

# Crowd Sourcing

## Open Innovation

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**Abstract** – In a few pages this paper uncovers Open Innovation and specifically the term Crowd Sourcing. The concept of lead users and the term Crowd Sourcing is shortly described followed by examples of organizations that are involved with facilitating Crowd Sourcing.

### 1 INTRODUCTION

Open and customer centered innovation is about the idea of sharing some of your innovation process with the "public" e.g. end-users, customers, fans and interest groups, to gain input and ideas for innovative new solutions.

Lead users utilizes products or solutions that are not yet available in the broad market place, they are often starting trends with their own applications or product modifications before there are any commercial products available, (Hippel, E. v., 2005). The lead users have unique insight in the future of the relevant product/market areas and are capable of spotting the new trends of the industry.

Two major challenges come to mind when considering how to utilize lead users in the innovation processes:

- How can we find such relevant and skillful lead users for our particular industry?
- What can we do to encourage and motivate lead users to share their inventions with us?

Crowd-Sourcing can allow the innovation teams to in-source competences from an innovation network on a peer need basis. This is done by making an open call for a solution to a problem or for idea generation, design, improvements etc. and the network bids in with possible ideas and solutions. This means that pretty much every part of an innovation development can be shifted to the solvers of the crowds outside of the company.

The following is examples of possible starting points for Crowd-Sourcing and places to find open network resources, more details are available in section 2.

InnoCentive - <http://www.innocentive.com/>

NineSigma - <http://www.ninesigma.com/>

YourEncore - <http://www.yourencore.com/>

Yet2.com - <http://www.yet2.com/app/about/about>

CrowdSpirit.com - <http://www.crowdsprit.com>

This paper is structures as follows:

Section 2 elaborates on the field of Open Innovation with focus on the possibilities of Lead Users and Crowd Sourcing.

### 2 OPEN INNOVATION

Open innovation is about the idea of sharing some of your innovation process with the "public" e.g. end-users, customers, fans and interest groups.

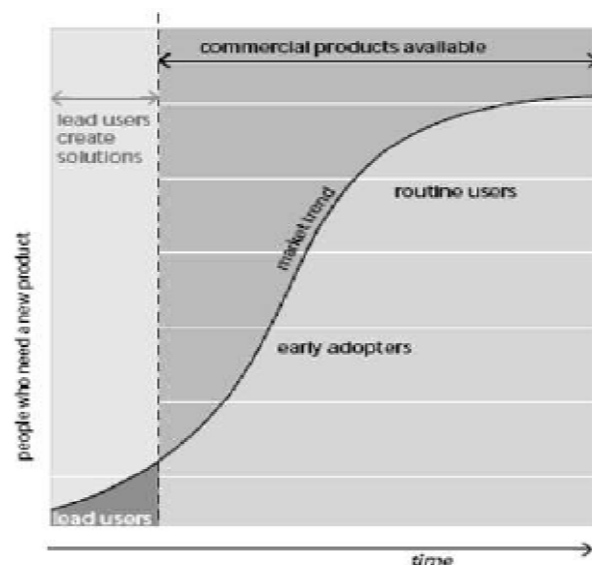
#### 2.1 Lead Users

Hippel, E. v. (1986) puts forward the concept of adopting applications and prototypes already developed by lead users, defining lead users as:

- Lead users face needs that will be general in a marketplace – but face them months or years before the bulk of that marketplace encounters them, and
- Lead users are positioned to benefit significantly by obtaining a solution to those needs.

The lead users are utilizing products or solutions that are not yet available in the broad market place.

A generic market trend is illustrated by a curve below, the lead users can be seen to be ahead of the early adaptors, starting the trend with own applications or product modifications before there are any commercial products available (Hippel, E. v., 2005).



Often these types of lead users autonomously

innovates new products and processes, typically because they can gain utility for themselves with the new product or process, (Harhoff, D.;Henkel, J.; & Hippel, E. v.; 2003). The lead users have unique insight in the future of the relevant product/market area and are capable of spotting the new trends of the industry.

## 2.2 Crowd-Sourcing

The Concept of Crowd-Sourcing is best defined by Howe, J. (2006):

*"...the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call. This can take the form of peer-production (when the job is performed collaboratively), but is also often undertaken by sole individuals."*

Using Crowd-Sourcing allows the company to in-source competences from an innovation network on a peer need basis. Such company makes an open call for a solution to a problem or for idea generation, design, improvements etc. and the network bids in with possible ideas and solutions. This means that pretty much everything beside the problems specification can be shifted to the solvers of the crowds outside of the company.

Compared to open innovation and especially the world of Open Source Software development, Crowd Sourcing is a more formalized and closed network type. Crowd-Sourcing can help companies avoid the time consuming task of finding users and customers for participating in user/customer centered innovation.

The following is examples of possible starting points for Crowd-Sourcing and places to find open network resources.

### InnoCentive - <http://www.innocentive.com/>

InnoCentive is brokers of solutions to more narrowly defined scientific problems. InnoCentive have access to 160,000 contract scientists that can help solve technical issues of new developments. About a third of the problems posted through InnoCentive by Procter & Gamble have been solved, (Huston, L. & Sakkab, N., 2006).

### NineSigma - <http://www.ninesigma.com/>

NineSigma is a connecting company that has science and technology problems as a specialty and they are networked with companies, universities, government, private labs, and consultants that can develop solutions. If a company has a problem they would like help to solve or develop they can contact NineSigma, who will help describing the problem and feeding it into their network. Proposals from the network are feedback to the company and if it is to their likings NineSigma will connect the company with the solver of

the problem.

### YourEncore - <http://www.youencore.com/>

YourEncore was founded in 2003 and it connects with high-performing retired scientists and engineers from different companies. YourEncore can connect companies to people with deep experience and new ways of thinking from other organizations and industries. Through YourEncore, the company can contract with a retiree who has relevant experience for a specific assignment. This is a powerful model because companies can experiment in out-of-box areas at low costs and with little risk.

### Yet2.com - <http://www.yet2.com/app/about/about>

Yet2.com is an online marketplace for intellectual property exchange. Yet2.com works a broker of technology transfer both into and out of companies, universities, and government labs. Yet2.com helps clients to describing the technology that they're seeking or making available for license or purchase, and distributes these briefs throughout a global network of businesses, labs, and institutions. The results can be that a company could license out their technology to applications in some other industries out of the way of their own core businesses.

### CrowdSpirit.com - <http://www.crowdsprit.com>

The CrowdSpirit proposes a Crowd Sourcing model that enables businesses to involve innovators from outside the company directly in the design of innovative products and services. This is approached by a simple 3 step process:

- Participants submit ideas in response to a challenge set by a company.
- Selected participants are invited to join the project team jointly developing the idea with the company.
- The participant have the privilege of being the first to use this innovative new product/service.

## REFERENCES

- [1] Hippel, E. v. and Katz, R. (2002), "Shifting Innovation to Users via Toolkits", Management Science Vol. 48, No. 7, July 2002, pp. 821-833.
- [2] Hippel, E. v. (1986), "Lead users: A source of novel product concepts", Management Science, vol. 32, no. 7, pp. 791-805.
- [3] Hippel, E. v. (2005), "Democratizing Innovation" MIT Press (April).
- [4] Harhoff, D., Henkel, J., & Hippel, E. v. (2003), "Profiting from voluntary information spillovers: how users benefit by freely revealing their innovations", Research Policy, vol. 32, no. 10.
- [5] Huston, L. & Sakkab, N., (2006), "Connect and Develop: Inside Procter & Gamble's New Model for Innovation", Harvard Business Review, March 2006.
- [6] Howe, J. (2006), "The rise of crowd sourcing", Wired, vol. 14, no. 6, pp. 176-183.