Overview

Recently, noted open innovation author Joel West was preparing to give a speech at the European Academy of Management. According to his February 2008 blog posting (http://blog.openinnovation.net), he reviewed materials from his recently published book, *Open Innovation: Researching a New Paradigm*, and realized that he had inadvertently omitted the use of communities in the open innovation process – a potentially critical tool for innovation practitioners. This paper addresses that gap, developing both theoretical foundations and empirical evidence that communities can provide valuable input into the innovation process. In addition, prescriptive recommendations are presented for any open innovation practitioner who is considering the use of communities.

Definitions

The concept of “open innovation” means different things to different people. Author Hank Chesbrough who coined the term has defined it as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively” (Chesbrough 2006). In 2008 West offered a more concise definition of open innovation: “using the market rather than internal hierarchies to source and commercialize innovations.”

Community also can be defined in different ways by different parties. From the Community 2.0 conference in 2007 in Las Vegas, it is defined as “a group of people who have been brought together, or have brought themselves together, under a common umbrella and who are having a conversation with each other.” The key components of this definition are “group,” “together,” “common umbrella,” and “conversation.” Rarely do companies use an approach that embodies all four components when employing open innovation. Instead, firms typically pursue open innovation via firm-to-firm collaboration, firm-to-university collaboration, and innovation hunts and challenges.

Firm-to-firm collaboration involves companies working directly together or through an intermediary. For example, Procter & Gamble discovered one of its laundry detergents was seeping through its water-soluble film pouch, making the outer cardboard package unattractive to consumers. It turned to NineSigma, a company that links manufacturers facing product development problems with third-party solutions. NineSigma connected P&G with a small, U.K.-based company that had faced and solved similar leakage issues, and the two then collaborated to address P&G’s problem.

Some companies utilize firm-to-university collaboration, as in the case of Microsoft partnering with The University of Wisconsin to open an advanced development laboratory designed to undertake the next generation of database research.

Innovation hunts and challenges such as those put forward by Innocentive, a company that connects solution seekers and problem solvers, are an increasingly popular means by which companies garner new knowledge and ideas from the outside. Typically, individuals become part of a firm’s
network of potential problem solvers. The company then posts strategic problems for members to address, and rewards them for their solutions.

Only a few companies have pursued the use of community as an input into the open innovation processes. One such company is Threadless, whose community members submit t-shirt designs online, vote on them, and the winners then move into production. And community veteran Lego has long seen its community of enthusiasts as a source of innovation, allowing members to create, share, and purchase their own unique products.

The Case for Collaborative Communities

Humans are social animals. There is an inherent tendency to group together and communicate, and advances in technology have enhanced the ability for humans to form virtual social networks on a global basis, linked by common interests.

So given the facts that humans naturally want to work together and that communities can provide innovative fuel, why are they not utilized to a greater extent?

Some might argue that communities, particularly those composed of customer or consumer membership, are not a prolific source of truly innovative ideas. Instead, they tend to offer incremental improvements at best and mundane ideas at worst. However, a study conducted with nearly 200 respondents from four different consumer communities with a combined total membership of just over 500 shows that nearly 40% offer suggestions that solve urgent problems, and 15% of those suggestions are considered to be a completely new product (Franke & Shah 2003).

Another argument against the use of community as a source for open innovation is that companies may believe that their current innovation processes are already successful. Yet the Product Development and Management Association (PDMA) in their longitudinal benchmarking study released in 2004 shows the percent of ideas generated that are subsequently viewed as commercial successes tends to be in the mid-teens. This trend has been fairly stable for the recent past, indicating that new open innovation sources might be appropriate even for organizations that consider their innovation processes successful.

Some companies perceive community as an unreliable innovation source, that members offer ideas that are neither actionable nor relevant. However, a 2005 study conducted by Callahan, Ishmael, and Namiranian proves communities whose members receive the appropriate tools and direction will generate ideas that are statistically more original, more relevant, and more diverse than communities that are given free reign.

And finally, some firms rely on research to bring the voice of the customer into the innovation process. However, a counter-argument might be made that successful product can be developed, evaluated, and commercialized most effectively when both open innovation processes and marketing research processes are combined within the same product development domain. The use of research alone overlooks a critical difference between open innovation and marketing research. The purpose of marketing research is to provide feedback on already conceived ideas, a task that is primarily judgmental in nature. A key objective of open innovation, however, is to gather new ideas and new ways of doing things, to bring fresh perspectives on issues that haven’t been considered previously; by nature, it is not evaluative. Additionally, research focus groups and surveys do not provide an environment...
that inherently promotes collaboration, an activity which is cornerstone of both open innovation and community.

**Prescriptive Recommendations**

From this assessment, six prescriptive recommendations are presented for practitioners of open innovation as well as for those who are currently utilizing communities and are seeking input on best practices for their management.

1. The first recommendation is to start with a clear purpose in mind—literally articulate and document the connection between the company's open innovation goals and the use of community. Then share that articulation with key stakeholders and decision-makers. Although this sounds extremely basic, the lack of synergy derails the success of many community-innovation efforts.

2. The second recommendation is to determine who should comprise the community. All-inclusive is not an approach that works well; just because a person volunteers to become a member doesn’t mean that person will be a successful contributor. Identify the characteristics, behaviors, attitudes, and interests of the “ideal” member, and then create a profile or persona to guide recruiting efforts.

3. The third recommendation is to communicate parameters and the end goal clearly and appropriately to the community members. Innovation flourishes in a clearly defined environment, one in which community members can work together toward a common goal rather than wander aimlessly by themselves. Regardless of how innovative the members are, in order for them to offer creative, actionable contributions, they must understand the goals and what they have to work with.

Many firms make the mistake of leaving the playing field wide open, believing the more freedom a community has the better. In a recent study conducted with the Imaginators®, Decision Analyst’s innovation community, approximately 40 community members in the European Union were brought together to collaborate on ideas for a new confection. The group was divided into a “non-directed creativity” group and a “directed creativity” group, with random members assigned to each group. The non-directed group was given free reign to create whatever ideas they wished, while the directed group was provided specific goals and relevant tools.

The effectiveness of each approach was evaluated from the perspectives of the number of distinct ideas generated, the number of categories into which the ideas fell, the relevance of the ideas in addressing the community’s task, and the originality of the ideas. As shown in the following table (Callahan et al., 2005), the group that received specific goals and parameters to work within performed significantly better across all evaluative categories than the group that did not.

<table>
<thead>
<tr>
<th></th>
<th>Ideas</th>
<th>Categories</th>
<th>Relevance</th>
<th>Originality Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Directed</td>
<td>512</td>
<td>29</td>
<td>92%</td>
<td>1.515</td>
</tr>
<tr>
<td>Directed</td>
<td>696</td>
<td>39</td>
<td>99%</td>
<td>1.585</td>
</tr>
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</table>
4. The fourth recommendation is to create the right environment for community members – one of open collaboration rather than of competition. The purpose of collaboration is to share ideas and build on the efforts of other members, but in competitive environments that cooperative spirit can be extinguished. Franke and Shah (2003) found that innovators who believe that their ideas might be stolen or utilized by others systematically reduced their disclosure of ideas in open forums, thus reducing the likelihood of successful collaboration. Thus, competitive environments similar to those found in many hunts and challenges tend to operate at the level of the best idea of a single individual, rather than the collaborative power of multiple individuals. The competitive environment is bound by the power of one rather than the power of many. One way to foster this collaboration is to encourage members to share high-level, conceptual ideas rather than detailed, requirement-level ones. The more tangible an idea grows, the more vested in that idea a member can become.

5. The fifth recommendation is to motivate community members in meaningful ways. Franke and Shah (2003) found the most important motivator to community members was an inherent interest in helping others. The least important motivator was financial compensation, indicating that money was not a driving force in the four communities that Franke and Shah examined. This is shown in the following table:

<table>
<thead>
<tr>
<th>Community Member Motivation</th>
<th>Agree</th>
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<tbody>
<tr>
<td>Community members should assist others</td>
<td>92.6%</td>
</tr>
<tr>
<td>It is fun to create something jointly</td>
<td>78.6%</td>
</tr>
<tr>
<td>It is the norm for members to collaborate for free</td>
<td>74.1%</td>
</tr>
<tr>
<td>If I collaborate, others will collaborate with me</td>
<td>35.7%</td>
</tr>
<tr>
<td>I enjoy giving advice as an expert</td>
<td>32.0%</td>
</tr>
<tr>
<td>I want to use the product myself</td>
<td>40.7%</td>
</tr>
<tr>
<td>It is nice to receive recognition</td>
<td>10.7%</td>
</tr>
<tr>
<td>I was paid well for my assistance</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

In a similar study conducted with a randomly selected subset of the Imaginators® community (Ishmael 2009) the following results were observed:

<table>
<thead>
<tr>
<th>Imaginators® Motivation</th>
<th>Mention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlet for creativity and innovativeness</td>
<td>46%</td>
</tr>
</tbody>
</table>

6. The sixth recommendation is to maintain the quality of the community. It’s not unusual for an organization to eagerly embrace a new initiative or program, only to have enthusiasm wane over time. Communities also can exhibit a similar pattern of behavior. There are four steps involved in maintaining the quality and productivity of a community.

First, ensure members have everything they need to be valuable contributors. This could involve providing special training or access to specific information and capabilities. Unless members have these things the will become frustrated and eventually will leave.

Next, assess each member’s contributions to the community over time. If possible after each community activity or task keep track of who contributes and to what degree.

Don’t hesitate to remove nonproductive members from the community. This helps establish a standard of performance that engaged members naturally will strive to meet. This should be done subtly so no member feels disgruntled or disappointed. Members can be given a “vacation” providing new members with the opportunity to participate in projects.

Finally, keep the community busy. If members truly reflect the profile or persona mentioned early, they will want the opportunity to remain engaged and interact with each other. Additionally, keeping them busy ensures their abilities and willingness to participate remain high.

Conclusions and Summary

Often firms are unsure of where to start when it comes to creating an open innovation community, particularly when it comes to determining the amount of time and resources to invest. However, because there is a broad spectrum of open innovation communities, companies have a variety of options. At one end of the spectrum are turnkey, off-
the-shelf communities that companies can secure as their use of community in open innovation evolves and grows. At the other end of the spectrum are internally developed and managed communities. These typically require revolutionary changes in the way firms manage their databases and the way they interact with customers. In the middle, drawing from both ends of the spectrum, are custom innovation communities that provide an easy-to-execute community for firms, while requiring less effort to build and manage than internally developed communities. This can be seen in the following figure.

Finally, three conclusions to draw from this paper are as follows:

First, a directed, collaborative community can be a valuable source for open innovation.

Second, there are a set of six simple steps that can help the open innovation practitioner successfully implement and manage communities.

Third, organizations can approach the use of communities from an evolutionary perspective or from a revolutionary perspective, depending on their appetites for investment.

References