bookmarking of single posts via the most popular social tagging services (e.g. delicious¹⁰) is now available with just one click.

6. CONCLUSION

⁷ http://www.itunes.com

⁸ http://www.youtube.com

http://www.flickr.com http://del.icio.us

The analysis of the academic literature, the theoretical discussion about the characteristics of weblogs as well as the investigation of comparable projects clearly identified the need for the IT-summit-blog to be set-up – the sooner the better. It became apparent, that the missing representation of certain interest groups in the course of the IT-summit and its follow-up process hindered calling the IT-summit a full success without even smaller negative aspects.

It surely was the first step in the right direction to call the politic and economic elite to gather in Potsdam to identify key areas of interest and clear the path for Germany to become the leading ICT-market worldwide. For the IT-summit to be called a full success however, a broader and most importantly public discussion about ICT-related topics needs to be undertaken.

Through the rearrangement of several elements and the inclusion of new components, the IT-summit-blog by now incorporates the character of a modern, collaborative, participative and attractive web-platform, which ultimately will have the potential to reach a status of a commonly accepted and reputable discussion platform for ICT-relevant and sociopolitical topics. The rearrangement of the blog comprised graphical, conceptual changes as well as changes regarding the provided content. Since the IT-summit-blog is moving on totally new terrain due to the fact that there is hardly no empirical value nor any comparison possible with similar other projects, a continuing project-monitoring will be of utmost importance in the future. Even though the project team was quite satisfied with the success of the blog in the first month, the necessity of fundamental changes soon became indispensable when statistics dropped to an all time low after three months in operation. Of particular interest will be to monitor to what extend those users that turned their back on the IT-summit-blog due to one of the above-mentioned reasons, can be regained with the undertaken rearrangements.

Obviously, the internal expectations on the blog are by far higher: Particularly in the aftermath of the second IT-summit, benchmark for the blog will be to not only regain those users that left, but also attract new users and motivate existing ones to contribute to the blog in a more active way. More active users lead to a higher contextual diversity, which in turn almost automatically leads to higher attractiveness and better user statistics. The added functionalities (tags, bookmarks, feeds and newsletter), the graphical and technical rearrangements (chronology of posts through classic blog-arrangement and meta-navigation panel), new content ("kiosk" - for press-releases and special event announcements) will most probably contribute to an even more successful future of the blog. Referring to the surges in hits and user-counts, these changes already seemed to have a very positive effect (refer to figure 6). The newly introduced formats (interviews), the strategic measures (iTunes) and the cooperation with numerous highly respected companies and initiatives from the political and economic arena will equally support this positive trend. The focus should in general be set upon the need for more user-posts rather than on content generation by the editorial staff in order to really benefit from the collective intelligence and creativity of the interested public for the ICT-site Germany. Think about IT – on the IT-summit-blog¹¹.

¹¹ http://www.it-gipfelblog.de

7. REFERENCES:

- [1] Andrews, D.C., 2002. Audience-Specific Online Community Design, *In Communications of the ACM*, Vol. 54, No. 4, pp. 64-68
- [2] Barabasi, A-L., 2003. Linked: How Everything Is Connected to Everything Else and What It Means. Plume, Pages: 304
- [3] Blanchard, A.L. and Markus, M.L., 2002. Sense of Virtual Community Maintaining the Experience of Belonging. *In Proceedings of the 35th Hawaii International Conference on System Sciences*.
- [4] Bross, J.F.M., 2007. Online Umfrage zum IT-Gipfelblog. Accessible via http://blog-umfrage.hpi-web.de.
- [5a] Butler, B. et al, forthcoming. *Community Effort in Online Groups: Who Does the Work and Why?*. In Leadership at a Distance, Lawrence Erlbaum Associates, S. Weisband and L. Atwaters (eds.)
- [5b] Butler, B., 2001. Membership size, communication activity, and sustainability: The internal dynamics of networked social structures. *In Information Systems Research*, Vol. 12, No. 4, pp 346–362.
- [6] Chan, M., et al, 2004. Recognition and Participation in a virtual community. *In Proceedings of the* 37th Hawai International Conference on System Sciences
- [7] Constant, D., et al, 1996. The Kindness of Strangers: The usefulness of Electronic weak Ties for Technical Advice. *In Organization Science*, Vol. 7, No.2, pp 119-135.
- [8] Cook, T. and Hopkins, L., 2007. Social Media or, "How I learned to stop worrying and love communication". Accessible via http://trevorcook.typepad.com/weblog/files/CookHopkins-SocialMediaWhitePaper-2007.pdf
- [9] Faloutsos, M., et al, 1999. On power-law relationships of the Internet topology. *In Proceedings of the Conference on Applications, Technologies, Architectures, and Protocols For Computer Communication* (Cambridge, Massachusetts, United States, August 30 September 03, 1999). SIGCOMM '99. ACM Press, New York, NY, 251-262. Accessed on the 02.04.07 via http://doi.acm.org/10.1145/316188.316229
- [10] Figallo, C. Internet World: Hosting Web Communities. John Wiley & Sons, Inc., New York, 1988.
- [11] Fulk, J., et al, 1990. A social influence model of technology use. In *Organizations and Communication Technology*, J. Fulk and C. Steinfield, Eds. Sage Publications, Newbury Park, CT, pp 117–142.
- [12] Godwin, M., 1994. Nine principles for making virtual communities work. *In* Wired, Vol. 2, No. 6, 72–73
- [13] Hourihan, M., 2002. What we are doing when we blog. *In: O'Reilley Network*. Accessible via http://www.oreillynet.com/pub/a/javascript/2002/06/13/megnut.html
- [14] Huberman, B., 2003. *The Laws of the Web: Patterns in the Ecology of Information*, Cambridge, MA: Massachusetts Institute of Technology Press, 105 pages.
- [15] Hagel, III, J. and Armstrong, A., 1997. *Net Gain: Expanding Markets through Virtual Communities*. Harvard Business School Press, Boston, MA.
- [16] Hars, A. and Ou, S., 2002. Working for Free? Motivations of Participating in Open Source Projects. *In International Journal of Electronic Commerce*, Vol. 6, No. 3, pp 25-39.
- [17] Hummel, J. and Lechner, U., 2002. Social Profiles of Virtual Communities. *In Proceedings of the 35th Hawai International Conference on System Sciences*.
- [18] International Telecommunications Union (ITU), 2005. Tunis Agenda for the Information Society. In *Documents of the World Summit on the Information Society*.
- [19] Jarvenpaa, S.L. and Staples, D.D., 2000. The Use of Collaborative Electronic Media for Information Sharing: An Exploratory Study of Determinants. *In Journal of Strategic Information Systems*, Vol. 9, No.2-3, pp 129-154.

- [20] Kim, A., 2000. Community Building on the Web. Peachpit Press, Berkeley, CA.
- [21] Kircher, H., 2007. Web 2.0 Plattform für Innovation. *In IT-Information Technology*, vol. 49, No.1, pp 63-65.
- [22] Koh, J. and Kim, Y., 2001. Sense of Virtual Community: Determinants and the Moderating Role of the Virtual Community Origin. *In Proceedings of the 22nd International Conference on Information Systems*, pp. 407-409.
- [23] Koh, J. et al, 2007. Encouraging participation in virtual communities. *In Communications of the ACM*, Volume 50, Number 2, pp 68-73.
- [24] Krüger, A., 2007: Einladung zum Gipfelbloggen Weblog zum nationalen IT-Gipfel mit Startproblemen. *In: Section "Computer"*. Accessible via http://www.heute.de/ZDFheute/inhalt/5/0,3672,5594789,00.html
- [25] O'Dell, C. and Grayson, J., 1998. If Only We Knew What WeKnow: Identification and Transfer of Best Practices. *In California Management Review*, Vol. 40, No.3,pp 154-174.
- [26] Preece, J., 2001. Sociability and Usability in Online Communities: Determining and Measuring Success. *In Behavior and Information Technology*, Vol. 20, No. 5, pp 347-356.
- [27] Schmidt, J., 2006: *Weblogs Eine kommunikations-soziologische Studie*. UVK Verlagsgesellschaft mbH, Konstanz, Germany.
- [28] Shirky, C., 2005. Power Laws, Weblogs, and Inequality. *In Extreme Democracy*. Ed. Jon Lebkowsky en Mitch Ratcliffe, accessed on the 01.04.07 via: http://www.extremedemocracy.com/archives/2004/08/chapter-3-power.html
- [29] Tung, L. et al., 2001. An Empirical Investigation of Virtual Communities and Trust. *In Proceedings of the 22nd International Conference on Information Systems*, pp. 307-320.
- [30] Watts, D., 2003. Six Degrees The Science of a Connected Age. W.W. Norton & Company.
- [31] Wasko, M.M. and Faraj, S., 2000. It is What One Does': Why People Participate and Help Others in Electronic Communities of Practice. *In Journal of Strategic Information Systems*, Vol. 9, No. 2-3, pp. 155-173.
- [32] William, R. and Cothrel, J., 2000. Four smart ways to run online communities. *In Sloan Management Review* Vol. 41, No. 4, pp 81–91.