

Introduction to Open Innovation

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From WIKIPEDIA: Although the idea and discussion about some consequences (especially the interfirm cooperation in R&D) date back at least to the 60s, **Open Innovation** is a term promoted by Henry Chesbrough, a professor and executive director at the Center for Open Innovation at the University of California, Berkeley, in his book 'Open Innovation: The new imperative for creating and profiting from technology.' The concept is related to user innovation, cumulative innovation, Know-How Trading, mass innovation and distributed innovation.

"Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology. The boundaries between a firm and its environment have become more permeable; innovations can easily transfer inward and outward. The central idea behind Open Innovation is that in a world of widely distributed knowledge, companies cannot afford to rely entirely on their own research, but should instead buy or license processes or inventions (i.e. patents) from other companies. In addition, internal inventions not being used in a firm's business should be taken outside the company (e.g., through licensing, joint ventures, spin-offs).

Closed Innovation versus Open Innovation

The paradigm of Closed Innovation says that successful innovation requires control. A company should control (the generation of) their own ideas, as well as production, marketing, distribution, servicing, financing, and supporting. The main cause behind this idea is that, at the beginning of the twentieth century, universities and government were not involved in the commercial application of science. Some companies therefore decided to do it all on their own. They created their own research and development (R&D) departments to be able to control the whole new product development (NPD) cycle inside the company. There just was not the time to wait for the scientific community to become more involved in the practical application of science. There also was not enough time to wait for other companies to start producing some of the components that were required in their final product. These companies became relatively self-sufficient 'castles', with little communication directed outwards to other companies or universities. Think a moment about the famous Formula 1 driver Ayrton Senna: *When you have everything under control you're not driving fast enough.*

Throughout the years several factors emerged that paved the way for Open Innovation paradigms:

- The increasing availability and mobility of skilled workers
- The growth of the venture capital market
- External options for ideas sitting on the shelf
- The increasing capability of external suppliers

These four factors have resulted in a new market for knowledge. Knowledge is no longer proprietary to the company. It resides in employees, suppliers, customers, competitors, and universities. If companies do not use the knowledge they have inside, someone else will. Innovation can be generated either by means of Closed Innovation or by Open Innovation paradigms. There is an ongoing debate on which of both paradigms will dominate in the future.

I believe in being open minded, and crucial is whether a company can accept that *“The innovation point is the pivotal moment when talented and motivated people seek the opportunity to act on their ideas and dreams.”* (W. Arthur Porter)

Innovative companies

The most innovative companies understand the rewards of Open Innovation principles and realize the following:

- A more robust product pipeline
- Accelerated speed to market
- Significant cost savings
- Access to global innovators across industries and technical disciplines
- Innovation sustainability
- Risk reduction

Innovative companies are also aware that there is no statistical relationship between R&D spending and *Sales Growth, Gross Profit Growth, Operating Profit Growth, Operating Margin, Net Profit Growth, Net Margin, Market Cap Growth and Total Shareholder Return* (based on 10,000 analyses by Booz Allen, *Global Innovation 1000, 2006*).

Steve Jobs, CEO of Apple, said: “Innovation has nothing to do with how many R&D dollars you have.” When Apple came up with the Mac, IBM was spending at least 100 times more on R&D. It's not about money. It's about the people you have, how you're led, and how much you get it.

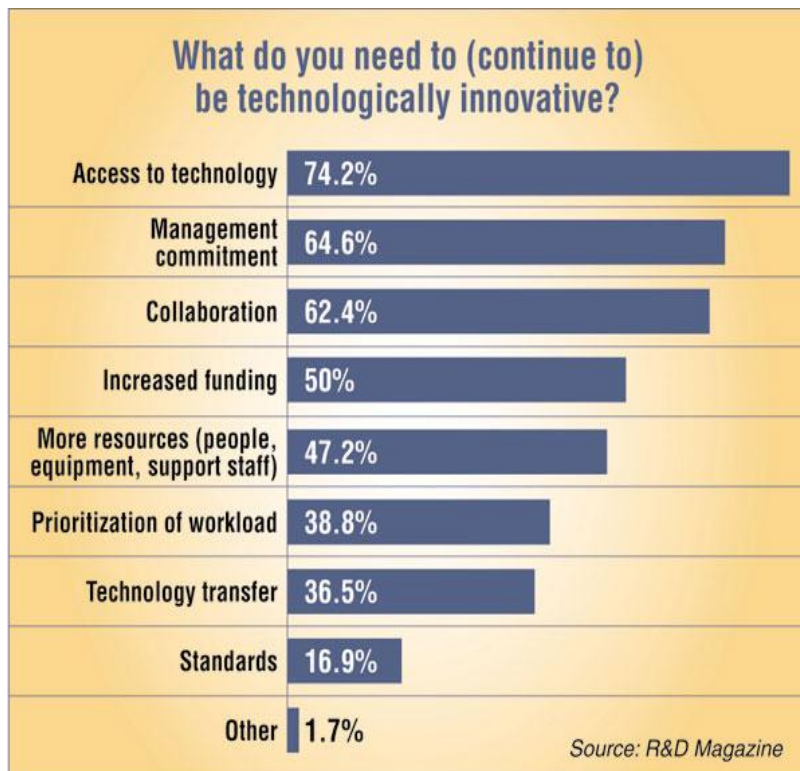
Reasons for appointing an Open Innovation consultant

1. The innovation marketplace isn't much of a marketplace as it is:

- Highly disaggregated due to the global dispersion of innovation resources
- The most valuable connections are hidden:
 - Cutting edge knowledge not in public domain
 - Tacit knowledge
 - Need for “translation” of needs

2. You may need help because of lack of transparency, information sensitivity, IP protection, and barriers created by management.

3. R&D staff often don't know how or don't have the authority to look beyond their own network, whereas R&D leaders know that access to technology is the main driver in being technologically innovative (see graph below):



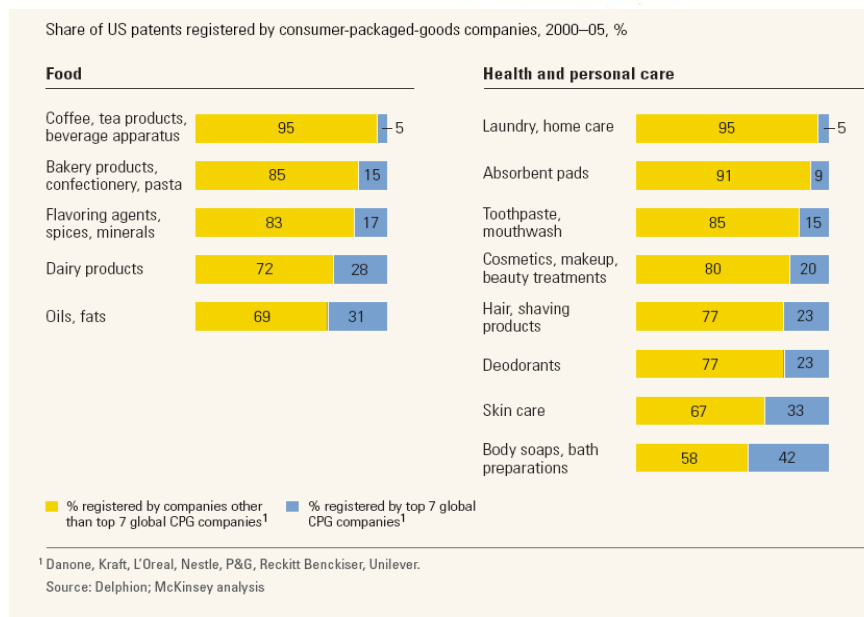
Source: Tim Studt, R&D Magazine, February 2005

4. An innovation consultant can act as an intermediary between the different internal disciplines and the outside world. The consultant can also help salespeople to formulate the right questions colleagues would like to know about products, services, customer behavior, etcetera. A consultant can also determine in which phase the company is. Should they consider crowd sourcing already or start with crowd watching?

I believe he should be capable of closing the gaps between sales, marketing, R&D, production and other relevant departments and make everybody understand that your dog's love, friendship and loyalty does not require coupons. He is more interested in food ... good food (a statement inspired by George T. Hewitt).

Can you imagine what needs to be done when a multinational like Proctor & Gamble decides to expand overall sales by 10%? In 2010 P&G sales were almost USD 80,000 million, so do the math. P&G, as an example, already decided that 50% of new ideas have to come from the outside, so instead of the 'not invented here' syndrome, they have adapted the attitude 'proudly found elsewhere'.

Like most multinationals P&G understands that not all the smart people are working for their company. Not all the desired innovation is done by a single multinational. Take a close look at the following illustration regarding patent applications and your conclusion should be that most innovation is probably effected *outside* multinationals. Knowledge is dispersed and the most interesting knowledge may not even be disclosed through patents – it's simply behind the eyes and between the ears of people everywhere and anywhere.



Proper Open Innovation is geared to obtaining tacit knowledge and applying it accordingly. In order to do this you need to make appropriate changes to your business model. This is far more important than getting a product to market first.

Example: Apple was not the first company to market an MP3 player, but they have gained considerable market share because of their design and their internet platform.

When you are considering becoming successful with Open Innovation be aware that you first need to learn how to crawl before you can walk, let alone run. How good are you in managing internal relations? When you are 'very good' at internal relations it's time to ask yourself how good you are in managing *external* relations, as Open Innovation has a lot to do with this subject.

Instead of talking about all the wonders and magic of Open Innovation it may help you to understand the principles faster by writing a little about myths:

Myths about Open Innovation

You only need a computer and access to internet

It is probably true that these days everybody with a little common sense has access to internet. But how are you going to reach the person or organization that has the solution for your innovation challenge? We all know that it doesn't make sense to advertize dog food in a magazine for professional bicycle shops. Would you as a professional company like to be accused of spamming? How about your competitor knowing that you are looking for a certain technology?

Assuming solution providers will know how to find your website is wishful thinking: there are about 24 billion websites worldwide. But also the most valuable connections are less than obvious.

You need to know what your challenge/opportunity is. The next step is to ascertain which instruments you can use to solve it. Add and weigh criteria in order to make a reasoned decision. When your decision is that Open Innovation is the obvious choice, it's time to appoint a consultant.

Everybody understands your problem

Most companies have their own professional language and abbreviations. Do *you* know what C.I.P. stands for? When you reach out over the internet then it would be nice when people understand what you're talking about. Ask yourself whether the solution provider should be, for example, Dutch – then you might want to target the Dutch market *in Dutch*. Or simply accept that you can reach far more people using English. And how about exploring Chinese creativity? When you write down the innovation opportunity in generic language, experts from other professional disciplines may understand what you are looking for. Write it to the point, avoiding undesired responses. Better to have 10 great ideas than a thousand mediocre or useless responses, which you still need to respond to expressing appreciation. (An important note here: just as many companies seem to be unaware of the PR effect of ignoring job applicants, so too you will be shooting yourself in the foot if you do not respond to all suggestions and input you receive.) An expert can help with interpreting and evaluating the solutions.

The whole world wants to solve your innovation challenge

Be realistic and help your potential helpers to digest your information. So when you explain your challenge in 20 pages and expect somebody that you don't know to read it all, please ask yourself on which planet you're living.

Besides being concise and clear, use visuals and a compelling tagline – like: “Do you want to be a millionaire this summer?” *That* will increase your chances of getting the attention you require.

Open Innovation is free!

Let's agree that people with considerable know-how are probably already employed. Do you believe that their employer agrees to dedicate valuable resources to another company for free? Open Innovation is serious business, so you have to determine what the value of an innovation is to you. Moreover, you should make it clear at the outset. When there is serious money involved, ask your colleagues if they really want to depend on solutions inside the company. Wouldn't it be better to do both – inside *and* outside the company? It's also essential to ask yourself what you're going to do once you get the appropriate response. Do you have budget, organization and other resources to implement the possibilities? Have you ever thought about patent issues? How do you negotiate with a good solution provider?

Open Innovation: “Not for me!”

Assume you are a celebrity. You may motivate the crowd to support you and with the help of other media like YouTube and tv there's a reasonable expectation that you're going to be successful.

When you are a highly visible multinational the crowd could also be interested in interacting with you. A good example is Lego or what Fiat did with the revival of their 500 model. It also helps when there's a financial reward involved.

However, when you're a committed pet food producer, the crowd is simply not interested in making you rich. There are opportunities with rescuing stray dogs in Africa, but you can hardly call *that* innovative.

Do's

Realize as an organization who and what you are and where you want to go. Do you want to reach out to as many people as possible or are you looking for some very specific know-how?

Be assured that there are more solutions than you can imagine, also from other disciplines. Ask yourself questions like: “How would nature solve this?”

And how do you know that your solution is the best one or has the winning design?
Learning to trust seems to be part of the program for Open Innovation!

Allow for failure and ensure there's budget for failure, too. It has incredible value when you know what does not work.

You probably know the old story of the journalist who questioned Thomas Edison about the 5000 failures he'd had on his way to creating the filament electric light-bulb. "Failures? Absolute not. I now know 5000 ways how NOT to make a light-bulb!"

Some companies may provide you with a part of what you need. Stay open for other sources to complement the missing part.

Teach your sales force to ask the right questions. The answers may provide very valuable information about your products and other opportunities.

Help young employees by asking questions to translate their observations into business issues.

As William Pollard once stated: *"Learning and innovation go hand in hand. The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow."*