

Tapping the Power of Social Software for International Development

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ABSTRACT

Social software provides powerful tools for international cooperation and communication which are applied at low cost for development projects. The international application of these seemingly global systems brings great risks of misunderstandings between project partners. We show how problems can occur in the discussion structures of blogs and in the construction of social capital in social software. Suggestions of how to overcome such difficulties and how to create successful international development projects applying social software are discussed.

Categories and Subject Descriptors

H.5.4 [INFORMATION INTERFACES AND PRESENTATION]: Hypertext/Hypermedia – *User issues*

General Terms

Human Factors.

Keywords

Internationalization Blogs, Social Software.

1. INTRODUCTION

Recently, social software systems have received great attention and many systems are successfully used by large scale international communities. Even business portals are now using the appeal and the simplicity of social software for knowledge management or they extract relevant business information by text mining. Social software with their ease for publishing on the web and the creation of virtual networks seem to be universal systems which can be used globally. Many international development projects need to provide low cost communication between community members of different cultures. Social software is of great appeal to them.

However, culture has a great impact on the development and use of IT [2]. Virtual chats are a good example for cultural habits and values in a new environment. In real face-to-face communication, standards and conventions have been established to signal that a partner wants to end the communication. For virtual chats, these signals are not yet established. This lack leads to uncomfortable situations for many users from cultures with an emphasis on politeness. There are also cultural factors which need to be

considered when designing social software for economic and community development.

E.g. questions like the following ones arise:

- Are there differences between the use of Social Software in individualistic and collectivistic cultures?
- Do individualistic cultures use social software more because it serves as a means of individual expression?
- Do collectivistic cultures use social software more because it serves for entering in virtual social interaction?

In order to analyze these questions, we conducted two initial studies which shed some light on the issues. One study analysed the discussion patterns in German and Chinese blogs and the second user study investigated how social capital and social presence is constructed in the interaction with social software in Germany and Nigeria.

2. BLOG DISCUSSION PATTERNS

Social software like blogs appeal to members of many cultures and some might even think that the internet leads to unified world culture. Blogs are becoming an increasingly important knowledge source not only for individual readers. Blog content is exploited for opinion analysis even for business portals. Research shows that for some domains like product information, opinions can be extracted from free text or from consumer sites like *epinions.com* [4]. Blogs can also be exploited to extract mood patterns [1]. However, the emotions and opinions expressed in blogs and the structure of discussions depend to some extent on the culture of the blog. In order to reliably extract knowledge, the structure and the communicative patterns need to be well understood.

A thorough intellectual analysis of 700 blog pages and the comments and reactions attached to them revealed culturally diverse patterns. The study showed that the virtue of keeping face is very important for Chinese and has an impact on the discussion and communication patterns. There are less negative reactions in the Chinese set as table 1 shows. A further detailed look at the negative reactions showed that they are usually longer than negative reactions in the contrastive German set. If Chinese react negatively, they feel the need to elaborate the reasons for that more.

Table: 1: Comment Types

Reaction	China	Germany
emotional, positive	0.298	0.175
argumentation, positive	0.157	0.226
Mediation	0.256	0.277
argumentation, negative	0.099	0.124
emotional, negative	0.071	0.107
change of topic	0.119	0.090

Further differences were found which can be attributed to high vs. low context communication style and the long-term vs. short-term differences between the German and the Chinese culture [3].

3. VIRTUAL SOCIAL CAPITAL

Social software appeals to users because they allow the creation of networks and because of their social reward systems. Virtual social capital can be built up and users can manage their networks and contacts.

In order to analyze cultural differences for this construction process, we conducted a user test with social software user test with Nigerian and German test users. Some 12 people of each culture underwent the user test in their own country and in their typical usage context. They interacted with an exchange system for videos (YouTube). The test revealed many similarities between the groups but also several differences. The interaction with the social software led to a positive emotional reaction in both cultures. The reaction was recorded with a standardized self report questionnaire [5].

The German test users did not see the integration into a social network as sufficient motivation to interact in the test situation. On the other hand, the Nigerians took advantage of the network and gave real socially motivated feedback.

The social status is the basis for trust and motivation for social interaction in many systems. The size of ones network or the popularity of ones pages are examples for indicators of that kind which are displayed in most social software applications [5].

It was obvious that both user groups searched for such indicators and that they intended to evaluate the social status of the person they looked at. However, the construction of the virtual social status differed greatly between the cultures. The German test users tried to identify the character of a person based on the content provided. They intensively read the opinions of other members of the network. On the other hand, the Nigerian test users were much more interested in the real world social network of the person. This may be due to their more collectivist nature.

The Germans in the test needed to find and judge more context and took more interest in the comments of others. The Nigerians as a high context communication style culture were less interested in the context and read the comments of other user much less [5].

Social software is of great interest for members of both cultures however, social values are constructed in very different ways.

Situations may occur where community members judge each other or other persons quite different from each other and do not understand the reasons for that. Someone may e.g. wonder why others do not trust him despite of his high social capital in his own culture and the reason behind might be that they cannot even see the issues which are relevant for them to construct social capital.

4. CONCLUSION

Social software applications include the risk of misunderstands in international settings. On the other hand, these systems can also remedy the communication and intercultural problems in ways which are not possible in face-to-face meetings. These methods need to be further explored. We suggest the following list of actions as a basis for discussion.

- Interfaces are culturally adapted and provide information relevant in the culture of the user
- Only a globally safe sub-set of indicators are shown
- Numbers hinting at social status are culturally normalized
- The applications explains potential differences and educates the user context dependent

All these methods have their advantages and disadvantages. There are many further open questions. Some of them refer to the empirical methods to study behavior in social systems. How does the test situation influence the use of social software? How can be study real-world social software? Ultimately, we need to arrive at a better understanding of social software itself to adapt it to international communication.

5. REFERENCES

- [1] Balog, Krisztian; Mishne, Gilad; de Rijke, Maarten: Why Are They Excited? Identifying and Explaining Spikes in Blog Mood Levels. In: 11th Meeting of the European Chapter of the Association for Computational Linguistics (EACL 2006).
- [2] Evers, V. et al. (Eds.) (2007): Designing for Global Markets 9: Proceedings of the Ninth International Workshop on Internationalization of Products and Systems (IWIPS 2007) Merida, Mexico.
- [3] He, Yilin; Caroli, Folker; Mandl, Thomas (2007): The Chinese and German Blogosphere – an Empirical and Comparative Analysis. In: Mensch & Computer 2007. (M&C) 2.-5. Sept. pp. 149-158.
- [4] Liu, Bing; Hu, Mingqing; Cheng, Junsheng (2005): Opinion Observer: Analyzing and Comparing Opinions on the Web: In: Proceedings of the ACM World Wide Web Conference (WWW). Chiba, Japan. pp. 342-351.
- [5] Stadtmüller, Bianca (2007): Cultural Differences and Emotions involved in the use of Social Software in Germany and Nigeria. Master Thesis. International Information Management. University of Hildesheim.