
Technologie- und Innovationsmanagement



Working Paper

HOW TO BUILD A VIRTUAL COMMUNITY

Evidence from 7 Cases

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January 2007

No. 46

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Abstract

Companies are starting to recognize the need to build a virtual community. They want to achieve a broad range of goals but face different, more demanding requirements when building a virtual community than do other providers. To give companies a guideline on how to establish their own virtual community we developed a process-model by means of an explorative case-study analysis. By looking into seven processes of how companies from the German hobby and leisure-products industry have built their virtual communities we gained many insights and derived a five-step process that can be used by companies to build a virtual community.

INTRODUCTION AND DEFINITION OF VIRTUAL COMMUNITIES

A number of different terms exist in literature to describe what we call a “virtual community”. The phenomenon is called online forum, network community, web community, online group, online community and many more (Feenberg & Bakardjieva, 2004; Horrigan, 2001; Kim, 2000; Preece, 2000). “Online community” is the most frequently used term. However, the word online indicates a sole appearance on the internet. This is not true at all. All communities we have investigated so far also depend on the personal interaction face to face. In addition, online, as the antonym to offline, appears to require synchronous communication where all communicating parties have to be online at the same time. This is opposed to asynchronous communication where people can communicate but do not have to be online at the same time which is the norm for communities in the internet. Therefore we have chosen the term “virtual community” to circumvent these misunderstandings. A detailed definition will follow.

The diffusion and the importance of virtual communities have been growing over the last years. Today more and more companies register the potentials that lie in virtual communities and want to take advantage of it. They follow very heterogeneous objectives when building a virtual community. These objectives can be grouped into seven categories. Their nature can be financial (Armstrong & Hagel III, 1995; Hagel III & Armstrong, 1997; Rayport & Jaworski, 2001), aimed at communication (Andersen, 2005; Jenner, 2002; Turner, 1987), at market research (Jenner, 2002; Shapiro & Varian, 2004), at enhancing the position in the market (Hof, Browder, & Elstrom, 1997; Lihotzky, 2003; Reichheld & Scheffer, 2000), at building prestige for the company (Andersen, 2005), at support (Andersen, 2005; De Cindio, Gentile, Grew, & Redolfi, 2003), and at the generation of innovative ideas or the enhancement of current products (Bartl, Füller, Ernst, & Mühlbacher, 2002; Dahan & Hauser, 2002; Dahan & Srinivasan, 2000; Füller, Bartl, Ernst, & Mühlbacher, 2006a; Sawhney &

Prandelli, 2000; Sawhney, Prandelli, & Verona, 2003). The variety of these objectives is overwhelming and gives a clear indication towards the potentials that are expected to lie within virtual communities.

For companies, to be able to take advantage of virtual communities and reach one or more of the objectives stated above they need to either join up with a community that already exists or build their own community. In our paper we address the second possibility aiming at the development of a process for companies that supports them at the task of building their own virtual community.

Still in this section a definition of the term virtual community will be developed. Following, a concept for the classification of virtual communities is developed and our own research-activity is classified using this concept. A literature review on the building of virtual communities gives an overview of the available works in this area. Then we define our research question and briefly explain the methodological approach. In the results section we develop a process for building a virtual community. Implications and the statement of required future research complete the paper.

Definition of Virtual Community

The term virtual community initially can be characterized as a gathering of individuals who interact socially, constitute a common public and possess bonds. At the same time a virtual community only appears to exist – it only exists seemingly. As this does not satisfy the requirements for a definition and literature suggest a large amount of different definitions, a number of definitions from literature will be contrasted and analyzed in order to develop a working definition for our paper.

The term virtual community is not always perceived positively. Some researchers talk about pseudo-communities or metaphors for communities (McLaughlin, Osborne, & Smith, 1995; Wellman & Gulia, 2001 give an overview of other critical descriptions of virtual

communities). We do not follow this opinion. However, the inflationary use of the term (Preece, 2000; Werry, 2001) for different appearances that are not directly connected with the actual phenomenon in the focus here certainly did not help to create a common understanding of the term. On the other end of the spectrum there are researchers who see a renaissance of community as virtual communities allow for a closeness which has been lost in the real world (Heintz, 2000).

The phenomenon has first been described by Licklider and Taylor in 1968 (Licklider & Taylor, 1968). Licklider and Taylor described On-line Interactive Communities which they characterized as “communities not of common location but of *common interest*” (Licklider et al., 1968). The most often quoted definition of virtual community is Rheingold’s definition. Rheingold was the first author to describe a virtual community in great detail (Rheingold, 2000). His approach can be described as “netnographic” meaning an ethnographic study on the internet (Kozinets, 1999, 2002, 2005).

The following table gives an overview of definitions from different sources.

Author Year, Page	Definition	Central Characteristics
Rheingold 1993, 2000, S.XX	Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyber-space.	-Social aggregations -Enough people -Long enough discussions -Human feeling -Personal relationships
Hagel III, Armstrong 1997, S.143	Virtual communities are groups of people with common interests and needs who come together on line. Most are drawn by the opportunity to share a sense of community with like-minded strangers, regardless of where they live. But virtual communities are more than just a social phenomenon. What starts off as a group drawn together by common interests ends up as a group with a critical mass of purchasing power, partly thanks to the fact that communities allow members to exchange information on such things as a product's price and quality.	-Common interests and needs -Share a sense of community with like-minded strangers -Recommendation of purchases
Cothrel 1999, S.52	A group of people willing and able to help one another.	-Group of people -Support
Etzioni, Etzioni 1999, S.241	First, it is a web of affect-laden relationships that encompasses a group of individuals – relationships that crisscross and reinforce one another, rather than simply a chain of one-to-one relationships...Second, a community requires a measure of commitment to a set of shared values, mores, meanings, and a shared historical identity – in short, a culture.	-Affect-laden relationships that reinforce one another -Commitment -Shared values, history, culture
Kozinets	...the term community appears appropriate if used in its most	-Social interaction

Author Year, Page	Definition	Central Characteristics
1999, S.253	fundamental sense as a group of people who share social interaction, social ties, and a common 'space' (albeit a computer-mediated or virtual 'cyberspace' in this case).	-Social ties -Common 'space'
Fernback 1999, S.211	...cybercommunities are characterized by common value systems, norms, rules and a sense of identity, commitment, and association that also characterize various physical communities or other communities of interest.	-Common value systems, norms, rules -Sense of identity -Commitment -Bonding
Kim 2000, S.28	A Community is a group of people with a shared interest, purpose, or goals, who get to know each other better over time.	-Shared interest, purpose, or goals -Long-term
Preece 2000, S.10	An online community consists of: -People, who interact socially as they strive to satisfy their own needs or perform special roles, such as leading or moderating. -A shared purpose, such as an interest, need, information exchange, or service that provides a reason for the community. -Policies, in the form of tacit assumptions, rituals, protocols, rules, and laws that guide people's interactions. -Computer systems, to support and mediate social interaction and facilitate a sense of togetherness.	-Social interaction -Satisfaction of own needs -Shared purpose -Shared values, rituals, rules -Computer systems support interaction
Wellman, Gulia 2001 (reprint), S.167-194	(The whole article "Virtual Communities as Communities - Net Surfers don't ride alone", displays a detailed definition of the term.)	-Meetings happen often -Contact on a basis of friendship -Reciprocity -Support -Over a long time
Figallo, Rhine 2002, S.37	A community is made up of people with common interests who communicate, form relationships, and establish shared history.	-Shared interests -Communication -Relationships -Shared History
Bagozzi, Dholakia 2002, S.3	We view virtual communities to be mediated social spaces in the digital environment that allow groups to form and be sustained primarily through ongoing communication processes.	-Social spaces -Digital environment -Sustained communication over a long time
Dupuits 2002, S.682	Environments for interaction, knowledge exchange and emotional support.	-Interaction -Knowledge sharing -Emotional support
Döring 2003, S.2	“Eine virtuelle Gemeinschaft ist ein Zusammenschluss von Menschen mit gemeinsamen Interessen, die untereinander mit gewisser Regelmäßigkeit und Verbindlichkeit auf computervermitteltem Wege Informationen austauschen und Kontakte knüpfen.“	-Bonding of people -Shared interests -Constant and engaging -Facilitated by computers -Exchange of information
Dassel 2004, S.1-2	"Virtuelle Welten [von TD mit "Virtual Communities" gleichgesetzt] sind Online-Umgebungen im Internet, in der Menschen genauso natürlich wie in der realen Welt interaktiv kommunizieren, Geschäfte abwickeln und sich unterhalten lassen."	-Interactive communication -Facilitated by computers
Koh, Kim 2004, S.157	Virtual community as a 'group of people with common interests or goals, interacting for knowledge (or information) sharing predominantly in cyberspace'.	-Shared interests and goals -Exchange of information -Primarily on the internet

Table 1: Definitions of the term “virtual community”

In the following we will not go into much detail with the definitions. We will rather select the central characteristics and from those derive a working definition for the paper.

Obviously a virtual community is a gathering of several individuals. These individuals possess shared interests. An interactive communication in-between all participants must be feasible. Single-sided communication from only one direction (e.g. from a company) or bilateral communication (e.g. between company and one participant) do not meet the requirements for a community. The discussions have to be extensive in a timely manner. This is to mean that a tool designed only for getting an answer for a question is not necessarily to be seen as a community. Virtual communities serve for knowledge exchange as well as emotional support. Reciprocity is a general principle.

The bases of a virtual community are shared rules, norms and values. In the long run these should enable the establishment of a shared culture and even history. The regularity and commitment of the communication are two further important corner stones. In addition the communication takes place primarily on the internet. This, however, does not mean that no face to face conversations are allowed to happen. Contrary, the complementation of virtual interaction by face to face interaction is seen as an important support for the establishment of a community-culture. As an example for this, De Cindio et al. describe a virtual community with physical closeness using a “...*local virtual community* focused on living in Milan...” (De Cindio et al., 2003).

The following working-definition for the present paper can be derived:

A virtual community consists of several individuals who possess shared interests and regularly communicate via a platform on the internet. The mutual communication is expanded over a long period of time and is aiming at the exchange of knowledge as well as at emotional support. The underlying principle is reciprocity. The basis of a virtual community consists of a shared culture in terms of values, rules and norms.

CONCEPT FOR THE CLASSIFICATION OF VIRTUAL COMMUNITIES

To classify virtual communities seven central criteria have been identified. These criteria will be briefly discussed and the type of virtual community analyzed in our paper will be described. Figure 1 gives an overview of the criteria and their specifications.

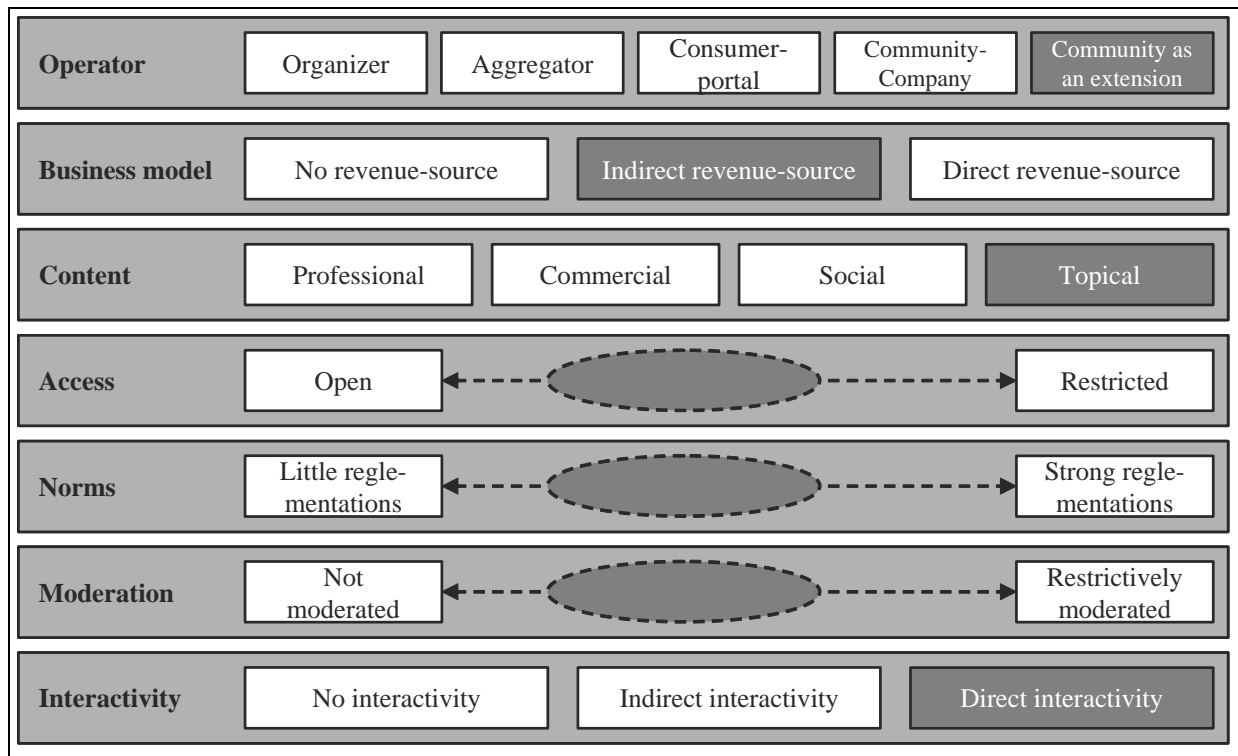


Figure 1: Concept for the classification of virtual communities
Source: own figure

Operator

The organization or individual running the community is a central criterion for a community. The degree of independence from an organization such as a company is an indicator for communities (Weiber & Meyer, 2002, 2005). A virtual community is independent when the topical focus is a product but the community does not have a strong relationship with the company that produces this product. On the other hand, a community that is run by a company depends strongly on it. Five different types of operators can be distinguished.

Communities run by **organizers** are the most common type of community. The organizer usually is a private person or club. The community does not have a strategic alignment (Czaplewski & Andrew, 2004). The organizer often runs a community because they strongly

like or strongly dislike a topic. The identification with this topic is very strong. Mostly no business-model exists for the community. An **aggregator** runs a website in order to aggregate as many users as possible. Examples are Yahoo! or Google. Aggregators usually are financed by advertisements on the website. Thus a large amount of users increases revenues. Aggregators use virtual communities to attract users and keep them on their website for a long time (Bressler & Grantham, 2000; Cothrel, 1999).

Consumer-portals serve as platforms to evaluate products (Banks & Daus, 2002). The virtual community is the means for the evaluation. The evaluation of a product that one participant has entered into the community can be read and commented by any other participant. This way discussion can be started. A **community-company** is a company where the community constitutes the center of the business-model. Examples are dating and business communities such as dating.com, xing.com or linkedin.com. This type of community usually is financed by participation-fees. The communities connect participants.

The fifth type of community-operators are companies that use the community as an **extension** to their core-business (Verstraete, 2004). The core-business of the company could consist of building and selling products. If these companies would discontinue the community the core-business could continue – as opposed to the community-companies described above. This type of community is in the focus of our paper.

Business-model

Three different business-models can be distinguished with virtual communities. The community does not need to be a source for revenues. This is the case when an organizer operates the community (even though one would not speak of a “business-model” in this case). For example community-companies but also other operators use the community as a direct revenue-source. Either the participants have to pay a fee for the usage or the revenues are generated via advertisements on the website. The third business-model uses the

community as an indirect revenue-source. By attracting participants they get deeply connected to the company and its products. Thus, in an indirect way, the community helps to create revenues for the company. This third type is in the center of interest of our study.

Content

Concerning the content a number of classifications are suggested in the literature (De Cindio et al., 2003; Markus, 2002; Schubert, 2000). As the suggested classifications at times exhibit large overlaps, we have consolidated them into four categories: professional, commercial, social and topical. **Professional** communities for example are learning- and research-communities. The exchange of knowledge is the intention of these communities (Markus, 2002; Schubert, 2000). **Commercial** or transaction communities are aimed at the actual transaction activity. They bring together vendor and customer. They can be further divided into business-to-business and business-to-consumer communities (Brunold, Merz, & Wagner, 2000; Hagel III et al., 1997). **Social** communities serve to build relationships and interaction between the participants. They can focus on demographic groups, ethnic groups or any other kind of social group (Markus, 2002). Information exchange and contact between the users is the main aim of these communities. Finally **topical** communities focus on a certain topic. These are usually hobby-communities, communities for gaming or so called communities of fantasy (Hagel III et al., 1997). This type of community often emerge around complex products where many questions can arise (Czaplewski et al., 2004). This type of community is of interest in our present paper.

Access

The way and the ease of accessing a virtual community are of central importance. Some communities are designed to grant access to nearly anyone who wants to enter (Gruber, 2001). Others are very restrictive in this matter. To restrict the access to a virtual community the operator of the community can demand a registration, personal information about the

prospective participant, the invitation from a participant already in the community, a restriction to owners of products by requiring the indication of an article-number (Tietz & Herstatt, 2005) or even the payment of a fee (Turner, 2005). The access to the community can be restricted in different ways. In some communities anyone can access and read statements but the writing requires a registration. In other communities outsiders cannot even read.

Norms

Every time people get together norms, values and rules are perceived as important. In virtual communities these corner-stones also are important (Blanchard & Horan, 1998; Eppler & Diemers, 2001; Ridings, Gefen, & Arinze, 2002). They build the frame of the behavior and the way of interacting. In some communities these rules are detailed and strict. In others they are more liberal and just provide a general framework.

Moderation

Closely related to the norms and rules is the criterion of moderation. Moderation is a means of enforcing the norms and rules. Different authors have different opinions about the tasks and extents of moderation. Anderson and Kanuka are of the opinion that moderation serves to delete and change statements, to guide discussions and to offer intellectual leadership (Anderson & Kanuka, 1997). Other authors warn about too restrictive moderation and recommend only the guidance of the participants (Eppler et al., 2001; Williams & Cothrel, 2000).

Interactivity

Communities depend on interactivity (Figallo, 1998). Without interactivity no community can develop. In the literature as well as in practice different forms of interactivity are discussed. It can be distinguished between direct and indirect interactivity. Indirect interactivity exists, for example, on the website of the book-shop Amazon.com. A reader can write a review of a book and publish it on the website. Others can read this review and also give their reviews.

But they cannot connect to other review-writers and start a discussion about the book. Thus the interactivity is only indirect and therefore this type of “community” is not covered by our working-definition. With direct interactivity all participants can connect to all other participants and start discussions. These discussions can include the operator of the community but does not have to (Werry, 2001).

Summary

This section has highlighted the complexity of virtual communities. Many different combinations of the criteria listed above are possible and can be observed in practice. In our paper we are addressing virtual communities that can be seen as an extension for a company, are an indirect revenue-source, have a topical theme and display direct interactivity. Access, norms and moderation will depend on each community to be looked at. Selecting companies who run a virtual community as an “extension” appears to be particularly interesting as they also could choose not to (as does the majority of companies). However, they did choose to build a community despite the threats associated with it – like negative comments or a failure in establishing the community (Hof et al., 1997; Stauss, 2000).

RESEARCH QUESTION AND METHODOLOGICAL APPROACH

Research Question

It has become clear that companies can strongly benefit from the establishment of an own proprietary virtual community. Companies follow a large range of aims with virtual communities. Research indicates that by means of virtual communities these aims not only can be accomplished but often reach still higher achievements (Tietz, 2007). With the “success-story” virtual community in mind it becomes surprising that not all companies build a virtual community. One reason for this lies in the threats connected with virtual communities. A way to circumvent these threats is a sophisticated planning and building

process for the community. Thus the research question for our paper can be derived as follows: How can companies successfully plan and build a virtual community?

The aim of our research is to develop a process-model for building a virtual community for companies. We approach this task by analyzing successfully established virtual communities that are operated by companies.

Methodological Approach

To investigate the research question an exploratory case-study approach has been chosen. There are five indicators as to why a case-study approach appears beneficial. The research question addresses the development of a process. Thus the investigation will analyze processes in order to derive a process model. An overall **process character** can be assumed (Carson, Gilmore, Perry, & Gronhaug, 2001; Chisnall, 2005; Gordon & Langmaid, 1988). The academic research in the area is continuously growing. However, the **knowledge** in the field of virtual communities is still limited (Carson et al., 2001; Eisenhardt, 1989). Virtual communities, despite the fact of being around for a while by now, still are very new and are located in a position of constant development. Thus **contemporary events** are investigated (Yin, 2003). The **diffusion** also is still limited (Blaxter, Hughes, & Tight, 2002). This means that only few communities fulfilling all the set requirements for their selection are available. A brought investigation of a high number of items is not possible at this time. And finally as indicated earlier the **complexity** of virtual communities and the process of their construction is high (Carson et al., 2001; Gephart, 2004; Miles & Huberman, 2004). Summarizing, we find that the five characteristics listed above recommend a case-study approach.

Selection of industry and cases

For our research we looked for an industry in which there are as many virtual communities as possible. The hobby and leisure products industry appears to be suitable as it can be expected that due to the fascination and identification of the users of the products companies feel

obliged to offer a community and give the users a platform to exchange their opinion about the product and its uses. First investigations into the field show support for this expectation.

For the selection of the cases three requirements had to be met. The community had to have a sufficient size, it had to display a high degree of activities and it had to follow the current trends, i.e. be state of the art. In total 37 communities have been found by searching the internet, recommendations from experts and investigations within dedicated communities about communities (i.e. posting a question about a recommendable community in a dedicated community).

Table 2 gives an overview of the case-studies that have been used for our research. All communities are German-language communities.

	Company	Community	Products/ Services
1	Aral AG	Bikerclub.de	Fuel, services at filling-stations
2	comdirect bank AG	comdirect community	Banking services
3	G+J Women New Media GmbH	Brigitte.de	Women's-journal, internet site
4	Henkel KGaA	Womensnet.de	Cosmetics products
5	Miniatuur Wunderland Hamburg GmbH	Miniatuur Wunderland	Exhibition of a model-train show
6	Stadlbauer Marketing + Vertrieb GesmbH	Carreraclub.com	Slotcars
7	Toshiba Europe GmbH	Toshiba Owner's Club	Predominantly computers

Table 2: Overview of the case-studies

Approach

For the elicitation of the data an eight-step process has been applied. After the identification of a virtual community (1) the requirements have been revised (2). Then the company that operates the community has been contacted (3) to inquire about the readiness to participate. After this had been clarified, the community was thoroughly analyzed (4). A semi-structured interview was conducted with the person or department responsible for the community (5). These interviews were summarized (6) and sent back to the interview-partner for a final clarification of misunderstandings and completeness. Required changes were incorporated into the summary. The data from this summary was triangulated with additional data from the analysis of the community, documents and other sources of data (7). Derived from this step the case-studies were finalized (8).

To compare and interpret the whole research a five-step analysis has been applied. At first the single case studies have been structured (1) and a content-analysis was performed (2). Each case study was coded (3) according to a coding-theme derived from the content-analysis (inductive identification of the indicators). Using the coding we compared the case-studies (4) and finally derived an analysis (5).

BUILDING VIRTUAL COMMUNITIES – A LITERATURE REVIEW

In the literature a number of approaches of building a virtual community are suggested. A selection of these will be discussed in the following.

The most extensive approach has been developed by Kim (Kim, 2000). In her book she suggests an approach containing nine aspects for building a community. It consists of purpose, places (binding people together), profiles (getting to know the members), roles (from newcomer to old-timer), leadership, etiquette, events, rituals and subgroups. As the purpose, focus and direction of the community have to be set in the very beginning. To achieve this, the needs of the participants and of the company are pinpointed, contrasted and evaluated. To bring people together a flexible meeting-place has to be constructed. The flexibility has to be incorporated in the size as well as in the range of topics to be discussed. Kim recommends starting at a small size and then slowly growing with the increase in the number of participants. To be able to get to know the participants, profiles have to be developed that enable the operator to learn about the participants. The profiles should not accumulate too much information as this deters people from entering the community. But they have to contain sufficient information for the operator to learn about the participant and for the other participants to be able to recognize others. Thus the selection of the content of the profile appears to be important.

To create a system that enables certain self-control of the community, different roles within the community have to be created. Kim recommends a system of visitors, novices, regulars,

leaders and elders who each have specific tasks and rights. At some stages, e.g. before becoming a leader, the participation in a workshop is necessary. With the suggested system the different groups are supposed to take care of each other. In the leadership-section Kim reports on the necessity of leadership from within the community and defines tasks that leaders have to fulfill. In the next section (etiquette) Kim elaborates on the need of rules and their enforcement.

Cyclical events are to connect the people and enable them to get to know each other. They are seen as a central aspect of virtual communities. In connection to these, rituals are supposed to give the community-participants an identity and a way of having something in common. These rituals can consist of a certain way of greeting each other or on specific days like the community-birthday. Finally, offering subgroups at a later stage of the development of the community is to help the growth-process and prevent a chaotic combination of different topics and groups of people.

The restrictions of this approach lie in the general nature of the advice. Community is defined brought by her. Her understanding of community is not in every case covered by our working definition. Additionally, it is widely known that companies face different and higher restrictions than for example private people. Kim's approach does not take this into consideration.

Preece (Preece, 2000) develops a life-cycle for virtual communities and suggests the four phases prebirth, early life, maturity and death. This process is named community-centered development process in reference to Norman's User-centered design (Norman, 1986). In the prebirth-phase the software is selected or developed and social rules are defined. In the early life-phase the community is developed in a large amount of test-cycles. Usability and sociability in the community are continually enhanced. In the maturity-phase the community leads a fairly independent life and the operator only engages in emergency-situations. The last phase is the death of the community. Some reasons and implications are stated. Basically the

community is getting out of the focus of the participants and thus loses its participants. Through the reduction of the discussions the community loses its appeal and slowly dies.

Preece's approach is even more general than Kim's approach. No focus on a single type of operator is taken. The projects that led to the development of the process stem from very different selected activities. The initial triggers for the different projects always addressed specific problems.

Figallo and Rhine (Figallo & Rhine, 2002) see virtual communities as instruments for sharing ideas. They accentuate the importance of trust, tolerance and reward. They point out that "...even in a goal-oriented online community, it's important to provide some 'free space' where informal conversation can take place." (Figallo et al., 2002). Figallo and Rhine belong to the few authors who warn about the different situations in which companies in contrast to private operators are situated.

Figallo and Rhine divide their approach into four phases. At first the seeding-phase allocates resources to those participants who can take the most advantage of those resources. The cultural influence-phase is supposed to ensure that the community suits the company's goals and culture. The community has to be culturally integrated into the company. The pilot-phase firstly restricts the community on a small slice of the market. The operator is supposed to question the community strongly and try to enhance it. In this phase it is necessary to define criteria for the evaluation. When this phase has been successful the network expansion-phase follows and the community can be expanded into other areas of interest.

The approach of Figallo and Rhine is less of a defined process as the ones of Kim or Preece. It is rather a list of important aspects that need to be taken into consideration. When addressing the establishment of a community they take the point of view of a company. But during the explanation of the process they frequently use the examples of a company-internal community which has very different requirements and restrictions compared to a community that is to be available for public use.

The approach suggested by Hagel III and Armstrong is very much driven by commercial aspects (Hagel III & A.M. Sacconaghi, 1996; Hagel III et al., 1997; Hagel III & Armstrong, 1999). They point out the importance of speed and adjustability and demand that companies have to strive to be the first in the market – ahead of their competitors. For them to obtain a critical size as quickly as possible is a central aspect. They recommend placing a strong brand in the center of the community. This is supposed to build strong ties to the participants. Also bringing in partners – even competitors – is supposed to strengthen the community.

This approach surprises with the incorporation of competitors. We do not expect too many companies to take this into consideration. In addition the approach remains very much on the surface and does not give many specific hints.

More approaches have been suggested by other authors (Andrews, 2002; Banks et al., 2002; De Cindio et al., 2003; Pitta, 2005; Schubert, 2000) which are similar to the ones discussed above. They are not going to be analyzed in detail here.

The detailed processes suggested by the different authors have been consulted to develop the semi-structured questionnaire for interviewing the company-responsible. It can be summarized that there are quite a number of approaches on how to build a virtual community. However, they all lack a focus on a single type of operator and they usually stay on the surface.

RESULTS: A PROCESS FOR BUILDING A VIRTUAL COMMUNITY

From the research we conducted we developed seven case-studies (as shown in Table 2). The people within the company responsible for the community were asked about the preparations and the process of building up the community. From this information we derived a five-stage-process which is displayed in Figure 2 and will be explained in the following.

The sequential appearance of the process-steps has been chosen for a better overview. In fact, the whole process cannot be seen as a sequence but rather as a number of loops and jumps back and forth.

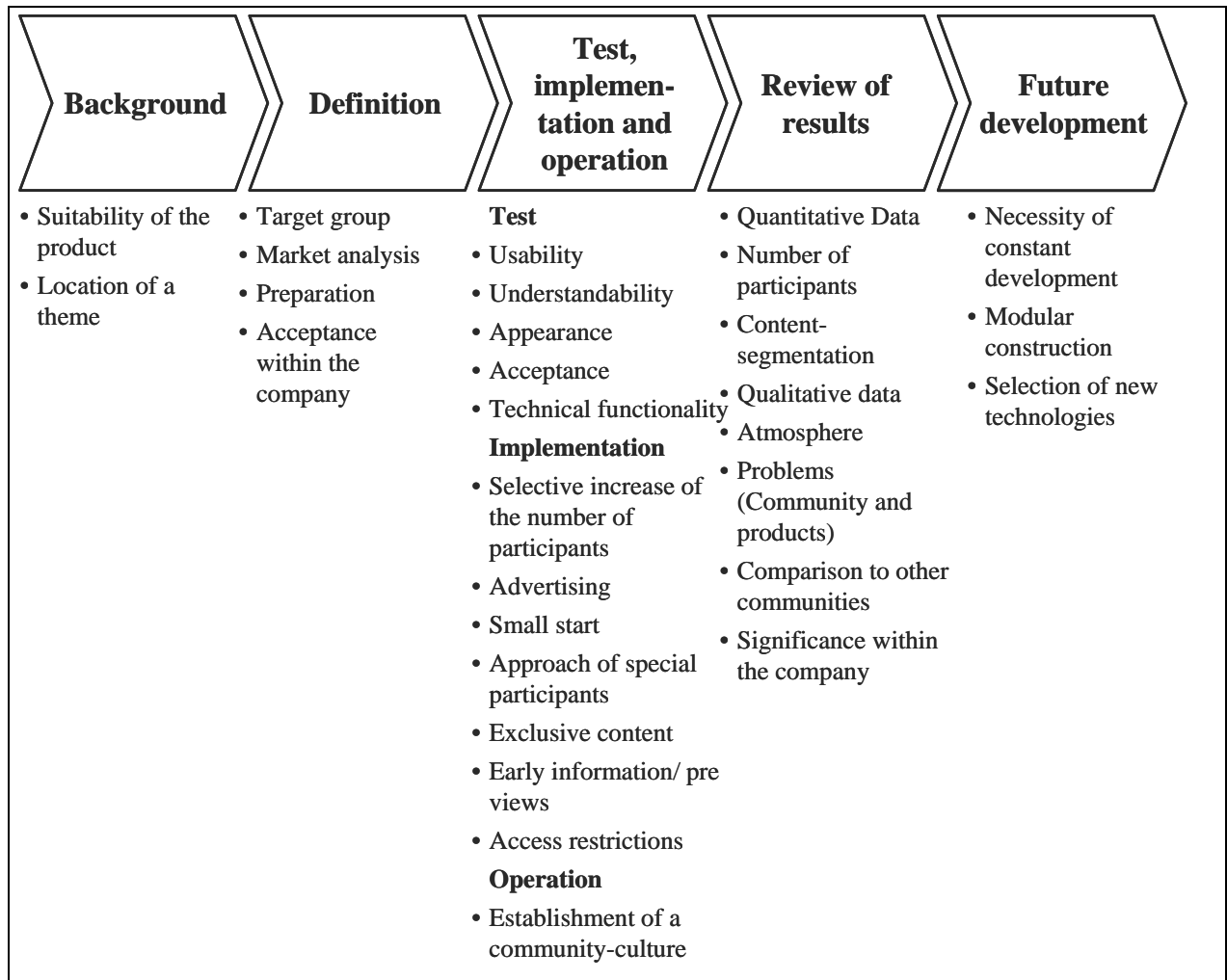


Figure 2: Process for building a virtual community
Source: own figure

Background

In the background-phase the general suitability is investigated. Not every company and not every product are suitable to be in the center of a virtual community. Thus a company has to balance whether or not their product is suitable as the center of a community. Indicators for the suitability are how lively communities about the product or the product-category are that are run by private operators. If these communities possess committed participants (high personal involvement) and a large amount of discussions, product or category seem to be

suitable as the center or core of a community. If no such liveliness exists in communities, it needs to be further investigated if the context of the product or the category is more frequently discussed. In such a case the community can be built around the topical area(s) that is closely related to the product or product-category.

An example for such a community that is built more around a topical context rather than a single product is womensnet.de – a community by Schwarzkopf&Henkel, the international cosmetics company. Discussions are centered on topics like beauty, cosmetics and lifestyle and the company's products are only mentioned at the margin of the community.

Definition-Phase

In the definition-phase four central aspects are to be taken into consideration: Definition of the target group, a market analysis, the preparation in general and the acceptance within the company. At first the target group has to be identified. The virtual community can only be planned and developed purposeful when the target group is clearly defined. The target group could be made up of especially motivated and committed users of the product (e.g. Carrera-Fans) or all users of a product (e.g. all users of Toshiba computers) or any other range of people involved with the product. Depending on the target group the community has to be arranged differently and different topics have to be provided.

When the target group has been defined, market research should be conducted to find other communities (run by companies as well as by private operators) that might exist in this field. The objective of this is threefold: The competitive situation needs to be assessed, the community has to stick out from the rest of the available communities and ideas for the configuration of the community can be collected in this manner. Problems and failures other encountered can be identified and thus bypassed. As an example, the Miniatur Wunderland, the community of the world's largest model-train exhibition identified topics that can lead to

quarrels between the fans. They avoided these topics from the very beginning and by this did not encounter the same problems other communities from this field did.

Despite the fact that not all communities have been prepared to the extent that had been expected a thorough preparation appears essential. At the time when most of the analyzed communities have been founded there was no need to extensively prepare a virtual community. Around the year 2000 the demand for novel interaction platforms was huge and the companies did not doubt that the communities would become lively and fill with participants. Nowadays the situation has changed and the amount of work invested into the preparation will influence the success of the community. We have identified seven aspects that need to be taken into consideration. These will be briefly explained now.

At first the **objectives** the company wants to achieve have to be defined as exact as possible – in a measurable form if this is feasible. General objectives companies strive for have been named above. The objectives can vary strongly depending on the company.

For a purposeful configuration of the community the **requirements of the target group** have to be identified. This can be achieved by an analysis of other communities from the field or by asking potential participants directly. For example Toshiba has inquired about the needs and wants of their target group via their website.

A **development team** whose task it is to structure and design the community in a detailed fashion has to be assembled. The affected departments need to be incorporated (e.g. marketing, support, R&D). They should be complemented by a person familiar with the functional and technical possibilities of virtual communities. This role regularly is taken by an external consultant. Also the members of the operating team, who will take over the responsibilities later, should be involved. We would like to point out that the operation team should be generously staffed as it has become evident that most companies underestimate the amount of work connected to running a virtual community. Unfortunately no indication of the required number of staff can be given as this depends on too many influencing factors.

In connection to the operating team the role of the **staff in the company** needs to be taken into consideration. A virtual community enables a company to place their “ear on the market”. Thus it is recommendable to motivate as many members of staff as possible to get involved in the community. This way an interlock with the market appears possible. In addition, the operating team is disburdened and is not by itself responsible for all care and support.

The intended topics and the **content** of the community should be set as early as possible. The selection of topics influences the design of the community. Despite this, a high degree of flexibility and openness in respect to new topics needs to be kept until the end.

A very important aspect is the **financing** of the community. A definition of which budget (e.g. marketing) finances the community is necessary. Furthermore, the size of the budget and if it is at all flexible and which criteria it depends on have to be decided.

All of these aspects should be summarized in a **business-plan**. The development of a business plan creates security for planning and obliges a structured approach.

While the preparation is under way the internal acceptance of the virtual community within the company needs to be monitored. If there are reservations the reasons need to be clarified and dispelled. The community requires a brought support as a close connection with the market will only be possible under this requirement. This is a bidirectional task. On the one hand the community needs support from the company as to information from within the company. On the other hand the community is a large source of information for the company and thus should be used as this, too.

Test, Implementation and Operation

The three activities test, implementation and operation will be discussed separately. This, however, in reality is not feasible as the three activities can hardly be separated from each other.

Test

It is advisable to test usability and the understandability of navigation with potential participants. Depending on the level of internet-competence of the target-group the features of the community will vary strongly. The operators of the womensnet.de community noticed that their target group was overstrained by the standard forum-system with parallel trees of statements. So they changed back to a system intended for guest-books where there is only one single tree of statements and the most recent one always is displayed on top. The users very much liked this and quickly adopted it.

Closely related to this is the appearance of the community. Details like choosing the color, the size of the writing, the organization of the whole community and many more details belong to this point. The appearance must be attuned to the target group.

The acceptance of the community and the chosen topics can be tested via a focus-group or in group-discussions. The clarification of this aspect is exceptionally important as the general acceptance is critical for the success of the community. The other aspects mentioned before still can be adapted later. But when it is clear from the very beginning that the topics will fail, it is necessary to think about an elementary different approach before the community is even started.

For testing the technical functionality and stability the community-functions have to be ready and usable. The reliable performance in all aspects is a matter of course.

Implementation

The implementation is the most important and also the most difficult phase. It contains the time between the launch of the community-system and the start of a regular operation. The actual aim of the implementation thus is the building of a community until it becomes alive and fills up with dialogues.

As the community-software at first only displays an empty shell, participants have to be attracted towards the community. This, however, should occur selectively. With the selective

increase of the number of participants we do not mean the increase of the number of participants no matter who they are but rather of participants who register for the community are interested in the topics and in the building up of the community. There are a number of ways to influence the development of the number of participants. An initial pool of potential participants helps a lot. Such a pool can consist in the form of a predecessor-community as it existed at Brigitte.de and Carrera. Also a database of the registered users of the products of the company (Toshiba) is of good service. The users can be told about the new community. If there is a newsletter, a group of potential users can be approached in this way (as happened at comdirect bank and Miniatur Wunderland). In general any kind of a focused access onto the target group is advantages. If there is no such pool of people available it should be considered to first build such a pool before starting a community.

Such a pool can also consist of a “natural community”. For example magazines and newspapers possess such a natural community. If there is one, it is easy to address potential participants as the target group already has selected itself. In addition, the connection of community and product is easy in this field as the content of the magazine will reflect in the discussions of the community (example Brigitte.de).

Even though magazines possess a natural community, a “media-fracture” (changing the type of media) should be avoided. Media independent of computers display a hurdle as there is a large step in between the media. This became a disadvantage of womensnet.de. They used to have a print-magazine and expected to bring over a large portion of the reader into the community. They had to discover that hardly any readers changed over.

For a community to become successful its existence has to be known. This can be achieved by advertising. However, it has become clear that mass-advertisements in this field are not leading towards the aim. This means that a focused target group has to be approached by the advertisements. Word-of-mouth appears to be the best form of advertising in this field. This

should be supported – for example by E-Cards which participants can send to friends to greet them and simultaneously tell them about the community.

Even when a large initial pool of potential participants is available the start still should be taken in small steps. A community that starts large with many forums and many other possibilities often appears to be empty. A small start enables a lively appearance and through a gradual development the impression of a very active community-team emerges. Furthermore, a small start saves resources, is less risky and faster to implement.

None of the seven analyzed communities approaches special participants like experts or opinion-leaders. In our opinion, the approach and winning of such people for the community will have a strong impact on the development of the community. This type of person also can be found inside the company.

If the content of the community cannot be found anywhere else, this of course will attract participants from the target group as these are very much interested in these topics. This is very important – especially in the beginning – as discussions in between very committed users will generate new content that also will not be available anywhere else.

To win participants for the community they first have to gain an insight into the community. To achieve this, the possibility exists to let people read the content or parts of the content but restrict writing to those who have registered. This enables an insight for those who are interested but still keeps an incentive to register.

In some cases it might make sense to build barriers for accessing the community. This will lead to a selection of those who are very much interested in the topic and will keep out those who only want to disrupt the community or are only marginally interested. In the Toshiba example users had to provide a series-number of a product and in the case of Carrera users even had to pay a participation fee of €10. Still – and maybe because of this – both communities are very successful.

Operation

Running a virtual community aims on the one hand at achieving the set goals of the company and on the other hand at the establishment of a community-culture. The whole design of the community should be aligned with the goals of the company. The establishment of a community-culture is essential as only through this a bonding in between the participants will develop. The bonding to and within the community increases and the loyalty rises. Community-culture can be assisted by concrete measure.

A community is characterized by communication between the participants. Communication is absolutely necessary for creating a community-culture. Through communication the participants grow together and a feeling of togetherness can develop. That is why ways have to be found to aid communication. Bringing in topics that lead to discussions is one way. A means to boost communication and mutual support is a reward-system. Titles for especially active or knowledgeable participants can be assigned. Frequently these are titles like newbie, regular, master and often more ranks. By obtaining a title other participants respect title-holders and often address questions directly to especially knowledgeable others. This gives the participants with an important title a special feeling of importance.

Communication also requires a basis. Without rules communication is hardly possible. That is why a “Netiquette” – etiquette for the net – is necessary. It is advisable to create this in writing. The enforcement of the netiquette especially in the beginning is very important as otherwise there would be no way to establish it.

Profiles where the participants can introduce themselves help bringing together people with similar interests. A well designed profile enables the reduction of anonymity. With the information and statements about oneself and maybe a picture, it is easy to get to know a person at least a little bit. This increases communication as interest-groups can develop.

A similar direction takes the assistance of fostering contacts. This can be achieved by the setup of a buddy list (e.g. the friends-manager at womensnet.de). Such a list shows connected

people when they are online or after they have written a new posting in the community. Through the support of the contacts the culture within the community is strengthened and the connections between the people are becoming denser.

Moderation is a very important topic with virtual communities. As a fundamental decision it has to be decided whether or not the community should be moderated. A certain amount of moderation will most likely be necessary. Without any moderation a virtual community will not work. In the next step it has to be decided who is supposed to do the moderation. Staff of the company or participants in the community are potential moderators. The advantage of participants lies in their commitment to, their recognition within the community and their cost-advantage. The advantage of members of staff lies in the close connection to and knowledge about the company. Moderation helps to increase the liveliness of a community and the feeling of belonging.

Closely related to moderation is the treatment of voluntary moderators and of other special participants in the community. Moderators from the community do not receive payments. But to keep a close relationship to the moderators some incentives for example in the form of price-reductions should be granted. In any case a pro-active dialog with these participants has to be there at all times as it is extremely important to keep these members in the community. Furthermore, these members have a deep understanding of the community and its activities. Thus they are an important source of information for the company.

To connect the participants as closely as possible with the community the assignment of responsibilities is recommendable. This can be achieved through the assignment of the moderation-function but it can also go beyond this. Participants can specifically be incorporated into certain company-functions. Carrera for example grants participants the right to comment on any new car they plan to produce. Before the actual development starts the community is asked to give feedback on the concept. In addition, participants themselves can

propose their own ideas. Such a close incorporation leads to a strong bond between the participants, the company and the community.

When communities grow strongly the danger of transforming into an anonymous mass comes up. When there are too many participants, they do not have a chance of getting to know each other. The bond between the participants gets weaker and an egoistical behavior might arise. To prevent this, sub-communities can be built. A sub-community is a community within the community that addresses a very specific topic that is of interest only to a small number of participants. Such a structure can enable strong growth but avoid its negative consequences.

Events help the bonding within the community. The participants get to know each other from a different perspective. Events can be either organized by the company or by participants from the community. For events that are organized by the company no high budget is required. Often the connection with the topic is much more important. Carrera, for example, has organized races with slotcars in a Ferrari-garage. Here the location was the main attraction and the surrounding activities like catering were only secondary. Events organized by participants are to be welcomed. This shows that the participants identify very strongly with the community. This kind of activity should be supported wherever possible. Tools to support the organization should be offered. The bikerclub for example offers a calendar-tool an interested biker can subscribe to for her or his region. Thus it is very easy to organize tours.

In a community difficult situations will come up. This cannot be prevented. It appears important that the company behaves open and honest in such situations. When there are technical problems the company should admit them and tell the participants that they are working to fix them. To try and cover them up will not be successful and it would lead to a loss of trust. Also the management of critical postings should be open and honest. Only deleting them will only bring more problems. In the worst case the discussions will be continued in a different community where the company has no control. Thus critical postings should be answered with factual comments and the participant should always feel that she or

he is being taken serious. In addition, the treatment of people who disturb the community can be problematic. Usually sending them an email asking to stick to the rules is sufficient. But sometimes these people just intend to disturb the community. Here a reprehension will not be successful. In these cases the community has to emerge as a single group and make it clear to this person that such behavior is not tolerated. This is only possible when a strong community-culture exists. As the last means the person can be locked out of the community – which of course not always is possible.

Review of results

To be able to assess the value of a virtual community the results somehow have to be reviewed. In doing so, the meaning of the data is the relevant measure and not the technical possibility of a census. Quantitative data can be the number of participants and the interest in a specific topic (content segmentation). With the number of participants an exact definition makes sense. The result depends very much on the level of activity that might be used as a basis for the measurement. The mere number has little significance. However, the number of active participants is very relevant. Thus the degree of activity has to be integrated into this census-model. On the qualitative side the atmosphere is important. With restrictions the atmosphere in the community can give an impression about the atmosphere in the market. This way the company can achieve the desired “ear on the market”.

By constantly measuring the topics of interest the community can be formed. The topics that meet the most interest can be placed in the foreground. Other topics can be switched to the background.

To be able to develop the community and also to do advertising for it, it is important to know the success factors. When it is known what draws the participants into the community, a special focus can be placed on these topics.

An additional aspect is problems. Problems the community faces have to be recognized and solved as soon as possible. This demands a continuous monitoring. Problems can be derived for example from the behavior of the participants. When they leave the community quickly there might be a problem. But also comments are important. It might make sense to build a separate forum for such comments. This might prevent problems and misunderstandings.

An additional aspect of special interest for companies is the feedback for the products of the company and suggestions for innovative products. Users who encounter problems with the products can share their knowledge with the company. Furthermore, the virtual community can serve as an early warning system. The company can recognize when the amount of complaints is growing and take measures correspondingly. This increases the market-orientation of the company.

A continuous comparison with competitors, independent communities, and communities that address different topics is an important indicator for the overall development of communities. Thus new trends can be recognized and adapted for the own community.

The significance of the community within the company is an important indicator for the importance of the information that it supplies. Some companies use a community mainly as a support-tool for users who encounter problems. Others use it to enhance their product, have a source for innovative ideas or even to incorporate users into company-processes. For the second type of company of course the significance of the community is much higher. This, however, depends very much on the objectives of the community. When a community runs smoothly, the objectives should be checked and maybe it is possible to get even more out of it than was initially planned.

Future development

The dynamic environment demands a great deal from companies. They constantly have to develop their community further and keep on searching for new trends. Even successful

communities cannot afford to remain like they are but have to continue to develop. Remaining at one stage means falling back. Because of this a community should always be built in modules. This way, the community can be enlarged but sections also can be closed.

New technologies have to be monitored and evaluated. It is important not to follow every technological trend. At times the value added is so small that it is preferable to stay away from one trend and rather concentrate on the next. The value-added has to be evaluated from the point of view of the participants. Some communities have participants who demand the newest all the time. These participants usually are skilled in respect to the use of such tools. In other communities the participants would be overburdened with certain tools. Thus it is advisable to select technological trends one by one.

IMPLICATIONS AND FUTURE RESEARCH

From our case-studies we were able to derive a process for building virtual communities for companies. Nowadays the preparation and planning for the development of a virtual community are getting more and more important. However, we are of the opinion that a thoroughly planned community even in a market where there already are available a number of communities can be successful.

In future virtual communities in the internet will become even more important – in even more applications ranging from support and marketing to new product development and maybe even further. Companies will not be able to neglect this. Thus if a company does not have their own community, they should start planning now. Even if the product does not appear to be suitable for a community, it certainly will be possible to find a broader topic that will be attractive enough for a community.

This leads to the fields of future research that need to be addressed. In our opinion all companies need a community. But there will not be sufficient space for one community each. Thus partnerships in developing and running communities will increase. This also will enable

addressing broader topics as information can come from different companies who are experts in separate but related areas. So research has to find possibilities and models for partnering to build and operate virtual communities.

- Andersen, P. H. 2005. Relationship Marketing and Brand Involvement of Professionals Through Web-Enhanced Brand Communities: The Case of Coloplast. Industrial Marketing Management, 34: 39-51.
- Anderson, T. & Kanuka, H. 1997. On-Line Forums: New Platforms for Professional Development and Group Collaboration. Journal of Computer-Mediated Communication, 3(3).
- Andrews, D. C. 2002. Audience-Specific Online Community Design. Communications of the ACM, 45(4): 64-68.
- Armstrong, A. & Hagel III, J. 1995. Real Profits from Virtual Communities. The McKinsey Quarterly, 3: 127-141.
- Banks, D. & Daus, K. 2002. Customer.Community. San Francisco: Jossey-Bass.
- Bartl, M., Füller, J., Ernst, H., & Mühlbacher, H. 2002. Managerial Perspective on Virtual Customer Integration - Cognition, Attitude, and Intention: 1-23. Vallendar: Otto Beisheim Graduate School of Management.
- Blanchard, A. & Horan, T. 1998. Virtual Communities and Social Capital. Social Science Computer Review: SSCORE, 16(3): 293-307.
- Blaxter, L., Hughes, C., & Tight, M. 2002. How to Research (2. ed.). Buckingham [u.a.]: Open Univ. Press.
- Bressler, S. E. & Grantham, C. E. 2000. Communities of Commerce: Building Internet Business Communities to Accelerate Growth, Minimize Risk, and Increase Customer Loyalty. London: McGraw-Hill.
- Brunold, J., Merz, H., & Wagner, J. 2000. www.cyber-communities.de : Virtual Communities: Strategie, Umsetzung, Erfolgsfaktoren. Landsberg/Lech: Verlag Moderne Industrie.
- Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. 2001. Qualitative Marketing Research. London: Sage.
- Chisnall, P. 2005. Marketing Research (7 ed.). London: McGraw-Hill.
- Cothrel, J. P. 1999. Virtual Communities Today. The Journal of AGSI (Association for Global Strategic Innovation), 8(2): 52-55.
- Czaplewski, A. & Andrew, J. 2004. A Theoretical and Empirical Exploration of Identification with Virtual Product Communities. International Journal of Internet Marketing and Advertising, 1(2): 155-173.
- Dahan, E. & Srinivasan, V. 2000. The Predictive Power of Internet-Based Concept Testing Using Visual Depiction and Animation. Journal of Product Innovation Management, 17: 99-109.
- Dahan, E. & Hauser, J. R. 2002. The Virtual Customer. Journal of Product Innovation Management, 19: 332-353.
- De Cindio, F., Gentile, O., Grew, P., & Redolfi, D. 2003. Community Networks: Rules of Behavior and Social Structure. The Information Society, 19: 395-406.
- Eisenhardt, K. M. 1989. Building Theories from Case Study Research. Academy of Management Review, 14(4): 532-550.

- Eppler, M. J. & Diemers, D. 2001. Reale und virtuelle Gemeinschaften im betriebswirtschaftlichen Kontext. Die Unternehmung - Schweizerische Zeitschrift für Betriebswirtschaft, 55(1): 25-41.
- Feenberg, A. & Bakardjieva, M. 2004. Virtual Community: No "Killer Implication". new media & society, 6(1): 37-43.
- Figallo, C. 1998. Hosting Web Communities: Building Relationships, Increasing Customer Loyalty, and Maintaining a Competitive Edge. New York, NY [u.a.]: Wiley.
- Figallo, C. & Rhine, N. 2002. Building the Knowledge Management Network. Best Practices, Tools and Techniques for Putting Online Conversation to Work. New York, NY [u.a.]: Wiley.
- Füller, J., Bartl, M., Ernst, H., & Mühlbacher, H. 2006a. Community Based Innovation: How to Integrate Members of Virtual Communities into New Product Development. Electronic Commerce Research, 6: 57-73.
- Gephart, R. P. 2004. From the Editors - Qualitative Research and the Academy of Management Journal. Academy of Management Journal, 47(4): 454-462.
- Gordon, W. & Langmaid, R. 1988. Qualitative Market Research - A Practitioner's and Buyer's Guide. Aldershot u.a.: Gower.
- Gruber, T. 2001. Collaborative Commerce. In P. Gruban (Ed.), Business Communities: Online-Projektgemeinschaften in Unternehmen integrieren und einsetzen: 133-173. München: Markt & Technik Verlag.
- Hagel III, J. & A.M. Sacconaghi, J. 1996. Who will benefit from virtual information? McKinsey Quarterly, 3: 23-37.
- Hagel III, J. & Armstrong, A. 1997. Net Gain: Expanding Markets through Virtual Communities. McKinsey Quarterly, 1: 140-153.
- Hagel III, J. & Armstrong, A. G. 1999. Net Gain. Niedernhausen/ Ts.: Falken.
- Heintz, B. 2000. Gemeinschaft ohne Nähe? Virtuelle Gruppen und reale Nähe. In U. Thiedeke (Ed.), Virtuelle Gruppen: 188-218. Wiesbaden: Westdeutscher Verlag.
- Hof, R. D., Browder, S., & Elstrom, P. 1997. Internet Communities: Forget Surfers. A New Class of Netizen is Settling Right In. Business Week Online, 5: 38-45.
- Horrigan, J. B.; Online Communities: Networks that Nurture Long-Distance Relationships and Local Ties; http://www.pewinternet.org/pdfs/PIP_Communities_Report.pdf; 10.02.2006, 2006.
- Jenner, T. 2002. Online Communities und Markenführung im Internet. WISU - Das Wirtschaftsstudium, 31(6): 809-815.
- Kim, A. J. 2000. Community Building on the Web. Berkeley, Ca.: Peachpit Press.
- Kozinets, R. V. 1999. E-tribalized Marketing?: The Strategic Implications of Virtual Communities of Consumption. European Management Journal, 17(3): 252-264.
- Kozinets, R. V. 2002. The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. Journal of Marketing Research, 39(1): 61-72.
- Kozinets, R. V. 2005. Communal Big Bang and the Ever-Expanding Netnographic Universe. Thesis - Fachzeitschrift für Marketing, 22(3): 38-41.
- Licklider, J. C. R. & Taylor, R. W.; The Computer as a Communication Device; <http://gatekeeper.dec.com/pub/DEC/SRC/publications/taylor/licklider-taylor.pdf>; 13.10.2006, 2006.

- Lihotzky, N. 2003. Kundenbindung im Internet : Maßnahmen und Erfolgswirksamkeit im Business-to-Consumer-Bereich. Wiesbaden: Deutscher Universitäts-Verlag.
- Markus, U. 2002. Integration der virtuellen Community in das CRM. Lohmar, Köln: Josef Eul Verlag.
- McLaughlin, M. L., Osborne, K. K., & Smith, C. B. 1995. Standards of Conduct on Usenet. In S. G. Jones (Ed.), Cybersociety: Computer-Mediated Communication and Community: 90-111. Thousand Oaks, CA: Sage.
- Miles, M. B. & Huberman, A. M. 2004. Qualitative Data Analysis: An Expanded Sourcebook (2 ed.). Thousand Oaks, Calif. [u.a.]: Sage.
- Norman, D. A. 1986. Cognitive Engineering. In D. A. Norman & S. W. Draper (Eds.), User-Centered System Design: 31-65. Hillsdale, NJ: Lawrence Erlbaum.
- Pitta, D. A. 2005. Online Consumer Communities and Their Value to New Product Developers. The Journal of Product & Brand Management, 14(4-5): 283-291.
- Preece, J. 2000. Online Communities - Designing Usability, Supporting Sociability. Chichester u.a.: John Wiley & Sons.
- Rayport, J. F. & Jaworski, B. J. 2001. e-Commerce. Boston: McGraw-Hill/ Irwin.
- Reichheld, F. F. & Scheffer, P. 2000. E-Loyalty - Your Secret Weapon on the Internet. Harvard Business Review, July/ August: 105-113.
- Rheingold, H. 2000. The Virtual Community. Cambridge, Mass.: The MIT Press.
- Ridings, C. M., Gefen, D., & Arinze, B. 2002. Some Antecedents and Effects of Trust in Virtual Communities. Journal of Strategic Information Systems, 11: 271-295.
- Sawhney, M. & Prandelli, E. 2000. Communities of Creation: Managing Distributed Innovation in Turbulent Markets. California Management Review, 42(4): 24-54.
- Sawhney, M., Prandelli, E., & Verona, G. 2003. The Power of Innomediation. MIT Sloan Management Review, 44(2): 77-82.
- Schubert, P. 2000. Virtuelle Transaktionsgemeinschaften im Electronic Commerce : Management, Marketing und soziale Umwelt (2 ed.). Lohmar [u.a.]: Eul.
- Shapiro, C. & Varian, H. R. 2004. Information Rules: A Strategic Guide to the Network Economy (Nachdruck ed.). Boston, Mass.: Harvard Business School Press.
- Stauss, B. 2000. Using New Media for Customer Interaction: A Challenge for Relationship Marketing. In T. Henning-Thurau & U. Hansen (Eds.), Relationship Marketing: 233-253. Berlin: Springer.
- Tietz, R. & Herstatt, C. 2005. Taking Advantage of Online Communities for Generating Innovative Ideas. Paper presented at the 12th International Product Development Conference, Copenhagen.
- Tietz, R. 2007. Virtuelle Communities als ein innovatives Instrument für Unternehmen - Eine explorative Fallstudienanalyse im Hobby- und Freizeitbereich. Unpublished Doctoral Thesis, Technical University of Hamburg-Harburg, Hamburg, Germany.
- Turner, F. 2005. Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community. Technology and Culture, 46(3): 485-512.
- Turner, J. 1987. Rediscovering the Social Group - A Self-Categorization Theory. Oxford: Basil Blackwell.

- Verstraete, C. 2004. Virtuelle Marken-Communities : Newsgroups und Chats als Instrumente der Markenbindung. Lohmar: Eul.
- Weiber, R. & Meyer, J. 2002. Virtual Communities. In R. Weiber (Ed.), Handbuch Electronic Business, 2 ed.: 343-362. Wiesbaden: Gabler.
- Weiber, R. & Meyer, J. 2005. Grundlagen des Community-Marketing: Bezugsrahmen und empirische Prüfung des Virtual-Community-Konzepts. Thexis - Fachzeitschrift für Marketing, 22(3): 42-46.
- Wellman, B. & Gulia, M. 2001. Net Surfers Don't Ride Alone: Virtual Communities as Communities. In M. A. Smith & P. Kollock (Eds.), Communities in Cyberspace: 167-194. London, New York: Routledge.
- Werry, C. 2001. Imagined Electronic Community: Representations of Online Community in Business Texts. In C. Werry & M. Mowbray (Eds.), Online Communities: Commerce, Community Action and the Virtual University: 3-32. Upper Saddle River, NJ [u.a.]: Prentice Hall.
- Williams, R. L. & Cothrel, J. 2000. Four Smart Ways to Run Online Communities. Sloan Management Review, 41(4): 81-91.
- Yin, R. K. 2003. Case Study Research: Design and Methods (3 ed.). Thousand Oaks, Calif. [u.a.]: Sage.