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Understanding the Motivations of Customer Knowledge Sharing in Online Community

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ABSTRACT

Today’s advanced web-based technologies create expanded opportunities for collaboration and customer knowledge sharing. However, research on customer knowledge sharing in web-based communication remains new. This study aims at proposing a theoretical framework for understanding customer sharing behaviors, which we define as voluntary acts of contributions by providing information or sharing experiences, from a motivational perspective. Our focus is on why people are motivated to make contributions in online community where contributions occur primarily through internet and communication technologies. We apply Maslow’s hierarchy of needs (the motivation theory) to explore how individual motivations influence customer knowledge sharing in online community. Particularly, customer knowledge sharing is modeled as a response to varied motivations. These motivations are proposed to be influenced by the availability of reputation systems. Given the importance of global knowledge sharing in today’s world, we expect the research findings can be useful for outlining some generic guidelines for promoting customer knowledge sharing in online community.

Keywords

Reputation system, customer knowledge sharing, motivation and hierarchy of needs

INTRODUCTION

The web-based technologies create expanded opportunities for customers to share and learn from each others. Researchers have long recognized the value of customer as a source of knowledge (Davenport and Jarvenpaa, 2003) and asserted the increasing importance of investigating customer knowledge management (Resnick et al. 2000). In virtual business communities, reputation systems are widely implemented for customer knowledge management and help elicit good behavior. The objective of this paper is to develop a model to understand why people are motivated to make contributions in online community where contributions occur primarily through internet and communication technologies. Based on the general description of knowledge contributions by Wasko and Faraj (2005) and Olivera et al. (2008), we define customer knowledge sharing as voluntary acts of contributions by providing information or sharing experiences. Our focus is to explore the important factors that motivate customer knowledge sharing in an online community. In particular, customer knowledge sharing is modeled as a response to varied motivation factors including social, esteem, cognitive and altruism needs. These motivations are proposed to be influenced by the availability of reputation systems.

A reputation system is a type of collaborative filtering algorithm which attempts to collect, distribute, and aggregate ratings about all participants’ past behavior in an effort to strike a balance between the democratic principles of open publishing and maintaining standards of quality (Resnick et al. 2000). It is often useful in virtual communities in which users may frequently have the opportunity to interact with strangers, users with whom they have no prior experience. Such algorithm, allowing readers to collaboratively impose editorial influence on the user knowledge, can contribute to sense of trust, encourage and reward good behavior (Dellarocas et al. 2004). For example, eBay (online marketplace), Amazon (online book and product review site), Epinions (online product review site), Slashdot (online discussion forum), and Yahoo! Knowledge “plus” (online knowledge sharing community) etc., all rely on reputation systems for customer knowledge management. However, without the participation of customers, an online community will just fade away.

Prior research on reputation systems has mostly focused on trust building in virtual business communities such as the eBay community and, the results reveal that eBay’s reputation system promotes trust as expected (Dellarocas et al. 2004). However, few (if any) studies have examined the relationships between a reputation system and customer knowledge sharing.
In this regard, the purpose of this study is to better understand the reputation system effect and the motivations behind a customer’s decision to share knowledge in an online community. We begin with theoretical perspectives for investigating the impact of reputation systems and the motivations behind customer knowledge sharing in an online community. We then present the research method and findings. Lastly, we conclude this paper with a discussion on the implications of our study for theory and practice.

THEORETICAL BACKGROUND

REPUTATION SYSTEM EFFECT

Reputation systems existed long before the popularity of the Internet. The main purpose of a reputation system is to reflect public opinion. Word-of-mouth, one of the most ancient reputation mechanisms in the history of human society, is being given new significance by the unique property of the Internet. Through the Internet, large-scale word-of-mouth networks in which individuals share opinions, experiences and knowledge on a wide range of topics are made accessible via reputation systems (Dellarocas, 2003). In recent years, reputation systems have been widely adopted as an important characteristic of virtual business communities, helping to elicit good behavior and encourage knowledge sharing among loosely connected and geographically dispersed individuals. The history of customer knowledge sharing is made publicly known with a reputation system, and customers would pay more attention to what they contribute to the communities in order to achieve a higher reputation score. Prior research supports that gaining reputation is one of the benefits for an individual from active participation in online community, leading to more active participations and better quality of knowledge sharing (Wasko and Faraj, 2005). Reputation systems also draw people’s motivation not to free riding from the phenomenon of “word of mouth” (also known as “word of mouse” in the online community context). Prior research supported that “word-of-mouth networks constitute an ancient solution to a timeless problem of social organization: the elicitation of good conduct in communities of self-interested individuals who have short-term incentives to cheat one another” (Dellarocas 2003).

KNOWLEDGE SHARING

Before considering the motivational forces in sharing, some notion needs to be developed of what knowledge sharing is. Alavi and Leidner (2001) define knowledge sharing as an important process in the overall knowledge management, driven by communication processes and information flows. Knowledge sharing presumes a relation between at least two parties, one that possesses knowledge and the other(s) that acquires knowledge (Hendriks 1999). In the sharing process, two sub-processes are involved, ‘externalization’ and ‘internalization’. The externalization is an act to externalize or transmit (codify, show, describe, etc.) information or knowledge by those that have knowledge. The internalization is an act to internalize or absorb (read, interpret, learn by doing, etc.) information or knowledge by those seeking to acquire knowledge. In this research, I only discuss the externalization process that focus on a contributor’s perspective.

In the physical world, knowledge externalization does not have to be a conscious act, nor does it have to be aimed at being shared by others. For instance, by engaging in hands-on activity, a person is sharing knowledge and experience with people who are working with him/her through practical demonstration of the topic even if the person is unaware of the specific knowledge needed for the task. However, in most situation where knowledge sharing to occur, it may need something to stimulate the knowledge owners to externalize their knowledge in a form that is easy and suitable for knowledge internalization by others (Muller et al. 2005; Hendriks 1999). Likewise in the online world, many forums or communities are built for information and experience sharing. However, as many studies have found, the availability of internet and communication technologies do not guarantee that knowledge sharing will take place (e.g., Wasko and Faraj 2005; Alavi and Leidner 1999; Orlikowshi 1996). Wasko and Faraj (2005) suggest that knowledge contribution in an online community primarily occurs “when individuals are motivated to access the network, review the questions posted, choose those they are able and willing to answer, and take the time and effort to formulate and post a response”. Olivera et al. (2008) also define contributions in distributed environments as “voluntary acts of helping others by providing information”. Knowledge resides within individuals (Nonaka and Konno 1998). To share something online, that is to codify either explicit knowledge in the form of procedures or documents (information), or tacit knowledge in the form of experience sharing and advice, individual’s enthusiasm is needed (Ruppel and Harrington 2001). In this paper, we define knowledge sharing as voluntary acts of contributing information or sharing experiences.
MOTIVATIONAL FORCES IN SHARING

Over the years, many psychologists have attempted to define and categorize what motivates people. One of the very influential theories explaining the actions of people is Maslow’s theory of motivation. It pictures human behavior as subjected to a set of fundamental drives, as illustrated in Figure 1.

![Maslow’s hierarchy of Needs (Abraham Maslow 1954)](image)

Maslow hypothesized that the actions of people are motivated by a hierarchy of needs. The hierarchy he described is based on two groupings, deficiency needs (physiological, safety, love, and esteem) and growth needs (self-actualization). According to Maslow, the “deficiency needs” are the general types of needs that must be satisfied before a person can act unselfishly and these needs are arranged in a hierarchical order. The most basic drives are physiological. After that comes the need for safety, then the desire for love, and the quest for esteem. As long as we are motivated to satisfy these cravings, we are moving towards growth, that is self-actualization. Hundreds of empirical studies have supported the motivational force of physiological, safety, love, and esteem needs. But the same studies have failed to discover a hierarchical arrangement (Huizinga 1970).

Today, many people have no need to worry about their physical needs or economic insecurity. Basic wants of humans are usually well satisfied and they no longer motivate people’s action as much as in the past although the needs are always present (Herrington 2004). Our study, therefore, adopts Maslow’s theory (1954) with a focus on the higher level needs, from social (belongingness & love), esteem, to self-actualizing needs. Further, when basic needs and safety are no longer the major concerns, people would begin to focus not only on what they can get from others (selfishly), but also on what they can contribute to others. This opens the door to altruistic help of others, even strangers (Neher 1991). The rise in volunteer work worldwide, on the other hand, also supports this claim. Somehow this selfless component has been ignored by Maslow’s theory of motivation. We describe each of the motivational forces (needs) and their relationships to customer knowledge sharing in the following sections.

Social needs. As Maslow expressed it, individuals are social beings. They have a need to belong and to be accepted by others, i.e. they strive for meaningful relations with other people. Many researchers suggest that trust is a key aspect of social (relational) need and a facilitator of collective action (Coleman 1990; Ma 2004). In general, trust develops when a history of favorable past interactions leads to expectations about positive future interactions (Wasko and Faraj, 2005). McKnight et al. (1998) define trust as “a belief that the intended action of others will be appropriate and be good for the collective”. We believe that customers who have the general trust tend to cooperate and have a higher motivation to share in online community.

In addition to trust, another aspect of social need that has been investigated relates to expectations that an individual’s efforts will be reciprocated. Reciprocity represents a sense of fairness where individuals usually reciprocate the benefits they receive from others in order to receive more useful knowledge in return in the future. Prior work in online communities has found evidence that people who regularly helped others seemed to receive help more quickly when they asked for help (Rheingold 2000).
Esteem needs. According to Maslow, all humans have a need to be respected, and to have self-respect. The esteem needs are of two types. There is the attention and recognition that come from others. There is also self-esteem. Contributing to an online community can provide a way to support one’s ego. Prior research has reported that individuals contributing to a community of practice may gain some reputation as an expert in a particular domain (Wasko and Faraj 2005). Customer knowledge sharing, therefore, may lead to approval, respect and self-value.

A sense of contribution arises when individuals feel that they are able to share with others the skills, knowledge and experiences they possess. By writing contents in a community, individuals benefit the community as a whole by contributing useful knowledge that others receive. Researchers have found that individuals with higher levels of expertise are more likely to provide useful knowledge on computer networks (Constant et al. 1996). Individuals are less likely to contribute when they feel their expertise to be of no use in the communities (Wasko and Faraj, 2000). The sense (perceived value) of contribution, according to Ardichvili et al. (2003), is closely related with individual’s knowledge sharing behavior. Moreover when people share knowledge, they gain confidence in their abilities and this brings the benefits of increased self-value (Constant et al. 1996). This belief, in turn, serves as a self-motivational force for users to contribute in online communities (Bock and Kim, 2002; Kankanhalli et al. 2005).

Cognitive needs. In addition to social and esteem needs (deficiency needs), Maslow’s theory also proposes the importance of growth needs. The conceptualization of growth needs in this study is limited to cognitive need – the knowledge motive. According to Maslow, cognitive needs are defined as the need to know, to understand, and to explore. By writing contents for a community, individuals might have a new learning experience, and be able to exercise their knowledge, skills and other abilities (Peddibhotla and Subramani, 2005).

Altruism needs. Altruism exists when individuals derive intrinsic enjoyment from helping others without expecting anything in return (Smith 1981; Kankanhalli et al. 2005). By contributing knowledge to online community, individuals might have the opportunity to help others (Wasko and Faraj, 2000). Prior studies on electronic knowledge repositories (e.g., Kankanhalli et al. 2005) indicate that individuals enjoy and derive pleasure from the acts of helping others.

All in all, these dimensions of needs are believed to be critical to the investigation of motivations behind a customer’s decision to share in online community.

RESEARCH METHOD

OVERVIEW

As this is an exploratory study of a qualitative and interpretative nature, we surveyed contributors in a large public online community (www.amazon.com/connect), a product review community at Amazon.com. About 1.4 million individuals have submitted reviews of various products such as books, music, movies, consumer electronics, etc. There is a reputation system (also known as rating mechanism) where readers of reviews can vote to indicate whether a particular review was helpful to them. Amazon.com recognizes its contributors based on the number and helpfulness of reviews written by each individual.

DATA COLLECTION AND ANALYSIS

The Amazon.com website has a top reviewers list, a collection of Amazon.com’s leading customer review writers. Each reviewer has a profile page, providing details such as the reviewer rank, number of reviews contributed, number of helpful votes, and the reviewer’s email address (if he or she discloses one). We collected the email address of reviewers listed at the top 300 reviewer ranks and a list of 256 email addresses is resulted. We then sent email message to these active contributors in the Amazon community with invitations to take the survey. Of the 256 reviewers that we contacted, 60 of the emails returned as undeliverable, leaving us with 196 potential respondents with valid emails. There was 23 responded for a response rate of 12 percent.

The narratives obtained were coded and analyzed using the qualitative data presentation and analysis methods (Miles and Huberman, 1994). This included coding of individual answers to identify major themes and categories, and identifying issues pertaining to each of the questions.
RESULTS

The study results are presented below, grouped according to two questions.

1. What drives you to participate in the Amazon review community, where you contribute your knowledge and information?

First, the data suggest that the majority of Amazon customers (over 80%) believe enjoyment in sharing (altruistic motive) motivate knowledge sharing in the online community. For instance, some respondents replied, “my motivation was to be helpful to others in their purchase, if it was something I had knowledge about.” “Reviewing is just a diversion, similar to a vacation, or a mantra.” “I enjoy sharing my thoughts with others.” “I keep reviewing because I love doing it.” “I was happy to participate, simply with the intention of sharing my views with others.”

Second, another set of reasons for contributing knowledge was associated with social needs. The expectation of relational capital leads many reviewers to participate in the community. Relational capital exists when members trust others within the collective, and recognize and abide by its sharing norms. In the survey some respondents (57%) indicated that, in many cases, knowledge contribution is facilitated by trust relationships. They are willing to share because a better relationship with other reviewers could be built up through the knowledge sharing. For instance, they wrote “the reviews have created ancillary benefits such as developing friendship and trust relationship with so many authors.” “I have made some valuable literary friends and their input increases my participation and general enthusiasm.” “It is a friend group!”

Third, the findings (around 75% of respondents) also provide support that knowledge contribution was associated with esteem needs such as reputation, sense of contribution, and self-esteem. For instance, respondents felt the need to establish themselves as experts (e.g., through gaining the formal reputation status by contributing to the community, or through gaining an informal recognition through multiple postings and contributions to the community). Contributing knowledge to the community provides a way to support the ego-enhancement. Some examples that respondents conveyed, “I needed a way to prove myself.” “I thought to myself: I could be the #1 reviewer.” “As a so-called top reviewer, I also like recognition.” “As a Top 100 reviewer, I get a lot more attention.” “One (motivation) is ego – just seeing my name (screen name, at least) in the public forum, and seeing it getting attention. It is especially rewarding.” “Knowing that the review has a potentially large readership gives incentive to make sure that the review is written well, to keep my screen-name’s reputation good.”

Last but not least, knowledge enhancement is another reason for contributions. It was supported (about 20% of respondents) that individual’s cognitive capital develops as he or she interacts over time with others sharing the knowledge and experiences. For instance, the respondents stated, “It was a challenge to learn how to express my thoughts in words.” “I also found reviewing helpful in an academic sense: my writing has improved over the years.”

2. Does the Amazon’s reputation system (where others rate your contributions as useful, and/or the reviewer rank) have any impact on your contributions?

Out of the 23 respondents, only three claimed that either the ratings or the reviewer rank had no impact on their contributions. The majority of respondents agreed that the reputation system is certainly important. Some respondents claimed, “Amazon’s rating system does influence my reviewing.” “A certain number of positive votes per review are necessary to gain ranking points, so most reviewers are aware of the feedback.” “The Amazon ranking system is actually a very great incentive indeed. Now that I’ve appeared as a Top 100 Reviewer, I get a lot more attention.” “My new reviews oftentimes receive no votes at all, which is discouraging.” By this study, we found that gaining ranking points (to enhance reputation status), drawing attention, and receiving rewards are important for motivating contribution. A reviewer at the Top 20 rank revealed “once I finally made it into the ranks of the top reviewers, more rewards came my way. People began offering to send me books (and later on, even some movies) for review. As a bibliophile, there’s nothing I love more than free books. And the most rewarding thing I as a reviewer have ever received is notes of appreciation… any feedback I get from customers is wonderful, but it’s really special to write a review that helps make a struggling author feel better about himself and his work.” This supported the altruistic concern of the reviewer. The altruism involves empathizing with and helping others in need without expecting anything in return.

DISCUSSION AND CONCLUSIONS

The findings need to be interpreted in the light of certain limitations of the study. One limitation is the use of a single community for collecting data. Research at multiple online communities would enable our insights to be more generalized.
Nevertheless, this study makes a significant contribution to theory and practice. The narratives obtained confirm the theoretical perspective of using Maslow’s (1954) theory to explain customer knowledge sharing in the online community. One useful perspective posits that customer knowledge sharing behavior can be both extrinsically and intrinsically motivated. Altruism, the enjoyment of helping others, is the mostly cited factors that motivate customers to share knowledge in the Amazon community. Moreover to some extent, social needs, esteem needs and knowledge needs are the motivations among customers who are willing to share.

Consistent with prior research that has examined reputation system effects, it is supported that reputation system effects are associated with customer knowledge sharing behavior in the Amazon community. The vast majority of respondents agreed that reputation mechanisms enhance gaining relationships and reputation, drawing attention and receiving rewards (both intrinsic and extrinsic rewards) that may lead to more customer knowledge sharing.

On the practical side, the findings of this study provide more complete and explicit justification for the general belief of reputation system effects on customer knowledge management. When reputation systems is applied, customers tend to contribute more postings, and helpful postings, and to have higher knowledge motive, reputation motive, sense of contribution, self-esteem, reciprocity and trust motives.

This study provides some thoughtful insights for the investigation of motivations that drive customer knowledge sharing in the online community. Further studies should continue to explore the reputation system effects, the impact of motivations versus the impact of barriers of customer knowledge sharing.

REFERENCES


