

'Egoboo' vs. altruism: the role of reputation in online consumer communities

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Abstract

This article focuses on the role of reputation in consumer communities. Reputation systems can have a sanctioning function (incentive for good conduct) or a signalling function (e.g. signalling competence or trustworthiness). If the sanctioning function is dominant, striving for reputation should be the major motivation for contribution. However, contributions also can be motivated by altruism, the pleasure of interaction, earning money or generalized reciprocity. An online study of members of a German consumer community assessed the motivations for contribution and the evaluation of various features of the site. Overall, reputation turned out to be the least important motivation. Five types of users could be distinguished, but only the multiple motive consumers scored high on reputation. However, all community members perceived the quality ratings of the reviews as very important. The findings suggest that reputation has mainly a signalling function, but not so much of a sanctioning function in consumer communities.

Key words

altruism • consumer community • contribution • generalized reciprocity • reputation • sanctioning function • signalling function • social dilemma

In online consumer communities such as Epinions.com (www.epinions.com), Reviewcentre (www.reviewcentre.com) or Mouthshut.com (www.mouthshut.com), consumers write reviews about products and services. The central idea is that the information given by other consumers is more objective: 'Unbiased reviews by real people' is the slogan of Epinions.com. However, why do people invest time and effort to write these reviews, and what is the role of reputation in these communities? These are the central questions of this article.

Reading the scientific and popular scientific literature on online markets and participation in online communities leads to the conclusion that it is all about reputation. Reputation systems are promoted as *the* solution to the trust problem in online interactions (Dellarocas, 2003; Resnick et al., 2000) and as the main incentive for contribution to online communities (Fraeueitelder, 2000; Kollock, 1999; Rhemgold, 2002). However, empirical studies on the motivations for contributing to an online community found often that reputation is not the main motivation; people also contribute because they like to help others or experience the interaction with others as pleasant (e.g. Anthony et al., 2005; Hennig-Thurau et al., 2004; Rafaeli et al., 2006; Schroer and Hertel, 2006). This article examines the motivations for writing reviews in online consumer communities, focusing especially on the role of reputation. In line with Dellarocas (2007), it is proposed that reputation systems have mainly a signalling function, but not a sanctioning function in online consumer communities.

REPUTATION SYSTEMS

A reputation system collects, weights and automatically distributes feedback about the past behaviour of actors (Resnick et al., 2000). Probably the most well-known electronic reputation system is eBay's feedback system (www.ebay.com). On eBay, buyers and sellers can give each other positive, neutral or negative feedback after a transaction. The absolute and relative numbers of positive, neutral and negative feedback are displayed on the member profiles. Basically, electronic reputation systems put traditional word-of-mouth networks on a much larger scale (Dellarocas, 2003, 2007). Reputation systems induce trust and cooperation in online markets (Ba and Pavlou, 2002; Bolton et al., 2004), where many interactions are one-shot interactions between strangers, making cheating a tempting strategy (Resnick et al., 2000). Reputation systems introduce a glimpse of the future by providing potential interaction partners with information about the past behaviour of an actor. Depending on the context, reputation systems can be (primarily) a sanctioning or signalling device (Dellarocas, 2007). If actors with a bad reputation are punished, the reputation system has a sanctioning function. This is the case in eBay, when buyers do not bid on sellers with a

bad reputation, thus the reputation system provides incentives for cooperative behaviour. If the ratings given in the reputation system reduce mainly information asymmetries, the reputation system has a signalling function. Often, consumers cannot judge the quality of products beforehand, so the reviews written by other consumers in online consumer communities help them to make the right buying decision. The reputation system provides information about the quality of products. In most settings, both functions play a role, but often one is more important than the other. Almost all empirical work on reputation systems has been conducted in online auctions, mostly eBay (see Dellarocas, 2003; e.g. Ba and Pavlou, 2002; Eaton, 2002; Lee et al, 2000; Lucking-Reiley et al., 2000; Melnik and Aim, 2002; Standifird, 2001). Research has shown that reputation systems build trust and induce cooperative behaviour in these settings. Negative feedback decreases the probability of sale and prices (e.g. Eaton, 2002; Lucking-Reiley et al., 2000; Melnik and Aim, 2002), thus a positive reputation pays off for a seller and the sanctioning function of the reputation system in this context has been demonstrated empirically.

Can these results be generalized to consumer communities? Is reputation the main motivation for cooperative behaviour, in this case, writing high-quality reviews? There are two lines of argumentation possible. If reputation systems have mainly a signalling function in online consumer communities but not so much a sanctioning function, the desire to gain a positive reputation should be less important than, for example, on eBay. However, because information about the quality of reviews written is usually displayed on member profiles, people might be motivated to have a positive reputation. Giving people feedback about the helpfulness of their contributions should increase their information efficacy, the belief that they do make valuable contributions (Kalman et al., 2002). According to Frauenfelder (2000), people are very sensitive to this type of feedback; he uses the term 'egoboo' to describe the ego boost that members of consumer communities feel when being rated positively. However, empirical evidence for this claim is sparse.

This research compares the relative importance of the possible motivations for writing reviews and focuses mainly on the importance of gaining reputation. To identify the possible motivations for writing reviews, the literature from two domains has been consulted: on contribution to online communities in general, and on engaging in word-of-mouth communication.

LITERATURE REVIEW

Motivations for contributing to online communities

Kollock (1999) proposed that reputation and reciprocity are the main motives for contribution to online communities. In newsgroups and mailing lists, people can win status by giving competent answers. Matzat (2001)

has shown that reputation is indeed an incentive for contributing, when community members come across each other offline and can benefit from their online reputation (for example, from the email lists of scientists who meet at conferences). In email lists, members have to remember which other members repeatedly provide high-quality answers. In consumer communities, the number and quality of reviews written is displayed explicitly in the member profile. Some communities provide lists of top reviewers or offer a ranking such as 'expert reviewer' or 'category lead'. Reputation should play an even more important role in environments with so sophisticated reputation systems. According to Frauenfelder (2000), explicit feedback is perceived as 'ego strokes', motivating people to write high-quality reviews. However, his claims are based on anecdotal report and not on systematic empirical research.

Another motivation, according to Kollock (1999), is reciprocity'. People contribute to an online community because they expect to receive valuable information in return. In online communities, generalized reciprocity is more important than direct reciprocity: help from another community member is reciprocated to a different community member, and not necessarily the original help giver. Kollock's analysis applied to communities such as newsgroups or email lists, in which one person asks a question and other community members answer the question. Consumer communities do not have this explicit question—answer structure; people simply can add reviews to products in the database. Nevertheless, they might perceive free-riding as unfair and feel obliged to write a review after using others' reviews for making a buying decision. Therefore, generalized reciprocity is expected to be another motivation for writing reviews in consumer communities.

Alongside Kollock's theoretical analyses, there are also empirical studies on the motivation for contribution to online communities. Although the authors use slightly different terms, depending on the theoretical background of their work, recurrent motives can be identified. McLure Wasko and Faraj (2000) studied three technical Usenet newsgroups, and found that people participated out of altruism and moral obligation. Moral obligation comes close to generalized reciprocity: people feel obliged to contribute because they also profit from the contributions of others. However, altruism is a motivation not mentioned by Kollock (1999).

Wang and Fesenmaier (2004) studied an online travel community and found that active contribution was related to instrumental efficacy and expectancy-related incentives, but not to gaining prestige. Their efficacy incentive measure captured items such as 'being helpful to others' or 'sharing enjoyment' (Wang and Fesenmaier, 2004: 717). The first corresponds to 'altruistic motivation', replicating the findings of McLure Wasko and Faraj (2000). The pleasure of interaction is another motivation for contributing

to communities. The expectancy items (e.g. 'seeking future exchange from whom I provide help') relate to Kollock's (1999) concept of generalized reciprocity.

Anthony et al. (2005) studied the actual contributions to Wikipedia rather than motivations for contribution. They found that for registered people, the quality of contributions increased with the number of contributions, and concluded that these people are motivated by reputation. However, a significant amount of anonymous contributors to Wikipedia also delivered high-quality contributions. These people cannot be motivated by reputation because they contribute anonymously, therefore the authors conclude that they must be motivated by altruism.

Thus, empirical research on online communities in general supports the notion that generalized reciprocity is a motivation for contribution to online communities. The notion that reputation is such a motivation has not received much support; instead, altruism and pleasure of interaction turned out to be motivations for contribution. However, most studies have been conducted in newsgroups, which do not have built-in reputation systems. Therefore, the results should be generalized with caution to online consumer communities with sophisticated reputation systems.

Motivations for engaging in word-of-mouth communication

Hennig-Thurau et al. (2004) studied the motivations for contributing to online consumer communities. They used research on traditional word-of-mouth communication as a theoretical background and looked at how far the factors that are relevant for traditional word-of-mouth communication are also relevant for electronic word-of-mouth communication. Sundaram et al. (1998) identified altruism, product involvement, self-enhancement, helping the company, anxiety reduction, vengeance and advice-seeking as the motivations underlying traditional word-of-mouth communication. Reputation is not on the list because traditional word-of-mouth takes place on a much smaller scale than electronic word-of-mouth. Consequently, the desire to gain a positive reputation was not measured by Hennig-Thurau et al. (2004). However, their subscale 'extraversion/positive self enhancement' contains some items which come close to reputation (e.g. 'I write comments on virtual platforms because my contributions show others that I am a clever customer'). Overall, concern for other consumers turned out to be the main motivation, followed by helping the company and advice-seeking. Economic incentives, social benefits and platform assistance had moderate scores; extraversion/positive self-enhancement and venting negative feelings scored below the scale-midpoint and therefore cannot be considered to be central motivations. A cluster analysis revealed four types of users: self-interested helpers (35%), true altruists (27%), multiple motive consumers (21%) and

consumer advocates (17%). Concern for other consumers and helping the company both refer to altruism; thus altruism is a central motivation in consumer communities. The low overall score of positive self-enhancement suggests that reputation is not the main motivation for writing reviews in consumer communities. However, reputation has not been explicitly measured. This article fills this gap by measuring reputation and comparing its influence with the following motivations: generalized reciprocity/moral obligation, altruism, pleasure of interaction and earning money. The first three have been found in research on other types of online communities; earning money was added because small amounts of money can be earned by writing reviews for online consumer communities, and this motivation plays a role, according to Hennig-Tburau et al. (2<

HYPOTHESES

An open research question about the relative importance of these motivations is posed:

RQ1: What is the relative importance of the following motivations for contributing: gaining reputation, altruism, pleasure of interaction, generalized reciprocity/moral obligation and earning money?

If reputation systems have almost no sanctioning function in consumer communities, gaining reputation should not be an important motivation for writing reviews. Building and maintaining a positive reputation is much more important when having a positive reputation pays off and having a negative reputation means an economic loss, as in eBay. Hypothesis 1 proposes that other motivations are more important than gaining reputation in online consumer communities:

HI: Gaining reputation is not the most important motivation for contributing to online consumer communities.

However, that reputation is not the main motivation does not mean that the reputation system is unnecessary in this type of community. As stated previously, reputation systems are expected to have a signalling function in consumer communities (Dellarocas, 2007). Consequently, community members should consider feedback about the past behaviour of an actor (in this case, the information about quantity and quality of the reviews written) as an important feature of the community. In particular, the quality ratings of the reviews should be used as indicator of which reviews to read or weight more heavily in the decision-making process. Hypothesis 2 proposes that reputation systems fulfill an important signalling function in online consumer communities:

H2: The reputation system itself (feedback about the number and quality of reviews) is judged as an important feature of the community.

Whereas the sanctioning function of a reputation system is important for all the people who write reviews, the signalling function is important for the people who use the reviews to make buying decisions. In particular, the people who base their buying decisions heavily on product reviews should consider quality ratings as an important feature. This assumption is stressed in hypothesis 3:

H3: The more people base their buying decisions on reviews in consumer communities, the higher the perceived importance of the reputation system.

To test these hypotheses, an online survey was conducted within a German consumer community.

METHOD

Research site

The study was conducted in 2005 within Yopi (www.yopi.de), which was launched in April 2000. At the time of the study, Yopi had more than 25,000 (Gentian or German-speaking) registered members and the database contained more than 200,000 reviews, resulting in an average of eight reviews per member. The site was visited by 2.1 million people per month. In recent years, Yopi has consistently been one of the top three German consumer communities and was relaunched at the end of 2005.' At the time of the study, each member had a profile which contained at least the nickname of the member and information about the duration of their membership. Optionally, users could reveal their birth date, contact information, additional information or upload a picture of themselves. The number of reviews written, the number of ratings given and received and the number of comments given and received was displayed as well as the titles of the latest reviews written, the product and its rating, and the rating of the review (by other members). Moreover, each member could build up a 'Buddynet', where the names and number of other members that a person trusted, and whom they were trusted by, were displayed.

The company earns money from advertising and the companies listed in the database, using a proportion of this money to pay active contributors. Writing reviews was rewarded with Yopi points, and 3000 Yopi points equalled €15. The number of points that a member received for a review was dependent on the quality rating and the number of reviews already written for that product. Writing one of the first ten reviews for a product resulted in more points, and the reviews judged as very helpful received double points. The more people judged a review as 'very helpful' or 'helpful', the

more points the writer earned. Thus, the community provided incentives for writing high-quality reviews about products which had not been reviewed yet. However, writing reviews generally did not result in a substantial amount of money. For example, the writer of a review which had been judged on average as 'very useful' by 53 other users earned €0.82.

Procedure and participants

The announcement of the survey with the invitation to participate was placed in the community members' personal member for two weeks. When community members clicked on the link to the online questionnaire, their unique user-ID was transmitted. This allowed the study to control for multiple participation and to match the self-report data with actual data on number of reviews written. Of the participants, 343 completed most of the questions and 302 continued to the last page containing demographic questions (178 females, 124 males, mean age — 27; $SD = 11.6$).

Measures

Membership characteristics Several questions assessed how long the participants had been a member of the community, how often they visited the community, how much time they spent in an average week on the community, and so forth. Also, they were asked about the characteristics of their Buddynet and whether they added any additional information (a picture, contact information, personal information) to their profile.

Motives Twenty items assessed the different motives for writing reviews. The items were based in part on the work of Hennig-Tburau et al. (2004). For reputation and generalized reciprocity, items were developed. The introducing line was always 'I write reviews because ...', followed by the respective motive. The participants indicated on a seven-point scale how far this motive was applicable to them (from 0 = not at all to 7 — fully). Item analysis led to a reduction of the items to four scales. 'Reputation'¹ was measured by four items (e.g. 'I want to gain status within the community') and the reliability was $\alpha = .85$. The subscale 'reciprocity/moral obligation' ($\alpha = .74$) consisted of five items, such as 'I feel obliged because I profit from the reviews of others'. Three items formed the subscale 'altruism' ($\alpha = .83$, 'I like to help others'). The last subscale, 'pleasure of interaction', consisted of four items, such as 'I like to communicate with other consumers' ($\alpha = .70$). 'Earning money' as a motive was assessed by a single item.

Features of the community The participants received a list with the features displayed on a member's profile, such as the number of reviews written, number of ratings given, the possibility of adding a picture, or the number of members that a person trusts. They were asked to indicate on a seven-point scale how important, that is, indispensable these features were to them. These

features were grouped later into features relating to quality, quantity, the Buddynet or personal information.

Influence on buying decisions Three items assessed how far membership of the community affected the participants' buying decisions (e.g. 'I would never buy a product which has received a negative rating'). These items were combined later into one scale, 'influence' ($\alpha = .82$). Again, answers were given on a seven-point scale.

Additional measures Three items measured social identification with the community ('I feel strong ties to the Yopi community'; $\alpha = .86$). In the end, demographic data (gender, age, occupation, education level) were assessed.

Contribution behaviour After completion of the study, the data on the number of reviews written, number of ratings given and received and number of comments given and received were obtained from the community provider.

RESULTS

Site usage

On average, the users had been members for slightly more than a year ($M = 14$ months, $SD = 16$) and spent about four hours per week in the community ($M = 4.39$, $SD = 5.33$). Of the sample, 48 percent logged in daily, 35 percent several times a week, seven percent once a week and another seven percent several times a month. The rest visited the site less often. The mean number of reviews written was $M = 73$ ($SD = 144$). The number varied from one to 1232, therefore the median is a better indicator of actual contribution behaviour. The median was 25, which is still much more than the average over the whole community ($M = 8$). On average, people invested 68 minutes in the preparation and writing of a review, indicating that they really invest time and effort. Thus, the sample consists of active community members and is not representative for all registered users.

Motives

Overall, the participants were motivated primarily by altruism ($M = 5.64$, $SD = 1.17$), followed closely by pleasure of interaction ($M = 5.56$, $SD = 1.02$). There was a significantly lower score for earning money ($M = 5.09$, $SD = 1.88$), and generalized reciprocity/moral obligation ($M = 5.05$, $SD = 1.25$). Reputation ($M = 3.49$, $SD = 1.59$) was the only motive that scored significantly below the scale midpoint (4, $t(312) = 6.08$, $p < .001$). Therefore, HI is supported.

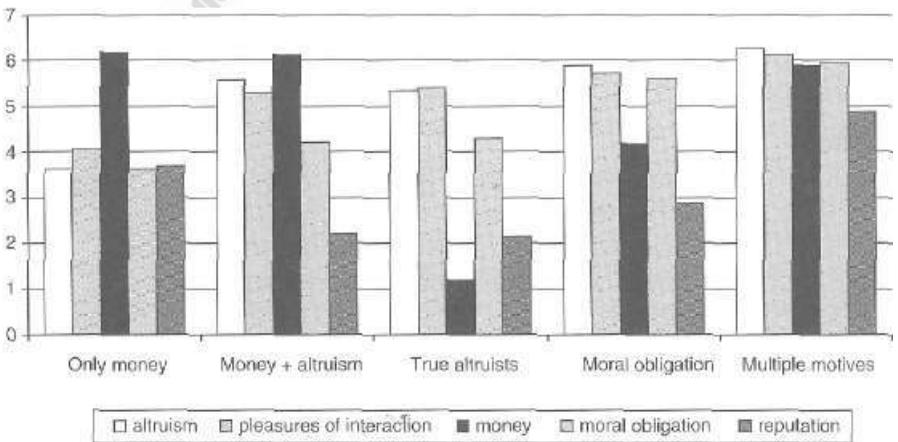
Types of users

To identify the different types of users, a cluster analysis was conducted; the Ward method was used. The appropriate numbers of clusters were

determined by visual examination of the amalgamation coefficient schedule (Aldenderfer and Blashfield, 1984). This procedure is analogous to the scree test in factor analysis and suggested five clusters. The fit of the classification was tested by a discriminance analysis, which showed that 89.2 percent of the original classified cases and 94.8 percent of the cross-validated cases were correctly classified. A multivariate analyses of variance (ANOVA) showed that the five groups differed significantly on the five motives (multiple $F(20, 1196) = 44.69, p < .001$; $F_s(4,300) = 89.34, 50.54, 63.82, 79.77$ and 122.41 for reputation, pleasure of interaction, altruism, generalized reciprocity/moral obligation and earning money respectively, all $p < .001$).

As can be seen in Figure 1, the first group ($N = 34$) was comprised of people who are motivated primarily by earning money. The second group ($N = 60$) was motivated by earning money, but its members scored high on altruism and pleasure of interaction. Generalized reciprocity/moral obligation and reputation were not important for these people. The third group ($N \sim 39$) consisted of true altruists. These people scored high on altruism and pleasure of interaction (no significant difference to group 2), but they did not consider earning money to be a motivation.

The members of the fourth group ($N = 61$) scored high on altruism and pleasure of interaction (significantly higher than the members of the second group), but for them generalized reciprocity/moral obligation was important. They also had higher values on reputation than the first three groups. The members of the fifth group ($N = 111$) scored high on all motives, including reputation and earning money. This group resembles the multiple-motive consumers found by Hennig-Thurau et al. (2004).



* Figure 1 Means on altruism, pleasures of interaction, generalized reciprocity/moral obligation, earning money and reputation for the five types of users

To characterize the groups further, they were compared with regard to duration of membership, visits per week, age, gender, social identification with the community and number of reviews written. There were significant effects for duration ($F(4,259) = 2.76, p < .05$, age, $F(4,259) = 7.13, p < .001$) and social identification ($F(4,259) = 17.17, p < .001$), with a marginally significant effect for gender ($X^2(4) \sim 8.21, p < .10$). As can be seen in Table 1, the members of the 'only money' group tended to be younger and male. They also showed the lowest level of social identification and the shortest duration of membership. In contrast, the 'altruists motivated by money'¹ group was composed mainly of women, and reported a higher level of social identification than the first group. In the other three groups, about 40 percent were males. The 'true altruists' were older than the other members.

Despite their long membership of the consumer community, they did not show a high level of social identification. The members of the fourth group that contributed because they feel obliged to do so showed a high level of social identification with the community. However, the 'multiple-motive' consumers scored highest on social identification: that is, they were integrated best into the community. Interestingly, with only 13 months, the duration of their membership was relatively short. With regard to behaviour in the community, the differences were smaller. There was only a significant effect for visits per week ($F(4,297) = 2.78, p < .05$), but only the difference between the members solely motivated by money and the multiple-motive consumers was significant. Surprisingly, there were no significant differences in levels of contribution, regardless of whether the absolute or relative number or log-transformed number of contributions was used as a dependent variable (both P s $< 1.08, p < .05$).

• Table 1 Community membership characteristics and demographics for the five types of users

	ONLY MONEY	MONEY + ALTRUISM	TRUE ALTRUISTS	RECIPROCITY/ MORAL OBLIGATION	MULTIPLE MOTIVES
Duration of membership (months)	11	15	22	15	13
Age	20	26	34	31	26
Men (%)	58%	28%	40%	41%	44%
Social identification	3.85	4.58	4.18	5.28	5.72
Visits per week	4.8	5.2	4.9	5.1	5.4
Reviews written total	39	89	87	53	76
Reviews written per month	6.9	8.6	6.9	9.0	11.0

Evaluation of the reputation system

H2 proposed that the reputation system — that is, feedback about the past behaviour of an actor - is judged as an important feature of the community. As previously mentioned, this was proposed because the information on the quality and quantity of reviews written has mainly a signalling function in this type of community. To test this hypothesis, the perceived importance of various features of the community was judged. These features were grouped into four types:

- 1 information about the quality of reviews;
- 2 information about the quantity of reviews and ratings;
- 3 information about Buddynet; and
- 4 additional information on the profile (e.g. photo, hobbies).

An ANOVA with repeated measurement showed that information about the quality of reviews was judged as most important ($M = 6.05$), followed by information about the quantity of reviews ($M = 3.93$), the liuddynet ($M = 3.61$) and additional information on the profile ($M = 3.45$). $F(3,900) = 248.06$, $jj < .001$). Planned comparisons (Bonferroni-corrected) showed that information about quality was judged to be more important than all the other types of information. Information about the quantity of reviews written was judged to be more important than information about Buddynet and additional information in the profile. The latter two did not differ significantly from each other. This distribution indicates that the elements of the reputation system — information about quantity and quality — are indeed perceived as the most important features of the community. Thus H2 is supported.

To explore further whether reputation systems function as a sanctioning or a signalling device in consumer communities, the correlation between the importance of the elements of the reputation system (e.g. information about quantity and quality of reviews) and writing reviews as well as influence on buying decisions were computed. The perceived importance of information on the quantity or quality of reviews was not related to the number of reviews written (r between $-.05$ and $-.01$). However, it was related to influence on buying decisions ($r(301) = .36$, $p < .001$), for quality ($r(304) = .26$, $p < .001$) and for quantity indicators. The more that people based their buying decisions on reviews in consumer communities, the higher the perceived importance of the reputation system. Therefore, H3 is confirmed as well.

DISCUSSION

More than 300 users of a large German consumer community provided information about their motivations for contributing to the community.

Overall, reputation turned out to be the least important motivation for contributing to a consumer community. Instead, altruism and pleasure of interaction turned out to be the main motivations. However, information about the quality of reviews, the central element of reputation systems, was considered to be the most important feature of the consumer community. Moreover, the importance of information about the quality of the reviews was related only to influence on buying decisions rather than to the number of reviews written, indicating again that reputation systems have primarily a signalling, rather than a sanctioning, function in consumer communities.

The results have implications for research on both reputation systems and contributions to online consumer communities. First, they show that the reputation system is perceived to be very important in online consumer communities. However, its function is not to motivate people to contribute, rather to help people to select and weight reviews when making a buying decision. Whereas reputation systems function as a sanctioning device in online auctions such as eBay, they function as a signalling device in consumer communities. Dellarocas (2007) proposed this difference in a theoretical paper, but the function of reputation systems has not been studied in the context of consumer communities. The present article is the first that addresses this question, and the results show clearly that it is important to consider the context of a reputation system and to differentiate between different functions.

The results gained in online auctions should not be generalized too rashly to other contexts. In online auctions, reviews are used mainly to assess the trustworthiness of a seller, then an interaction partner is chosen. A negative rating can have detrimental effects for a seller; this is the sanctioning function of reputation systems. In online consumer communities, reviews are used mainly to assess the quality of the review, rather than the person who has written it. No interaction partner is chosen, but a buying decision is made. The effects of a negative rating are less detrimental to the writer. People receive less money for less helpful reviews, but the overall amount of money is rather small anyway (recalling that the median was 25 reviews across a period of 14 months). Writing a better review the next time immediately pays off, whereas an eBay seller who has recently received negative feedback might experience difficulties in finding a buyer who is willing to bid. There are fundamental differences between the contexts, so research should take these differences into account and not just focus on online auctions.

The present research also extended prior research on the motivations to contribute to online consumer communities by explicitly assessing reputation and generalized reciprocity/moral obligation as potential motives. The prior research departed from work on traditional word-of-mouth communication, which did not consider reputation to be a motivation. In contrast to the

assumptions of Frauenfelder (2000), reputation was not the main motivation for writing reviews; instead, altruism and pleasure of interaction turned out to be the main motivations. This is in line with other empirical studies on contribution to consumer communities (Hennig-Thurau et al., 2004) or other types of online communities (e.g. McLure Wasko and Faraj, 2000; Wang and Fesenmaier, 2004).

Further analysis showed that five groups of users can be distinguished. A relatively small group is motivated only by earning money. However, most other users score highly on altruism and pleasure of interaction, and differ mainly in the importance of money, generalized reciprocity/moral obligation and reputation. Only for the multiple-motive consumers is reputation an important motivation. The group of multiple-motive consumers is also the largest group. Thus, reputation plays an important role for a significant part of community members. However, even for them, reputation is not the main motivation.

Three out of the five groups in the current study correspond roughly to the ones reported by Hennig-Thurau et al. (2004): the multiple-motive consumers, the true altruists and the altruists motivated by money (called 'self-interested helpers' by Hennig-Thurau et al., 2004). Hennig-Thurau et al. did not find a group which is primarily motivated by earning money, probably because they also included communities in which no money could be earned. Offering money for contribution is a double-edged sword. On the one hand, money can be an incentive to contribute, but it can crowd out intrinsic motivation (e.g. Deci and Ryan, 1980; Frey, 1997). Obviously, the small amounts of money which can be earned in online consumer communities do not crowd out altruism and other intrinsic motivations. Only a small group is motivated primarily by earning money, and this group shows the shortest membership, consisting mainly of male students. It seems that earning money is a reason to become a registered member of the community, especially for young people who are still going to school or university; but earning money goes well together with altruism in the present study, as well as in the group of self-interested helpers identified by Hennig-Thurau et al. (2004).

The results have practical implications for the providers of online consumer communities. There is good news: people contribute mainly because they like to help others and find pleasure in interacting with other community members. The multiple-motive consumers showed high levels of social identification, indicating that these communities are indeed perceived as communities by many members, rather than databases with product reviews. Although reputation turned out to be the least important motivation, the reputation system itself is necessary. However, because the reputation system has mainly a signalling function, it is more important to display

the helpfulness of a review next to the review, rather than to display the helpfulness of the written reviews in the member profiles,

CONCLUSION

Limitations of the study

The current research has some limitations. First, the sample was self-selected. The invitation to participate in the study was displayed in every member's personal member area, thus, every member of the population had the chance to participate in the research. However, analysis showed that mainly the very active members accepted the invitation to participate. Therefore, the sample is not representative of the whole consumer community. This is not so much a problem because the aim of this article was not to describe the average community user, but to examine which factors motivate people to contribute; therefore, it makes sense to concentrate on the active members that actually contribute to the community. If even the members who have a good reputation are not motivated by gaining reputation, reputation is unlikely to be the main motivation for contribution to consumer communities.

Another limitation is that the study focused on the members of one specific consumer community. Although Yopi has a reputation system and displayed the number and quality of reviews written in the member profile, it did not provide lists of top reviewers or give extra distinctions such as 'category lead'. It could be that reputation-motivated people prefer to write for communities that do, such as Epinions.com. Future research should compare the importance of various motivations across communities with slightly different features. For example, Reviewcentre.com did not have member profiles for a long time, but now it has introduced a ranking system which is oriented along the lines of military rank: there are more than 10, from 'lance corporal' to 'field marshal'. It would be interesting to examine how far features such as the presence of league tables and the framing of ranks (in military terms; or more related to expertise or popularity) attracts different people, and therefore influences the relative importance of motivations.

Suggestions for future research

Future research should compare different types of online venues. User-generated content plays a central role in many of the popular Web 2.0 applications. People share pictures on Flickr (www.flickr.com), videos on YouTube (www.youtube.com) or bookmarks on social bookmarking sites. To design such sites optimally, it is important to know why people contribute. Reputation systems might help to find high-quality information in the flood of information. There are also other sites in which an interaction partner is chosen (rather than a product or movie). On sites

such as KentACod-er (www.rentacoder.com), people can hire coders for software problems. In contrast with online auction sites, on which mainly the trustworthiness of a seller is judged, the competence of a coder is judged mainly in this context. It can be expected that the relative importance of the sanctioning and the signalling function of a reputation system will differ across these types of sites. To explore the role of reputation systems fully, studies should not focus too exclusively on one specific auction site.

To conclude, this study on consumer communities found that it is not all about reputation when the motivations for contribution are examined. However, it is all about reputation when it comes to buying decisions — but the quality of the review is important rather than the quality of the reviewer. Future research should focus more on the different functions of reputation systems by comparing the role of reputation in different contexts. The present study is but a small first step towards a full understanding of reputation systems.

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Note

- 1 In the relaunched version (see http://www.yopi.de/index.php?templ&ite=help_ov&cofconfirmation-view_item&GPJ^ND_PARENT=no&MY_CAT_ID-125; consulted May 2007), additional search options and the option to add pictures were included. The member profile now contains information about the member's activity. Additionally, the payment system was elaborated further. The number of points received is now dependent also on the product category. In the top category are products such as computers or digital cameras, in the middle category products such as films and digital video discs (DVDs) and in the lowest category products such as food or drink. Reviewing products in the category 0 (e.g. cooking recipes) does not result in points.

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