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Thomas Schoberth
University of Bayreuth

Armin Heinzl
University of Bayreuth

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VIRTUAL COMMUNITIES AS A COMMUNICATION INSTRUMENT FOR INFOMEDIARIES: TYPOLOGIES AND PROPERTIES

Thomas Schoberth
Forwin Research Network
University of Bayreuth
thomas.schoberth@uni-bayreuth.de

Armin Heinzl
Department of Information Systems (BWL VII)
and Forwin Research Network
University of Bayreuth
heinzl@uni-bayreuth.de

Abstract

Virtual Communities provide effective means for client communication and retention. The role of Virtual Communities has been steadily increasing during the past five years. This paper explores how Virtual Communities may be utilized as an effective platform for organizations which act as infomediaries between various group of actors. Using the example of the SdK, a non-profit organization which advocates the interests of small investors in Germany, four different typologies will be developed in order to explore how this interest group can best fulfil its role as an infomediary. For each typology, the specific advantages and disadvantages will be discussed, yielding a specific diffusion path for Virtual Communities in similar settings.

Keywords: Virtual community, typology, properties, diffusion, action research

Introduction

Virtual Communities have gained an increasing importance in the realm of electronic business. Their role has changed from non-commercial discussion groups into an essential instrument for electronic business (Romm et al 1997, Boczkowski 1999, Brunold et al 2000). Today, many organizations develop Virtual Communities or continue to integrate sophisticated Virtual Communities into their web site offerings in order to retain existing customers, identify needs and believes of their existing customer base as well as to attract new clients (Figallo 1998). In addition, some commercial market players like PlanetRX or Yahoo acquired non-commercial communities like diabetes.com or Geocities.com in order to reduce the community development cycle.

Since many research contributions deal with specific aspects of Virtual Communities (Hawkins et al 1999), their diffusion needs to be further explored. Thus, we initiated the DiViCom (Diffusion of Virtual Communities) project within Forwin research network. DiViCom objects to monitor the evolution of selected Virtual Communities from their birth stage until their maturity or death phase. The longitudinal study of the diffusion of Virtual Communities bears the potential to shed more light into the enablers and inhibitors of a communities’ (economic) success.

Since the observation and analysis of community user interactions requires direct access to log files as well as the corresponding user profiles, we consider the conception, development and operation of a real-life community as an appropriate means for controlling the research process. In this paper, we first outline the necessary conceptual foundations. Then, we develop a framework of alternative community typologies for a non-commercial infomediary. Following the guidelines of action research, we choose a non-profit organization for small investor’s interest protection as an example. Each typology will be developed in the light of this organization and will be conceptually evaluated. Finally, two specific typologies will be recommended as a platform for supporting and strengthening the organization’s role as an infomediary between small investors and public companies. Based on these typologies the Virtual Community of the small investor interest group, SdK, will serve as a basis for monitoring the diffusion process in the future.
Conceptual Foundations

In accordance with the foundations of Rheingold (1993), Hagel and Armstrong (1997) as well as Schuberth (1999), we define a Virtual Community as a pool of individuals or organizations

- which share common interests as well as values and
- which interact for a certain period independent of place, media and time.

The basis for interaction is provided by specific information technologies. In general, any communication media like text, voice or video may be utilized for Virtual Communities. But we assume that text based communication formats will be most likely to be available and accessible through desktop and mobile computing and communication devices. Within this format, we differentiate synchronous types of communication like online chats from asynchronous forms like mailing lists, newsgroups, bulletin boards as well as asynchronous forums. Since mailing lists and newsgroups mainly address one way communications which are difficult to trace and provide a lower degree of interaction, these applications will be excluded from field experiment. Interactions based on asynchronous forums are permanently available, centrally storable as well as ex post traceable. They may be usefully complemented by notification emails as well as expert chats and will be the basis of our action research.

According to Breuer (1993), intermediation expresses the process of interposing a third party between at least two exchange partners. The roles of an intermediator can be information production, price determination, goods or services exchange, as well as goods and services refinement. Kannan et al (1988) define an infomediary as someone who focuses on the provision, creation, processing, and distribution of information as a specific type of service. Thus, an organization which collects data from its members or the press, which refines this information or validates it through legal knowledge, and passes this refined information from its members to public companies and vice versa may be characterized as an infomediary.

In this setting, we utilize the case of the SdK as a distinct infomediary. The SdK is an non-profit organization that protects the interest of small investors against public companies. It is one of Germany’s largest financial interest groups with more than 12,000 members. It is run by 35 honorary part-time professionals with a strong legal or business background. The SdK holds at least one share of each public company in Germany which provides the status of a regular shareholder and entitles it to participate at the annual meetings. The activities of the SdK involve

- negotiations with public companies and the legislators in order to strengthen the position of small investors,
- utilization of the right of information at the shareholders’ annual meetings through inquiries, (counter)petitions, opposing votes, and media campaigns, and
- clarification of elementary small investor issues through legal procedures.

The SdK is an existing community with a professional IT infrastructure. It already offers an extensive homepage (www.sdk.org) as well as various web sites to inform members about shareholders’ annual meetings, media reports, court findings, quality indicators for stock markets as well as IPO norms and standards.

Prior to our research, the SdK had not yet employed any Virtual Community. It communicated with its members through ordinary channels like telephone, mail, newspaper, the radio as well as television (see figure 1). In the late nineties, it added a web site and email functionality as complementary communication channels. Communication with the representatives of public companies has been achieved through direct meetings, participation in annual meetings, ordinary mass media, and legal proceedings. In the future, these communication channels will be accomplished by the introduction of a virtual community (see also figure 1).

The expected benefits of the new communication platform are as following:

- Small investors may interact among each other.
- Small investors and public companies may interact with each other without any location and time restrictions.
- Small investors may obtain useful information about public companies on a single web site and obtain the chance to interact with them directly.
- Public companies may establish a positive shareholder relations effect through their interactions with small investors and/or representatives of the SdK.
- SdK obtains an attractive communication platform and controls it by itself.
Typologies and Properties of Virtual Communities

*Evaluation Criteria*

In order to compare the properties of each typology to be developed, we briefly introduce various criteria. From the perspective of the SdK the following issues are of importance:

– vicarious liability of member contributions,
– degree of infomediation,
– effort for the SdK, and
– visibility of SdK’s contributions.

For public companies we suggest the following evaluation criteria:

– SdK’s role as qualitative filter,
– effort for the public companies involved, and
– visibility of the public company’s contributions.

The group of small investors is likely to conceive the following criteria:

– rich communication with public companies,
– rich communication among each other, and
– uncensored as well as unsuppressed contributions.

*Generic Typologies*

From careful analysis of existing Virtual Communities in the World Wide Web, we classify potential interaction pattern among community members into four typologies.
In typology 1, which we call "simple forum", each public company is represented as a topic of the Virtual Community. Within each topic session, all community members (small investors, representatives from public companies as well as professionals from the SdK) may communicate directly with each other on an equal basis. There is no moderation through any SdK representative.

Typology 2, which is named "moderated forum", provides a separate forum for each public company, too. But since the SdK will act as a moderator between participating small investors and representatives from companies, all interaction takes place through professionals of the SdK which act as editors.

Typology 3, which we describe as "two simple forums", is a combination of the previous pattern. The small investors communicate directly in the first forum, while the second forum establishes a communication channel between the SdK and the public companies. Since the SdK selects important issues from forum 1 and – if substantial - addresses them in forum 2, both forums are coupled. Forum 1 provides substantive input for forum 2. All interactions in forum 2 may be observed by small investors.

![Figure 2. Typologies for Virtual Communities](image-url)
In typology 4, which can be characterized as "one unmediated, one moderated topic", consists of two forums again. But on the contrary to typology 3, there is no interconnection between forum 1 and forum 2. The first forum offers unmediated interactions between investors. The second is identical to typology 2 where professionals of the SdK moderate and edit the contributions of the investors and the representatives of the public companies involved. All typologies are summarized in figure 2.

**Discussion**

We assume two alternative scenarios for the discussion. In the first scenario, we expect few small investors to participate in the community. In the second one, the number of investors involved will be a three digit number.

In order to operationalize the evaluation criteria introduced in section 3.1., we will use a scoring model with a bipolar scale (-2 = very bad, -1 = bad, 0 = neither bad, nor good, 1 = good, 2 = very good) for each criterion. The result of applying this scoring model is summarized in table 1 and 2.

**Table 1. Evaluation of Scenario 1**

<table>
<thead>
<tr>
<th></th>
<th>Typ. 1</th>
<th>Typ. 2</th>
<th>Typ. 3</th>
<th>Typ. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SdK:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vicarious liability</td>
<td>2</td>
<td>-2</td>
<td>1</td>
<td>-1</td>
</tr>
<tr>
<td>Degree of intermediation</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Effort for SdK</td>
<td>2</td>
<td>2</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Visibility of contribution</td>
<td>-1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0.25</td>
<td>1.00</td>
<td>1.00</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Public companies:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SdK's role as qualitative filter</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Effort for public companies</td>
<td>-1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Visibility of contribution</td>
<td>-1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-1.33</td>
<td>2.00</td>
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<td>2.00</td>
</tr>
<tr>
<td><strong>Small investors:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication richness with companies</td>
<td>2</td>
<td>2</td>
<td>-2</td>
<td>2</td>
</tr>
<tr>
<td>Communication richness among investors</td>
<td>2</td>
<td>-2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Uncensored/unsuppressed contributions</td>
<td>2</td>
<td>-2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-0.67</td>
<td>0.67</td>
<td>1.67</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>0.31</td>
<td>0.78</td>
<td>1.22</td>
<td>1.64</td>
</tr>
</tbody>
</table>

From the perspective of the SdK, typology 1 bears the lowest risk of liability issues since all community content is provided uncensored. This, in turn, releases the SdK as an operator from any liability risks. Every community member acts as an independent author who is individually responsible for the consequences of his contributions. Since there is no moderation from the SdK, the degree of intermedation is low. The interest group will not be able to enforce or refine other members contributions. With regard to SdK’s effort, typology 3 seems to be sub-optimal. This is due to the fact that the editor(s) from the SdK are required to scan all contributions in the unmediated forum and convert the essentials to the moderated forum. Since all typologies except the first one are (partially) moderated, the SdK has the opportunity of directing the focus of discussion towards "hot issues", increasing the visibility of small investors concerns.

For public companies, the unmediated forum of typology 1 implies that all contributions from private investors are addressed directly to company’s representatives without any quality assurance, redundancy reduction or further specifications by SdK professionals and vice versa. This will decrease the quality of interaction, increase the effort for the company representatives and lead to less effective shareholder relations.
Small investors may reap least benefits with regard to communication richness with public companies from typology 3 since this is the only interaction pattern where the investors cannot address their issues directly to the companies. Typology 2 provides no means for direct interaction among investors and bears the highest potential of changing or suppressing content through SdK editors.

If the number of participants increases in the Virtual Community, we will conceptually evaluate the four typologies in scenario 2 slightly different (see table 2, deviating evaluations compared to scenario 1 are printed in italic style).

If the number of community members grows, the increasing effort becomes evident in all typologies with moderated forums. Especially in typology 2, where all community interaction passes the editor’s bottleneck, the increased traffic may require the involvement of additional editors. Since typology one implies no intermediation at all, this pattern will decrease the visibility of SdK’s contributions when the traffic increases.

From the perspective of a public company’s effort, typology 3 remains superior under increasing usage conditions. On the contrary, typology 1 bears the highest potential of labor intensity since all contributions head on directly to the representatives. Since so many direct interactions encompass this typology, virtually no specific contribution of a public company may be enforced in comparison with other interactions.

Analyzing the impact of an increasing population of community members from the perspective of the investors, typology 2 as well as typology 4 may be positively influenced with regard to their communication richness with companies. This is due to the fact, that these two pattern which involve moderators are more likely to address the relevant issues when the number of interactions increases.

### Table 2. Evaluation of Scenario 2

<table>
<thead>
<tr>
<th></th>
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<td></td>
<td></td>
</tr>
<tr>
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<td>2</td>
<td>-2</td>
<td>1</td>
<td>-1</td>
</tr>
<tr>
<td>Degree of intermediation</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Effort for SdK</td>
<td>2</td>
<td>-2</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Visibility of contribution</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.00</td>
<td>1.00</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Public companies:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SdK’s role as qualitative filter</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Effort for public companies</td>
<td>-2</td>
<td>-1</td>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>Visibility of contribution</td>
<td>-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-2.00</td>
<td>1.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
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<td><strong>Small investors:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication richness with companies</td>
<td>2</td>
<td>1</td>
<td>-2</td>
<td>1</td>
</tr>
<tr>
<td>Communication richness among investors</td>
<td>2</td>
<td>-2</td>
<td>2</td>
<td>2</td>
</tr>
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<td>Uncensored/unsuppressed contributions</td>
<td>2</td>
<td>-2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-1.00</td>
<td>0.67</td>
<td>1.33</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>1.22</td>
<td>0.94</td>
</tr>
</tbody>
</table>

**Conclusion and Future Research**

At a first glance, the findings seem to be somewhat contradictory. Since the SdK has not yet had a Virtual Community, the application of the scoring model suggests the introduction of typology 4 which consists of two forums while one is unmediated and the other not. When the number of participants in the community increases, typology 3 satisfies the requirements of all participants best. But under the circumstance of a growing online community, the defects of indirect interaction between investors and companies, which are inherent to these typologies, seem to be tolerable.

The first Virtual Community implemented for the SdK will therefore follow the pattern of typology 3, providing a rich basis for extensive logfile and profile analysis. This in turn should help to create a database for exploring the diffusion of Virtual
Communities in depth. On the basis of other organizational settings, we attempt to explore under which conditions typology 1 and 2 may lead to considerable results. Our "live experiment" has still a long way to go.

References