Customer Integration with Virtual Communities
Case study: The online community of the largest regional newspaper in Austria

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Abstract
Virtual communities were promoted as “the” business model in eBusiness. Nowadays only a few communities are economically successful. Although revenues expected through advertising or subscriptions are low, communities are still a perfect place to “listen to the customer”. By integrating community members into market research and product development activities companies can get efficient support to improve products for more customer satisfaction as well as to identify new sources of revenue. The case study of “Kleine Zeitung Online” provides a good example of how new ideas and streams of revenue can be generated by listening to the community. Findings show that community members and especially the identified lead users are very willing to provide the necessary information to develop new products for their community, which leads also to new revenue possibilities.

1. Introduction and Motivation
Virtual communities were promoted as “the” business model in online environments. Over the last few years, however, only a few communities have proven to be economically successful. In most cases revenues from advertising and/or subscriptions were just not sufficient to cover marketing expenses. Though the stand-alone business model is no vein of gold, transforming communities into other business models can work. Primary content, brand, entertainment or even commerce sites can profit from additional advertising and commerce revenues through the excess of traffic generated through a virtual community. But the marketing impact of virtual communities as a part of a diversified business model should not be underestimated. This paper intends to give ideas about how to integrate communities efficiently into marketing concepts. The research focuses on how virtual communities can help improve products, lead to innovations and how to use the involvement of their constituents to discover new streams of revenue. The lead user concept (von Hippel, 1986) plays an important role in this research, as virtual communities are a perfect source for lead users, because they are especially concerned about future developments of “their” community.

In the first part of this paper we will give an overview of social and economic approaches to virtual communities. We will take a state-of-the-art look at virtual communities as a stand-alone business model and their expected revenues from advertising, subscriptions and e-commerce. Based on this overview we will provide new ranges of use for virtual communities in a diversified business model. The second part of this research includes a case study on a virtual community of one of the leading online newspapers in Austria. Furthermore we will present our central findings and conclusions for further research.

2. Virtual Communities
The history of the term community can be traced back to a time long before the rise of the internet. The term was even coined long before electronic communication in any form took place. It was a concern of many social theorists, scientists and philosophers of the 19th and 20th centuries (Muniz & O’Guinn 2001). A lot of sociological and psychological research was already done on communities before the “virtual” became relevant. Research concerned the impact of the industrial society on interpersonal relations. Effrat (1974) categorizes communities in solidarity institutions, primary interaction and institutionally distinct groups. Dyson (1997) defines community as the unit in which people live, work and play. The internet serves as enabling technology for human interaction. One of the earliest and most popular approaches to online communities is by Howard Rheingold (1993), which he presents in his work THE WELL (Whole Earth ‘Lectronic Link). In “The Virtual Community” he defines them as “social aggregations that emerge from the net when people carry on public discussions long enough”. Key factors are human feelings as well as personal relationships. One of the most popular economic approaches was presented by Hagel & Armstrong (1997) in their bestseller Net Gain. They saw the virtual community as a virtual enterprise that helps companies gain spectacular revenues. In their definition a virtual community must fulfill five criteria:

- distinctive focus as to membership,
• integration of content and communication,
• emphasis on member-generated content,
• choice among competing vendors
• commercially motivated community organizers.

Other authors take the virtual community term and transform it into communities of commerce (Bressler & Grantham 2000) or communities of transaction (Schubert & Ginsburg 2000). All these definitions have in common that they originated from a virtual community definition without economic interest. Carefully speaking about economic interest, it is the financial interest of a community operator that is new to these definitions.

For this paper we follow the definition of Schubert (2000), who describes virtual communities as the union between individuals or organizations that share common values and interests using electronic media to communicate within a shared semantic space on a regular basis. Furthermore we have to distinguish between two different aspects of economic interest in virtual community. The virtual community as a stand-alone business model that finances itself through advertising revenues, membership fees and commerce revenues (Timmers 1998), is an electronic environment solely for community activities, with The Well being a prime example. The virtual community as add-on in a diversified business model like content or commerce platforms in order to build customer loyalty and customer feedback like Amazon.com, CDNow and many other sites is widely used and can also provide additional revenues through advertising.

3. Community Landscape

When looking at the classic concept of the community as a stand-alone business model, in which people get into contact with new and old friends on neutral ground, and the WELL serving as prime example, it can be shown that economic success is often lacking. These places where thousands of users discuss topics could gain revenues through subscriber fees, advertising, e-commerce or other sources.

The successful ones of these communities - Klang and Olsson (1999) called them third places in their categorization of communities - were soon acquired by big internet companies. The WELL, one of the few online communities that managed to introduce subscription fees, was acquired by Salon.com. GeoCities, one of the biggest collections of private homepages, was incorporated by Yahoo; Tripod, another private website-collection, was bought by Lycos, and Xoom was taken over by NBC. The majority of them were first-movers in a specific segment – all of them starting in the US-market.

Follow-up stand-alone online community models do not seem to be profitable. According to a recent study by Bughin and Zeisser (2001), in which the e-performance of 300 companies worldwide has been monitored, none of the communities in the sample is break-even. They realize an average EBIT (= operating profit divided by revenue) of minus 83%. The main identified problem is the bad return on marketing expenses. Virtual communities spend excessively on brand building, but research shows that these expenses are not very effective. A 10% increase in marketing expenditure just returns a 5% increase in revenue. Many other communities, such as the-globe.com, Themestream, Kibu.com, Productopia.com or TheMan.com have already been buried on the “dot-com graveyard”.

Looking at the main revenue sources of virtual communities these days the reason for the lack of success seems obvious. Revenues are just not sufficient without a big partner in the background to cover marketing expenses. Advertising revenues through banner advertising, sponsoring or any other kind of advertising account for the biggest share of revenues of most virtual communities, but are not sufficient to make them profitable. One reason for this is the presently bad situation of the advertising market. The growth rates promised by most analysts in the last years were all marked down (Gluck et al. 2001). On the other hand communities are not the place were marketers spend their online advertising budget. The lion share of advertising revenues (more than 40%) is spent at the 3 big portals AOL, MSN and Yahoo (Li et al. 1999), and virtual communities only get a small piece of the pie as there is less advertising interaction of community site users compared to content and transaction site users (Cashel 2001). The introduction of membership fees in the virtual community often fails. In contrast to the real world where people pay to have a beer in a bar just to talk with some friends, users of online communities are not willing to pay just to have a nice chat in cyberspace. This problem does not only affect virtual communities, content sites that implement paid content strategies also face this problem. To gain revenues through membership fees, operators must provide an added value to their constituents. E-commerce revenues can be gained in two different ways. On the one hand virtual communities have the opportunity to sell merchandise like T-shirts, umbrellas, mouse-pads or whatsoever, on the other hand there is revenue-sharing on sales made on commerce sites that are initialized (usually by banner click-through) by community sites. Direct revenues do not really matter when looking at the economic performance of communities and also revenue-sharing is not an important source of revenues as most of the commerce turnover (75%) is generated directly at retailers’ sites and the margins for revenue-sharing with other sites range between only
only 5% and 15%. **Alternative sources of revenue** like donations, content syndication and others do not really carry weight for the majority of virtual communities.

4. New Ranges of Use in a Diversified Business Model

Though the stand-online business model for communities for sure is no vein of gold, transforming communities into other business models can work. Looking at the submodels of a business model primary content, brand, entertainment or even commerce sites can integrate communities into their revenue model by gaining additional advertising or commerce revenues through the excess of traffic generated through a virtual community.

But also immaterial compensations like consumer stickiness, consumer-created content and customer information can be generated through virtual communities. Another very important value in this context is the possibility to influence the action of users with the help of communities. This can happen in a direct way by moderating a community, but also in an indirect way. The question how these values can be turned into additional revenues or cost savings is still unanswered.

Generally there is some recent research about the impact of virtual communities on retail and media sites. McKinsey found out that retailer sites benefit from higher customer purchase and retention rates and an increased visit frequency. Community members are more likely to purchase online than non-members. According to this study community members account for 1/3 of all users, but generate 2/3 of all online sales. On media sites community members raise four times the amount of page views per person and session compared to non-members (Brown, Tilton & Woodside 2002).

![Figure 1: The gap between community and non-community users on transaction sites](image)

**Source**: Brown, Tilton & Woodside 2002

The customer relationship model as part of a business model shows the logic how to reach, serve and maintain customers. The customer relationship model can be divided into the marketing, distribution and service model. (Petrovic, Kittl & Teksten 2001). In particular in these parts of a diversified business model virtual communities should be integrated as communities can serve as a powerful marketing tool as well as a perfect source of information to enhance these models, which directly leads to product development.

4.1 Customer Integration

Customer integration based on aggregating customers needs or interests is often a vital contribution for the success of a company. Processes most influenced by costumers are the innovation process as well as the product design, re-design and development process. The reason for that is quite simple: Products and services have to fit customers needs. The innovation process for example is divided into subprocesses like finding ideas, creating product concepts, defining projects, developing constructing drafts, evaluating prototypes and introducing innovations to the market. Homburg & Gruner 1996 in their study showed that it is not advisable to integrate customers into the whole innovation process. Best phases for integrating customers is while finding ideas as well as during the product conceptualization phase, but also letting customers evaluate prototypes shows success. There are several methods for integrating customers into innovation and product development processes. Virtual communities for integrating costumers online are helpful in many ways. As the community mainly consists of individuals that share common interests, they often show high involvement to the product or company their community space is connected to. This high involvement leads to brand awareness as well as basic knowledge about the product and company, which is an important condition for customer integration. The second advantage of virtual communities is that the necessary tools for integrating them into different processes are often already implemented into their community space. Bulletin boards, chats and voting tools provide a basic toolset for communicating with constituents and integrating customers. These tools allow an interactive communication without extravagant expenses. Market Research and Product development are processes that often go hand in hand and both offer good chances for integrating virtual communities.

4.2 Virtual Communities in Market Research

Market research is a very important success factor for enterprises in the offline as well as in the online world. There are a lot of possibilities for online market research nowadays. A lot of secondary data is available on the net and in different databases and there are several instruments for primary market research like e-mail and website surveys, pop-up tests and questionnaires up to online focus groups and other qualitative instruments.
In terms of market research communities provide a wide range of customer information. The information is mainly collected through different methods of tracking or through the user, who provides information required to access certain areas or services. Users that benefit from communities are very likely to provide private information. Normally a lot of demographic data can be collected through different registration proceedings. Questions about sex, age, address, and many more have to be answered.

A phenomenon of community that also plays an important role in marketing is the lead user concept. Lead users are familiar with conditions that are a matter of the future for most others. Their present strong needs will become general needs in months or years yet to come (von Hippel 1986). Virtual communities are a perfect source for these lead users as they are already related to a certain product or topic, continuous and long-dated. In a virtual community these lead users can serve as trendscouts to catch future developments. These lead members can be motivated by giving them special social status in the community or by rewarding them with various incentives or even money. EMI Music Austria (http://www.emimusic.at) uses online trendscouts to obtain market surveys and to develop new products. Another aspect of market research in a virtual community is product testing. This is also very common in the software industry. Selected lead users of the virtual community can check new games, utilities and other software tools for usability and bugs.

4.3 Virtual Communities in Product Development

In fast evolving markets with dynamic customer needs, it is getting more and more important to manufacture products that are perfectly suitable for the customers. With Customer Relationship Management (CRM) a shift from transaction-oriented to a more relationship-oriented marketing took place. The next big change of mind in marketing is mass customization and customer integration. Integrating the customer into the product development process means to let him choose from a finite range of combinations. Good examples of product development through customers are the Nike ID-program, where the customer can personalize his shoes (see http://nikeid.nike.com), or cases of open-source software, where the users develop the product completely (Kuwabara 2000). The topic of product development is quite closely related to market research and in some cases the borders become indistinct. In the cases mentioned above, it is mainly the community that is involved in the development of certain products. In the special case of open-source software the product emerges merely from user-to-user interaction. Users are motivated to participate in programming efforts, because they can directly benefit from the software, but also because of the reputation they can gain in the community (Lakhani & von Hippel 2000).

Another chance of integrating virtual communities into product development is to integrate lead users of very innovative communities. Innovative communities are very hard to identify, but there is a lot of potential in communities, where constituents join for fun and enjoyment like youth culture communities and sport communities. A study by Franke & Shah (2001) on extremes sport communities (boardercross, canyoning, handicapped cycling and sailplaning) found out that nearly one third of the members in these communities had already taken part in a product innovation. The researched communities were offline communities, but potential can easily be transferred to the internet. For example Duotone, a well-known snowboard manufacturer, initiated a design competition in the online community of the Austrian youth radio station FM4. The results were that good that they decided to take the best designs up into the product line of the upcoming year. Very good concepts can also be found at MIT’s Virtual Customer Initiative (http://mitsloan.mit.edu/vc/Pages/vc.html).

Figure 2: Using virtual communities to design a crossover car at the MIT
Source: http://conjoint.mit.edu/demos/udesign/Pages/dragdemo.html, 2002-01-09

For our explorative case study we tried to implement and test some of the mentioned ideas in a large Austrian online community. Therefore a survey was implemented in the virtual community of Kleine Zeitung Online, which aimed to learn about functions and misfunctions of the community and to integrate constituents in new developments to find alternative streams of revenues besides advertising as well as to improve the community space and build new products for the community.
5. Case study: Kleine Zeitung Online Community

Kleine Zeitung Online is the online affiliate of one of the biggest Austrian newspapers. Its online community consists of about 7,000 registered users of whom about one third are active in the community regularly.

For this study we implemented an online survey in the community that aimed at finding out about the socio-demographic structure of the community, the users’ reasons for being in the online community as well as the reason for which they joined. In a second part of the survey, questions were designed in order to involve respondents into the development of their community, to detect new possible revenue streams and build new products for the community.

5.1 Research Methodology

On the one hand we identified 30 lead users (von Hippel 1986) that are familiar with conditions in the community and have been highly involved in developing and supporting the community in order to find out if they reacted differently than “normal users” and if their contribution to product development leads to new conclusions. The questionnaire was sent to these lead users via email and all of them responded. On the other hand the survey was implemented on the community sites of Kleine Zeitung Online. The acceptance of cookies and the nickname were obligatory to avoid multiple participation. 2574 constituents were invited to take part in the survey, 488 started the questionnaire and 312 completed it entirely. This corresponds to a rate of response of 18.96 % and an abruption rate of 36.07 %. The abruption rate is rather high because of the length of the survey.

The survey differentiated between users that are already customers (in the sense of subscribers to the newspaper) and non-customers. The survey consisted of 19 questions concerning socio-demographic data, buying behavior, community use, importance of tools and services in the community, willingness to pay and community development.

5.2 Identification of Lead Users

Lead users are defined as users that are “at the leading edge” in terms of a related new product and who expect a relatively high benefit from solutions to satisfy their needs (von Hippel 1986). Although von Hippel (1986) provides goods suggestions of how to identify lead users in industrial markets, he also points out the complexity of identifying them in consumer markets. Although he suggests to identify lead users in mass markets by appropriately designed surveys, we chose to do that in a more pragmatical way. During our research we identified 30 lead users. On the one hand we chose the 20 most active members in the community. These users may not be confused with power users as their activeness is based on their activities concerning the design and development of the community. The identification was relatively easy as constituents get scores for different activities like introducing new topics for bulletin boards, taking part in surveys and recruiting new members. Out of the list of the top members we chose the ones with the highest scores. Moreover super users that have certain rights in the community and that have always taken an active part in the design and organization of the community were identified as lead users.

5.3 Findings

For our analysis we decided to differentiate between lead users and ordinary users on the one hand, but also between recent costumers that are subscribed to the print edition of the newspapers and non-costumers. The analysis revealed some surprising results that proved that the virtual community of Kleine Zeitung Online offers some great potential in terms of additional revenues, new costumers and brand loyalty.

When analyzing the socio-demographic structure of the Kleine Zeitung Online Community, we learned that the typical user of this community is male, between 20 and 29 years old, well educated and lives in urban regions. Compared to general user data of Kleine Zeitung we also see a higher percentage of women and more members in the segment between 40 and 49 years.

\[\text{Figure 3: Subscribers in the Kleine Zeitung Online Community}\]

Figure 3 shows the percentage of newspaper subscribers who are active in the virtual community. The potential of constituents that are not customers (that means that neither they nor anyone else in their household) is very high. In particular the identified lead users are not very familiar with the offline product, their community is related to.

The buying behavior of community members is also very different from the average internet user in Austria. ¹ A majority of the respondents (71%) declares to have bought online in the last year, whereas only 38% of the Austrian online population has bought products online in the same period of time. A big

¹ Data from the Austrian Internet Radar 4/2001, Fessel Gfk
difference in the buying behavior was also detected with regard to hard- and software. There were two questions in the survey that asked how members learned about the Kleine Zeitung Online Community and about their motivation to participate. Results show that the Kleine Zeitung Online community works exactly like a community in theory should work. Only half of the respondents found their way into the community because of advertising or references in newspapers. The attention of 49% of the respondents was attracted through suggestions from friends and acquaintances. In this case there is hardly any difference between ordinary users and lead users. An aspect that is hardly surprising is that subscribers to the newspaper were more often led to the community through the print edition of the newspaper and advertising itself, while non-customers joined by advice from friends and acquaintances.

![Figure 4: How community members learned about the community](image)

When asking for the users’ motivation to participate we noticed two major categories of reasons. On the one hand, there were community-specific reasons like the people in the community in general (19%), friends and acquaintances in the community (15%) and regional aspects (18%). On the other hand, we found out that members give brand-related reasons such as being subscribers to the newspaper (13%), the feeling that Kleine Zeitung is “their” newspaper (18%) and good support by the staff of the newspaper (17%) for their motivation to participate in the community. This leads to the conclusion that virtual communities can serve as an important tool for branding too.

The last and most important part of the questions concerned product development, asking the community members about their favorite tools, their willingness to pay and their favorite package out of six different packages we offered. We operated a hybrid conjoint analysis (Dahan & Hauser 2000) by letting constituents rate the features directly and then updating these importance measurements with data from profile ranks, choices and comparisions. An open question provided helpful suggestions and possible improvements for the virtual community. There was a total of seven questions concerning this topic. The average time for answering each question was over 60 seconds, which shows that respondents took the questions seriously and took enough time to answer them. Especially the selected lead users were very much involved in these questions as the average time they dedicated to answering these questions even exceeded the time ordinary users took for answering.

The open question was answered by 52% of all respondents and by even 63% of the lead users, which is a very high response rate compared to usual surveys.

When looking at tools and services in the community, we found out that the most important tools for community constituents are the typical community tools like chat, blackboard and guestbook. Amongst these typical community tools, the digital newspaper was also referred to as the most important service in the community. This leads to the conclusion that the content of the newspaper is a very important part for the community space.

![Figure 5: Most important tools and services in the community space](image)

In a next step we wanted to know the most important community tools and services, but supposing that the price per service or tool per month is 0.50 €. Surprisingly the most wanted tools and services were the same as in the last question. Chat was voted as most important tool, followed by blackboard, guestbook and the digital newspaper. In average 3.62 tools and services were chosen, which shows that the average willingness to pay is between 1.50 and 2 € per month. With regard to tools and services we also asked explicitly for which services and tools the community is most willing to pay and for which they are least willing to pay.
Very interesting in this case is that respondents would agree to pay for the digital newspaper, if they had to pay at all. Ranking second is the willingness to pay for the chatroom, but when looking at the tool the community is least willing to pay for, we find the chatroom ranking first. As a conclusion we can say that on the one hand the online community would be willing to pay for the content of the newspaper and for special services like short messaging services or webmail. Community tools like chat, blackboards and guestbook have to be free in the community, as they are seen as a matter of course.

A major difference between lead users and ordinary users can be found when asking for their willingness to pay. Lead users are more willing to pay for typical community tools and services. They are more interested in entertainment and communication than in the offered content. In question 8 and 9 we offered 6 different packages to the respondents. The packages varied in price, range of functions, tools and services and scope of content. With these questions it was possible to gain insight into the preferred future shape of the community, a tendency for a price possibly to be charged for a premium service package and the market-share the offered packages might win.

The range of functions was subdivided into small, medium and large. The small package only included central community functions such as chat, blackboards and trial versions of online games. The medium package additionally comprised a personal guestbook, short messaging services, e-cards, the complete version of online games and psychotests. The large package finally included supplementary webmail, sweepstakes, a personal organizer and the possibility to personalize the community page. The standard package contained the normal online content and latest news, while the plus package included a so-called “e-paper”, which is a pdf-like version of the print newspaper. The price differed according to the range of functions. Subscribers to the print magazine had to pay one additional €uro for the plus package, while non-subscribers were charged €10 for the additional version. A look at the preferences for the different packages shows that 44.05% of respondents chose the package that was for free, followed by the medium packages with 16.4% and 12.86% for the plus version respectively. This result may not be very surprising, as it is generally known that online users are not willing to pay for content and services. Seen from the opposite perspective, however, we realize that there are nearly 50% (as 6% of respondents did not choose any package at all) of the community members who are willing to pay for one of these packages. This leads to the conclusion that there is a potential for a cleverly designed package of functions and content that is offered at a moderate price.

The open question yielded many comments stating that everything was alright with the Kleine Zeitung Online Community and no improvements were necessary or that users should always be able to use all content, tools and services for free. But there were

2 For examples look at Newsstand (http://www.newsstand.com) or OliveSoftware (http://www.olivesoftware.com)
three basic groups of suggestions for improvements. First there were suggestions that technical equipment like servers should be improved and webmail should have some additional functions. Second, there were some wishes concerning targeted offers. Respondents wished for more specific offers for seniors and kids, and especially blackboards should be extended with targeted topics. The third group of suggestions concerned the contents in the community. People wanted to know more about current events and more up-to-date news.

6. Conclusions and Limitations of this research

This case study wanted to show, how the virtual community as a part of a diversified business model can lead to new ideas for product development and additional revenue potential. As advertising and commerce revenues are not sufficient, it is essential to show what additional revenues might be generated by making use of the virtual community.

In case of the Kleine Zeitung Online Community a large potential was identified with regard to future print subscribers. 40% of all respondents at the time have no access to the newspaper, but the content of the online affiliate is one of the most important elements in the community. The goal for the newspaper management now consists in indicating targeted directions to convert these community members into subscribers. Furthermore it was shown that several improvements are necessary in order to keep the online community up with the needs of the constituents. Valuable clues on how to improve the community were gained. Another surprising fact is that there is a potential for a premium service package, as members are willing to pay at least a small amount per month for a package shaped for a specific target group. The identified lead users did not yield the expected results as in most cases their behavior does not differ too much from ordinary users. But considering the high response rate and the fast responses, it is proved that lead users are highly involved and can be helpful for further research in focus groups. Furthermore they started a new topic in the bulletin board discussing about the survey and impacts on the community.

This case study is just one example for how to better integrate virtual communities in market research and product development. The purpose of all these efforts must be the goal to supply added value for the company the community is connected to. The chosen methodology was targeted and also limited for this particular community and should be a starting point for further research. The research methodology will differ from target group to target group.

7. Further Research Questions

In this paper some examples for alternative ranges of use of virtual communities were given. The survey in the virtual community can be seen as a starting point for further research, which will make use of more qualitative methods to integrate members of the community into further innovation and product development processes. What is still unanswered, however, is the question, how the success of these actions can be measured. Future research will concentrate on the effectiveness of these actions. Moreover ratios for measuring community success in market research, product development and other ranges of use in a diversified business model should be given. Another topic of interest is the question how to influence the action of community members in a value-adding way.

Reference List


