

Open Innovation via Web-Based Intermediaries

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Extant research on Open Innovation (OI) reflects the importance given to how established firms shift towards the new paradigm of OI in order to enhance innovation. OI, by definition, is a game for two, at least: One firm that seeks to acquire knowledge, and a pairing party that supplies the knowledge.

Today, there are several web sites acting as OI intermediaries, the most known are listed in table 1. The core service of these sites is to provide virtual space for solution seekers and solution providers to meet and exchange knowledge. WBIs, among others, offer web space to list technologies for sale or purchase, contest-like challenge requests featuring winning awards for the solution providers, and challenges for common societal good. Moreover large firms operate and maintain their own open innovation sites as ideas submission sites, see for example www.pgconnectdevelop.com of Procter & Gamble or www.innovatewithkraft.com of Kraft.

OI through WBIs is one particular setting featuring open and worldwide access to any potential actor. Based on secondary data available on WBIs web pages, the status, roles and motives of solution seekers and solution providers are presented in the next sections.



WBIs
www.yet2.com
www.ninesigma.com
www.innocentive.com
www.ideaconnection.com
www.yourencore.com

Table 1. Limited list of web-based OI intermediaries (Data presented in the main text are from mentioned web sites available online as of March 2010).

Solution seekers

According to an online benchmark survey (December 2008 - January 2009) undertaken by Ninesigma.com among companies that have embraced OI practices, half of the surveyed firms believe that they are operating at the early stages of adoption of OI and about 40% at an optimizing stage. Half of the optimizing status firms report revenues in excess of \$10 billion per year while the majority of firms with less than \$10 billion belong to the early stages group. Reported use of intermediaries and the top three OI practices among these two groups is presented in table 2.

The main current focus of OI practices for all companies is new product development. Companies value external partnerships as very important while more increased influence of external partnerships is projected for the next five years. Accordingly, the percentage of new products with elements originating outside the company shows a steady increase for the years ahead. Among all the companies the top three outcomes of OI practices reported are:

- Increase in the richness of their technology portfolio (77%)
- Ability to find non-core competencies (66.7%)
- Increased R&D productivity (58.3%)

Responses on an open-ended question about other benefits due to OI experience fell within the categories:

- Shift in mindset or culture
- New connections made
- Improved reputation
- Faster time to market
- A tool to cause better internal alignment

Optimizing Companies Early stages companies

Stage of OI adoption 40% 49%

Use of OI intermediaries 64% 35%

Top three OI practices Scouting (92%),

Supplier co-innovation (82%), University co-innovation (80%) Supplier co-innovation (77%), University co-innovation (69%), Scouting (65%)

	Optimizing Companies	Early stages companies
Stage of OI adoption	40%	49%
Use of OI intermediaries	64%	35%
Top three OI practices	Scouting (92%), Supplier co-innovation (82%), University co-innovation (80%)	Supplier co-innovation (77%), University co-innovation (69%), Scouting (65%)

Table 2. Excerpt of ninesigma.com benchmark survey results.

Further, solution seekers find WBIs to be a useful platform to facilitate OI practices and support the process of transforming business models to more open configurations. The following excerpts from yet.com are indicative.

"yet2.com will change my business model. We will use this access to the world of available technology to bring new products to market."

Joseph A. Miller, Chief Science & Technology Officer, DuPont

"The current technology transfer process is seriously limited by the difficulty licensors and licensees have in identifying one another. In addition, providers must incur significant expense and time determining deal-making potential. yet2.com overcomes these barriers."

Theo Grigoriou, President, AlliedSignal Technologies, Inc.

Solution providers

Many of the solution seeking companies also act as solution providers. The following company comment in yet2.com site is representative.

"SAIC currently leverages technologies created in one field to solve problems or develop commercial opportunities in another. We look forward to accessing yet2.com both as a provider and purchaser of technology."

Joseph Daniele, senior vice president, Intellectual Property and Technology Commercialization at SAIC

But there are also individual inventors and small-medium firms who engage in OI to exploit their technologies and inventions. Yet2.com for example asserts that its client base consists of about half the Global 1000 firms, along with hundreds of small-to-medium enterprises. About 120.000 individuals involved with OI visit its global marketplace website annually in search of new technologies.

Moreover we find web pages devoted to individuals "winners of the year" exhibiting their expertise background and qualifications with some small interviews posted as well. In some cases there is even more active participation by inventors who participate in associated blogs. The majority of these exhibited solution providers are individuals with high qualifications (PhDs and MScs) or small scientific firms and research labs. Interesting for example is the fact that in innocente.com solvers represent 175 countries across the globe.

Some solvers' quotes from ninesigma.com are indicative.

"NineSigma provides us a great opportunity to present our innovations to Global 1000 companies and work with them to solve their technology challenges. The Request process provides a unique opportunity to engage companies based on their specific R&D directions. These are timely connections that are very difficult to form otherwise. We have come to rely on NineSigma as a valuable channel for new opportunities that we otherwise would not have known about."

Jon Dettling, North American Director for Ecoinetsys, a Swiss-based environmental life-cycle assessment provider

"The obvious benefit of working with NineSigma is that we got a substantial contract. (\$1.8M USD, initial stage contract with a Fortune 50 NineSigma client). We also received a contract to do some development work to drive the technology forward... we anticipate that we will work with this client through two additional stages to get to manufacturing."

Alexander Gosling, Director, Invetech Pty Ltd., Australia

Also interesting are the following quotes from an interview with Dr. Lakhani, Professor at Harvard Business School, who follows the growth of innocente.com and studies the effectiveness of the problem solving process. We also found that InnoCentive solvers were motivated as much by intrinsic motivation factors (learning, joy of problem solving, intellectual challenge etc) as they were by winning the award money... In our survey we asked the Solvers if the problem they created a solution for [was] inside their field of expertise, at the boundary of their field of expertise or outside their field of expertise. The regression results showed that the further the Solvers rated the problem was from their own field of expertise the more likely they were to have solved the problem!...

Epilogue

Open Innovation via WBIs could be visualized as a vast storefront of opportunities for knowledge exchange for all types of players. Solution seekers actively open up their innovation process to tap external knowledge within a virtual space that serves as "incubator" for OI processes. This initial period gives the safe space to companies until they get enough confident and can justify the investment to maintain their own portal of open innovation. Solution providers, especially small companies or individuals coming from isolated or lagging economies, can find their way to collaborate with pioneer firms and serve demanding and intensive markets.

Reference

The article is adapted from Mantas, V. and Soderquist, K.E. (2010), "Open Innovation: Activating the Entrepreneurial Mindset", 5th European Conference in Entrepreneurship and Innovation, September 2010, Athens, Greece.