Leveraging Relationships with Web 2.0 Consumer Communities as a Strategic Capability

Nitin Aggarwal
San Jose State University, aggarwal_n@cob.sjsu.edu

Leslie Albert
San Jose State University, albert_l@cob.sjsu.edu

Recommended Citation
http://aisel.aisnet.org/amcis2009/539
Leveraging Relationships with Web 2.0 Consumer Communities as a Strategic Capability

Nitin Aggarwal  
San José State University  
aggarwal_n@cob.sjsu.edu

Leslie Albert  
San José State University  
albert_l@cob.sjsu.edu

ABSTRACT
In today’s dynamic business environment many firms must pursue a series of competitive strategies to survive. According to RBV, these strategies are based upon a firm’s possession of resources and capabilities that are valuable, imperfectly inimitable, non-substitutable, rare and non-transferable. In this paper we extend research on online communities and inter-firm performance differences by suggesting that ability to leverage relationships with Web. 2.0 consumer communities is a strategic capability. We illustrate through the example of Starwood Hotels and Resorts how this capability may lead to competitive advantage and offer suggestions as to how firms may use Web 2.0 consumer community relationships effectively.

Keywords
Web 2.0, Online Communities, Resource Based View, Competitive Advantage, Knowledge resources

INTRODUCTION
In today’s rapidly changing business environment, competitive advantages are often short lived and many firms must pursue a series of strategies in order to outperform their competitors. The Resource-Based View of the Firm (RBV) (Barney, 1991) and more recently, Competitive Heterogeneity (Hoopes, Madsen and Walker, 2003), have been offered as partial explanations for performance among firms. RBV suggests that firms possess strategic resources that may be combined in unique ways to create competitive advantages (Barney, 1991). RBV has also been applied to the use of strategic capabilities, “a firm’s ability to deploy resources” for competitive advantage (Amit and Schoemaker, 1993: 35). These capabilities are “firm specific” and may create advantages on their own or by allowing the firm to extend the value generating capability of its resources (Makadok, 2001). One resource that has received much attention in the literature is organizational knowledge (Grant, 1996). To attain advantage from knowledge resources however, firms must also use their capabilities to scan their environments for ways to extend and build upon their knowledge. For example, Proctor and Gamble (P&G) employs what it calls “technology entrepreneurs” to scour conventions and the Internet and to interact with suppliers to gain access to new knowledge and reduce their research and development costs.

However other firms are taking this idea a step further and are leveraging their relationships with Internet communities to gather knowledge and to interact with current and potential customers. These interactions then further increase firms’ access to consumer knowledge. In this paper we provide a case study of how one firm, Starwood Hotels and Resorts, has created this type of relationship with Web 2.0 community member. Starwood monitors the forums of Flyertalk.com, a community of frequent travelers, looking for knowledge about consumers’ travel experiences then uses this knowledge to address their customers’ concerns and to gain insights into frequent travelers’ wants and needs. This increases Starwood’s customer satisfaction and loyalty, improves its reputation among Flyertalk.com members and ultimately provides it with greater access to consumer knowledge. In this paper we extend research on online communities and inter-firm performance differences by suggesting that this ability to leverage relationships with Web. 2.0 consumer communities is a strategic capability that may lead to competitive advantage.

The remainder of the paper is organized as follows. The first section discusses Web 2.0 consumer communities and the types of knowledge they generate. The second section briefly reviews the literature on inter-firm performance differences and offers propositions which suggest that the ability of some firms to create and harness relationships with Web 2.0 consumer communities constitutes a strategic capability. The third section illustrates, through the example of Starwood Hotels and Resorts, how this capability may lead to competitive advantage. The fourth section offers insights into how firms may develop relationships with Web 2.0 consumer communities. The final section reviews the contributions of the paper.
WEB 2.0 CONSUMER COMMUNITIES

Although there is some disagreement on what is meant by the term “Web 2.0,” many of the technologies that support Web 2.0 communities, such as wikis, blogs, and forums possess features that encourage the development of knowledge and relational resources by enabling users to easily create, manage and post content. Further, network effects lead to an increase in value, and encourage reciprocity among members, even as the number of contributors grows (Katz and Shapiro, 1994). The ability of Web 2.0 communities to foster participation and the creation of relationships is one explanation for their exponential growth; according to Alexa.com, 10 out of top 20 most popular websites in the world are Web 2.0 communities such as YouTube, Facebook, MySpace, Blogger and Hi5.

In addition to these very general communities, consumers have also built highly active, unofficial Web 2.0 communities around innumerable products, services, and companies. Many firms see these consumer communities as threats from which they must protect themselves or as irrelevant blips on their external relations radars. But other firms have a more entrepreneurial view of the value community knowledge and relational resources may provide (Alvarez and Busenitz, 2001). Firms also host their own official Web 2.0 consumer communities. However, in this paper we are only considering Web 2.0 consumer communities that are owned and operated by third parties as there is some concern regarding the ability of sites controlled and filtered by organizations to foster the growth of unbiased information and relationships (Walden, 2000).

Web 2.0 Consumer Community Knowledge

Knowledge generated in Web 2.0 consumer communities begins with individual posts to topic threads on a community’s website. These posts are often requests for assistance from the community regarding specific problems or responses to others’ requests. Through discussion and interaction these communities share existing knowledge and synthesize ideas into new knowledge. This knowledge maybe very specific - related only to a particular product model or instance of customer service, for example. Other knowledge maybe quite general, addressing company-wide, or even industry-wide, issues. Toyota Camry has an unofficial consumer community, www.camryforums.com, where users share knowledge about the Camry from engine troubles and potential solutions to new features and customizable options. Posts regarding Camry parts recalls, clogged fuel vents, and maximizing gas mileage provide participants with knowledge specific to the Camry. Such specific knowledge is valuable to Toyota because it provides insights as to how the Camry maybe improved, but it is not necessarily valuable to Honda. Other posts however, such as lists of desired features and financing options or complaints about option packages, are more general and valuable for both Toyota and its competitors as they compete to offer products and services that best satisfy consumers. In addition to this valuable knowledge, Web 2.0 consumer communities also enable firms to build relationships with consumers.

Web 2.0 Consumer Community Relationships

The relationships between members of Web 2.0 consumer communities constitute a network of weak ties that provide participants with the knowledge, experiences, and perspectives of a wide range of individuals (Granovetter, 1973, 1983). Weak ties are often characterized as acquaintances or strangers that connect via a jointly known intermediary. While weak ties provide access to novel information they also incur high search costs as ties must work through their intermediaries to find each other (Granovetter, 1973, 1983). However, in Web 2.0 communities, members self-select, based on their interest in a particular product or service, and congregate in a central “location.” The forum itself becomes the intermediary and its search and archive functions greatly reduce the search costs attributed to weak ties. By participating as members within Web 2.0 consumer communities, firms may also take advantage of low-cost connections to a wide range of both current and potential customers.

In the following section we review the literature on strategic resources and capabilities and propose that the ability of firms to leverage relationships with Web 2.0 consumer communities constitutes a strategic capability that provides unique opportunities to take advantage of the knowledge and relationships these communities create.
THEORETICAL DEVELOPMENT

According to the Resource-Based View of the Firm (RBV), firms possess different strategic resources that maybe combined in unique ways to create sustained competitive advantages (Barney, 1991). For a resource to be classified as “strategic” it must be valuable, imperfectly imitable, non-substitutable, rare and non-transferable (Priem and Butler, 2001). In order to be valuable, a resource must be able to improve the firm’s efficiency or effectiveness and its standing in the market. To be imperfectly imitable, the resource must be costly or difficult for competitors to replicate. For it to be considered rare, it may not be possessed simultaneously by many firms. Non-substitutable resources have no “strategic equivalent” that competitors may use implement the firm’s strategies (Barney, 1991). Resources must also not be saleable through markets, in other words, they must be non-transferable (Dierickx and Cool, 1989).

Building on RBV, the Knowledge-Based View of the Firm suggests that knowledge is a uniquely important strategic resource and that “the primary role of firms is in the application of existing knowledge to the production of goods and services” (Grant, 1996: 112). Thus the capability of firms to use the knowledge they possess is also crucial to achieving competitive advantage. Further, KBV suggests that the capability of a firm to gather knowledge (exploration), combine it with existing organizational knowledge, and use it effectively (exploitation) can in turn generate new knowledge resources.

Although Barney’s RBV framework is applicable to both strategic resources and strategic capabilities, many studies that followed differentiate between resources and capabilities (Amit and Schoemaker, 1993; Makadok, 2001; Teece, Pisano and Shuen, 1997). Hoopes et al. explain the difference between the two by suggesting that resources possess value independent of the firm, and thus may be “valued and traded” while capabilities are so embedded within the firm that they are not independently valuable (2003; 890). Thus capabilities, by definition, are non-transferable. More recent studies have also questioned RBV’s completeness and usefulness for explaining inter-firm differences (Priem and Butler, 2001). Alternative explanations, such as Competitive Heterogeneity (Hoopes et al., 2003), suggest that while strategic resources and capabilities are important to creating sustainable advantage, they are not the only sources of performance differences among competing firms. We are not suggesting that a firm’s ability to leverage its relationships with Web 2.0 consumer communities is alone sufficient to create sustainable advantage, but that when bundled with other resources and capabilities, it may provide firms with competitive advantage in today’s highly-interconnected, Web-enabled world.

Leveraging Relationships with Web 2.0 Consumer Communities as a Strategic Capability

As discussed previously, RBV suggests that a strategic capability must be valuable, rare, and costly to imitate or substitute (Barney, 1991, Bollinger and Smith, 2001). In this section we suggest that a firm’s ability to leverage its relationships with Web 2.0 consumer communities meets all of these requirements.

Valuable

In order to be considered strategic, a capability must be valuable, i.e. be able to improve a firm’s relative market position via increases in efficiency or effectiveness (Priem and Butler, 2001). The capability to leverage relationships with Web 2.0 consumer communities improves firm effectiveness by enabling firms to interact directly with consumers and act quickly upon the specific and general knowledge these consumers provide. The specific knowledge found in these communities, such as a customer post about a recent instance of poor service, is often time sensitive. By acting promptly and publicly on this knowledge, a firm may preserve that particular customer’s satisfaction and loyalty and also entice other community members into becoming customers. These consumer communities also possess a highly dynamic set of general knowledge about a firm’s business and industry. A firm that actively participates in these communities can create a first mover advantage and further increase its effectiveness by exploiting this knowledge before its competitors can acquire this information as well.

Leveraging relationships with Web 2.0 consumer communities may also improve firm efficiency. Although engagement in these communities is not cost-free, gathering consumer knowledge of similar quality to that generated in Web 2.0 consumer communities through other means would be much more costly. Firms may also reduce customer services costs by addressing issues through the community were members may search and view their responses. This enables the firm to address the concerns of many members through interactions with a few. Further, leveraging these relationships may also improve efficiency by providing an inexpensive way for a firm to manage its public image and advertise its products and services. Members in these communities are often highly vocal and opinionated about products and services. By responding to consumers’ posts, a firm can mitigate the damage any negative posts could have on its reputation and capitalize on the free advertising members’ positive posts provide.
As a firm’s ability to leverage its relationships Web 2.0 consumer communities improves both effectiveness and efficiency, we propose:

Proposition 1: The ability of a firm to leverage relationships with Web 2.0 consumer communities is a valuable organizational capability.

Imperfectly imitable

A strategic capability must also be imperfectly imitable, i.e., difficult or costly for competitors to replicate. According to Barney (1991), the three main isolating mechanisms that prevent competing firms from imitating a resource or a capability are unique historical conditions, causal ambiguity, and social complexity. Unique historical conditions occur when the acquisition or use of a resource depends on being in the right place at the right time. Causal ambiguity arises when competing organizations are not able to identify linkages between a firm’s resources and its sustained competitive advantage. Socially complex resources are resources that are that the firm has access to but that it cannot manage or influence (Barney, 1991). Although the links between firms’ involvement in these communities and their competitive advantages are not clear or causally ambiguous (Peteraf, 1993), the ability of firms to leverage their relationships with Web 2.0 consumer communities often stem unique historical conditions. For example, for a firm to capitalize upon community knowledge it must often act upon it in a timely manner. Being in the right place at the right time is not just serendipitous - it requires the firm to actively monitor community posts and possess an established reputation that community members view as credible.

The inimitability of this capability also stems from its social complexity. According to Barney, firms may have access to the same basic resources but not all possess the unique “culture, social relations and traditions to exploit [a resource] in implementing strategies” (1991, 110). In other words, competitors find it difficult to imitate a firm’s ability to leverage relationships with Web 2.0 consumer communities because they may not possess the organizational culture that can accept and build upon consumer input or recreate the social relations the focal firm shares with the community. So although this capability is observable by other firms, competitors may not possess the unique combinations of resources needed to imitate it. Based on this capability’s dependence on unique historical conditions and its social complexity we propose:

Proposition 2: The ability of a firm to leverage relationships with Web 2.0 consumer communities is an imperfectly imitable organizational capability.

Non-substitutable

In order to create competitive advantage, a capability should not have any strategic equivalents, which may be “…exploited separately to implement the same strategies” (Barney, 1991, 111). Although competing firms may have alternative capabilities that allow them to gather consumer knowledge and build firm-consumer relationships, they are not necessarily strategically equivalent. For example, a competing firm may possess the capability to collect both specific and general consumer knowledge without engaging Web 2.0 consumer communities. Unfortunately, collecting information through traditional methods, such as interviews, diaries and focus groups, are often time consuming and costly. Even surveys, widely used because of their low cost and efficiency, are frequently biased and thus may not offer an accurate portrayal of consumer knowledge (Lee, Hu and Toh, 2000). Further, each instance of data collection by these methods creates a single, static representation of consumers’ opinions and ideas. By comparison, active Web 2.0 consumer communities offer knowledge that is high quality and dynamic due to the constant monitoring and frequent posts by community participants. The knowledge in these communities may also be inexpensively retrieved through threads and functions that support the searching, categorizing and archiving of content. Further, Web 2.0 consumer community knowledge is less biased than data collected by more traditional methods because the questions asked, and comments provided, are driven by the consumers themselves. Firms may also possess the capability to build relationships with their consumers. However many of these relationships are one sided, as with marketing campaigns or public relations announcements, or merely reactive as is the case traditional customer service call centers. Relationships built between firms and Web 2.0 consumer communities are more proactive and interactive than traditional firm-consumer relationships and thus provide unique opportunities for firms to communicate with their consumers.

But perhaps the biggest different between the capability to leverage Web 2.0 consumer relationships and alternative firm-consumer relationship capabilities is that the former capability harnesses the recursive nature knowledge exploration and exploitation (Grant, 1996). Each time a firm participates as a member in a Web 2.0 consumer community it has the opportunity to act upon consumer knowledge to improve its customers’ satisfaction, build its reputation and strengthen its relationship with consumers. These, in turn, increase the firm’s credibility, attract new customers and generate additional
opportunities for the firm to gather consumer knowledge. Due to the inability of alternative capabilities to exploit strategically equivalent consumer knowledge and relational resources and their inability to create reinforcing effects between these resources we suggest:

**Proposition 3:** The ability of a firm to leverage relationships with Web 2.0 consumer communities is a non-substitutable organizational capability.

**Rare**

To be considered strategic a capability must also be rare, i.e. not possessed by many competition firms (Barney, 1991). The rarity of the ability to leverage relationships with Web 2.0 consumer communities stems largely from competing firms’ inability to recognize the value in Web 2.0 consumer communities and their lack of understanding of network effects. According to Alvarez and Busenitz, some individuals possess “entrepreneurial recognition” which allows them to see value in certain resources. As a result, these individuals are able to turn “creative insights and often homogeneous inputs into heterogeneous outputs” (2001, 761). Similarly, the capability to leverage relationships with Web 2.0 consumer communities is not possessed by many firms, even though these communities are available to all, because many firms lack entrepreneurial recognition of the valuable resources these communities provide.

Another explanation for the rarity of this capability is that many firms fail to fully understand the concept of network effects – a phenomenon whereby a product or service becomes more valuable as more people use it (Song and Walden, 2003). This is not to say however, that the value members derive from a Web 2.0 consumer community is based solely on the sheer number of its participants. The value also depends on the number and quality of interactions among those members. This effect is compounded by the need for communities to attain a critical mass of members in order to become self-sustaining. Communities with the greatest value pull members from less valuable communities until the latter set possesses too few members to sustain themselves. These forces help explain why there is often only a few large Web 2.0 community per interest group. Many firms do not understand these effects and choose to interact with Web 2.0 consumer communities solely through their own forums where they can control and filter consumer posts. But consumers often view censored forums as less valuable, and therefore less attractive, than uncensored, independently hosted communities. As a result, firm-sponsored sites rarely achieve the self-sustaining critical mass or network effects, and thus cannot recreate the resources, of independently hosted communities. Although competing firms may later develop this entrepreneurial recognition and understanding of network effects, first movers enjoy an advantage from their established relationships and reputations with Web 2.0 consumer communities. As maybe seen with Amazon.com and BarnesandNobel.com, later adopters often find this advantage difficult to recreate or overcome. As such we suggest:

**Proposition 4:** The ability of a firm to leverage relationships with Web 2.0 consumer communities is a rare organizational capability.

**Strategic Capability**

As the capability to leverage relationships with Web 2.0 consumer communities is valuable, imperfectly imitable, non-substitutable and rare, we propose that:

**Proposition 5:** The ability of a firm to leverage relationships with Web 2.0 consumer communities is a strategic capability may lead to competitive advantage.

In the following section we illustrate how one firm, Starwood Hotels and Resorts, is creating competitive advantage by leveraging its relationships with Web 2.0 consumer communities.

**STARWOOD HOTELS AND RESORTS**

Starwood Hotels and Resorts is one of the largest hotel chains in the world with over 925 properties and 155,000 employees. Starwood is well recognized for its superior customer service and has won numerous “Freddie Awards,” where travelers pick their favorite frequent travel programs, in a variety of customer satisfaction categories. Starwood’s reputation among frequent travelers can be attributed, in part, to their participation in web 2.0 consumer communities. Starwood uses its self sponsored site, theLobby.com primarily to disseminate corporate information to consumers, though consumer responses are
also posted following a review by Starwood employees. However, Starwood recognizes that such censorship may discourage active dialogues with its customers so it also participates in more informal, private communities like Flyertalk.com.

Flyertalk.com is a self-moderated community of frequent business travelers who share a common interest in the maximizing value of their travel arrangements. The site began as a bulletin board on September 22nd 1995 and has since grown to include more than 200 forums with over 7 million posts and 13 million page views per month. Forum topics range from destination specific information, such as the best “hang out” places and restaurants, to tips for maximizing the mileage rewards to service related kudos and criticisms. Its members are highly active and loyal to the site - most contribute frequently and some even fly to attend community meet-up events called “do”s.

Starwood’s involvement in Flyertalk.com began on Nov 22, 2000 with the introduction of a single employee representative, William Sanders, known on the boards as the Starwood Lurker. The Starwood Lurker interacts with the community as an official Starwood employee but also as a fellow frequent traveler. On the official level, the Lurker patrols the online forums addressing the concerns of community members, assisting them with their problems, correcting misunderstandings and managing the firm’s public image. As an unofficial member the Lurker posts his own views, often acknowledging other members’ problems and expressing his own feelings of helplessness. The Lurker’s unofficial participation allows members to relate to him as fellow traveler and as a consumer advocate, rather than solely as an agent of Starwood Hotels and Resorts. This gives him immense credibility with FlyerTalk.com members and strengthens firm-customer relationships. Since the joining Flyertalk.com, the Starwood Lurker has made over 15,800 posts, for an average of 5.56 posts per day. By participating in Flyertalk.com as a community “member” through the Starwood Lurker, Starwood Hotels gains access to specific knowledge about their hotels and services and to general knowledge regarding the services and products frequent travelers want. The Lurker project has been so successful in boosting customer satisfaction and loyalty that Starwood hired an additional lurker in 2005.

Starwood’s participation in these communities is valuable as it allows Starwood to differential itself from other hotel chains through the relationships it has developed with consumers and the knowledge these relationships provide. According to Starwood, “The information we get from these communities is priceless. We want to know what is on the minds of our guests and how we can serve them better going forward. How better to get that than to listen to what they are saying?” (Q&A with the Starwood Lurker, October 28, 2008, By Jennifer Kovacs available at http://www.hotelworldnetwork.com/social-networking/qa-with-starwood-lurker). Moreover, numerous Flyertalk.com members attribute their initial association with Starwood Hotels to the participation of the Starwood Lurker in the forum (examples may be found at: (http://www.flyertalk.com/forum/communitybuzz/937213-dinner-starwood-lurker.html accessed on 4/15/09). These relationships are also rare, non-substitutable, and inimitable as they are derived from the reputation, history and unique interactions Starwood was able to create through its early involvement with these communities. The Starwood also benefits from its database of many hundreds of frequent high value travelers with whom the Lurker interacts directly. While this tracking of forum members raises some privacy concerns, most Flyertalk.com members are supportive, and appreciative, of the Starwood Lurker’s participation in the forums. Same privileges, however, are not extended to other firms whose participation is often seen with suspicion (e.g. http://www.flyertalk.com/forum/archive/t-815807.html accessed on 4/16/2009).

The inability of other firms to create a sustained presence in this community suggests that competitors are finding it difficult to replicate Starwood’s success. For example, American Airlines introduced its “dealFinder” service on Flyertalk.com under the screen name AA interactive marketing in July 2007 but ended the service soon after.

DISCUSSION

As Web 2.0 communities flourish, firms with the strategic capability to leverage relationships with these communities will enjoy a competitive advantage. Firms that lack this capability or ignore these communities risk alienating both current and potential customers. Below we offer managers some tactics for building relationships with Web 2.0 consumer communities.

First, firms must appreciate the free and open speech Web 2.0 consumer communities provide. Many firms are hesitant to give customers complete freedom in expressing their ideas and opinions. However, firms’ attempts to control or influence member contributions often backfire and do little to discourage negative posts. Belkin, a firm that sells networking supplies, discovered this first hand when it was revealed that an employee of the firm had paid members of the community Mechanical Turk to post positive reviews about its products on Amazon. Although Belkin’s president publically apologized and pulled the paid-for posts, the firm suffered damage to its reputation and credibility with consumers.
Second, firms should view communities as a source of valuable information, not as threats. While the opinions posted on the communities are not always favorable or correct, they may still have an impact a firm’s bottom line. Companies that use their relationships with Web 2.0 consumer communities effectively understand that all posts present an opportunity to better understand consumers and how others view their products and services. When addressed correctly, these posts may lead to better customer service and improved relationships – as Starwood has discovered. When handled poorly, or ignored, they can cause long term damage to the firm’s reputation and image.

Third, firms should seek out, and become members in, independent, self-sustaining communities where majority of their customers interact. Some advantages of these communities are: (1) they offer greater value than smaller and/or firm-sponsored communities and thus continually attract new members; (2) they are self-monitoring, so posts containing incorrect information about the firm are usually moderated and disciplined by the community; (3) they enforce rules of conduct which squelch flammers and encourage constructive discussions that generate valuable knowledge for firms; and (4) they allow firms to direct efforts towards capitalizing on network effects rather trying to recreate these effects in their own sites.

Fourth, firms should engage communities frequently and consistently to take advantage of the available knowledge. For example, engaged firms can limit the damage to their reputations from negative posts. According to Elisabeth Loverso, Director of Product Development at Red Storm Entertainment, “speed and attention is the key…” when dealing with a consumer’s complaint “we’re catching it before it becomes a marketing or PR issue” (Nutt, 2007). Staying engaged allows also firms to gain first mover advantages in capitalizing on consumers’ ideas for product or service improvements.

Lastly, firms should identify and ally with community leaders. Over time Web 2.0 consumer communities create self established leaders by way of their contribution and participation in the community. Firms may strengthen their own reputations with communities by enlisting the support of these leaders. In some cases, alliances with community leaders may be forged by providing these individuals with tools or training that they may use to further enhance their community experience and recognition. Fully disclosing the terms of such alliances to community members protects firm credibility and may encourage more members to become firm representatives.

CONCLUSION

In this paper we extend the literature on online communities and inter-firm performance differences by suggesting that the capability to leverage in Web 2.0 communities is a strategic resource that may be combined with other organizational resources and capabilities to create competitive advantage. We also suggest that this capability allows firms to capitalize on the often overlooked knowledge and relational resources these communities provide. Although we offer some insights into how successful firms have established and leveraged their relationships with Web 2.0 consumer communities, further research into how this capability is created and leads to competitive advantage is needed. It is our hope that this paper will spark further interest in both researchers and practitioners as to how the growing phenomenon of Web 2.0 consumer communities may be harnessed by firms.

REFERENCES