

# Open innovation study by WU Vienna

## Executive Summary

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### 1. Introduction

The open innovation approach can be considered as an antithesis to the traditional, vertical integrated model of R&D where products are only internally developed and sold by one single company. Companies open up their own innovation processes and integrate knowledge from external stakeholders like customers, lead users or competitors. This is called the outside-in process (inbound open innovation). On the other hand, companies try to externalize knowledge (innovations, products, licenses) which is currently not used. This is called the inside-out process (outbound open innovation).

#### Increased awareness for open innovation

Socio-economic trends like the growing collaboration between firms and customers are the foundation of the new, so-called paradigm in innovation management. More and more companies apply these methods also in their own innovation process. This process of adoption has started with some early adopting companies in high-tech industries, but it is recently also explored in low- and medium-tech industries. As innovation is not restricted to product innovation, but also includes process and business innovation, open innovation is also increasingly used in the service sector.

### 2. The Study

The study examines the current status of open innovation in Europe, independently from any industry, country or company size. Data collection took place between February and June 2009. In total 1018 companies (including Top 500 companies in Europe) in 24 European countries were contacted. The response rate was 23%. Key Informants were mostly C-Level Executives or (in case of larger companies) usually Head of Innovation and R&D director. (see figure 1) The sample is very diverse regarding industry and also company size: 30% have less than 100 employees, 32% between 101 and 5000, and 38% have more than 5000 employees. No biases were found in the sample.

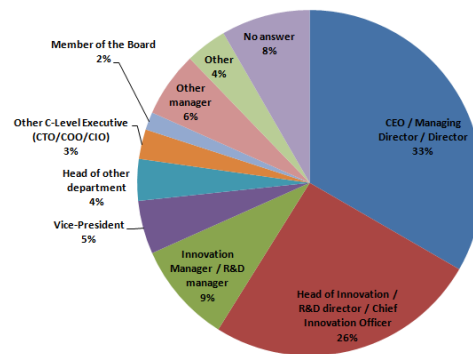


Figure 1: Sample Descriptive - Key Informants

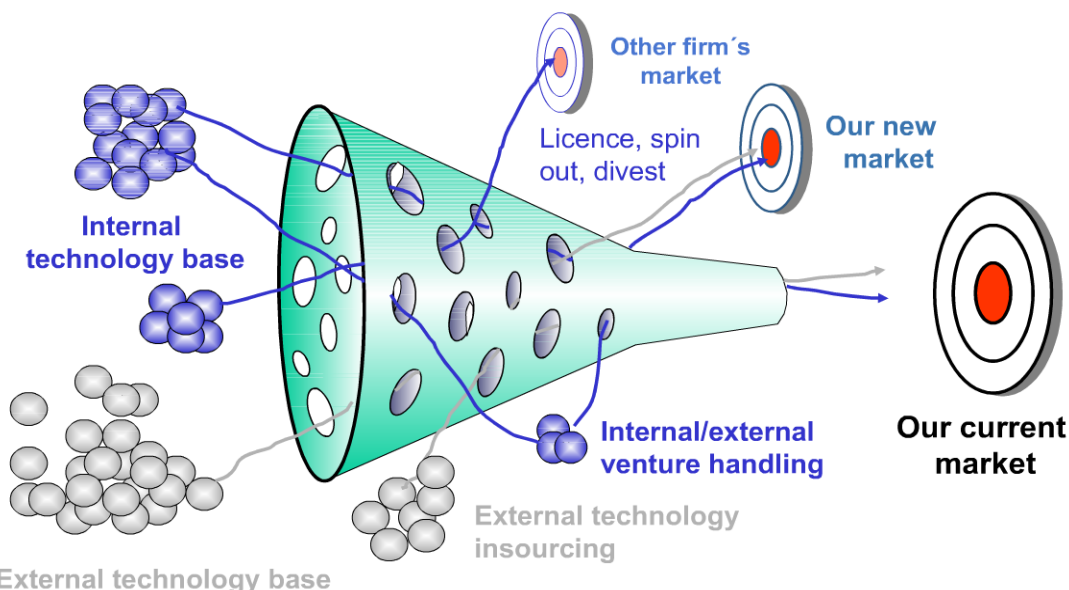


Figure 2: Open innovation concept (Source: Chesbrough, 2006)

### 3. Key Findings

The study finds that already 30.3% of the companies are already using open innovation to a large degree. These companies are called the “open innovators”. 38.7% of the sample is using the open innovation concept partly, for instance just the outside-in process. These companies are called “semi-open innovators”. Only 31.0% are not using open innovation methods, or just to a minor degree.

Open innovators have already successfully implemented open innovation in the whole company. Whereas semi-open innovators often focus on single or few open innovation activities, open innovators have developed a real open innovation strategy. These companies are often characterized by a high level of structural focus on open innovation, e.g. through an own open innovation department, or a large internal and external network. But open innovation is not only integrated structurally. Additionally, these companies also have a strong culture with an intrapreneurial spirit. Open innovation is already reflected in the companies’ incentive system, which again lowers the barriers for the Not-Invented-Here-Syndrome and the Not-Sold-Here-Syndrome.

When grouping the responses with the open innovation model provided by Gassmann and Enkel (2004), 44% of the companies are found in the closed group. (see Figure 3). We see, that inbound open innovation methods (collaboration with external stakeholders or acquisition) are more used than outbound methods.

#### The open innovation types: Inbound, outbound, coupled.

First, the more a company adopts inbound open innovation methods, the more a company will also adopt outbound open innovation methods. Second, companies adopt more inbound open innovation than they adopt outbound open innovation methods. 85.6% of the responses are located over the 45 degree line, which means that they are more engaged in inbound activities than outbound activities. According to our data, there are almost no companies using only the inside-out process.

This can be explained by the inherent risk of open innovation. The risk of outbound methods (e.g. selling licenses or other know how) is perceived a lot higher than the risk of integrating external knowledge into the company. But, when companies start to use open innovation on the inbound side, they are also getting more open on the outbound side.

Extent of inbound activities	High	<b>Inbound</b> 24,7% of responses 7,4% R&D intensity	<b>Coupled</b> 24,7% of responses 7,3% R&D intensity
	Low	<b>None</b> 44,0% of responses 5,0% R&D intensity	<b>Outbound</b> 6,7% of responses 9,5% R&D intensity
		Low	High
		Extent of outbound activities	

Figure 3: Open innovation adoption types

Barriers for open innovation like the Not-Invented-Here Syndrome are already lower, compared to early 2000’s. But the Not-Sold-Here Syndrome still seems to be prevalent. We assume that the percentage of companies using outbound open innovation will increase radically within the next years.

#### Is open innovation complementing or substituting internal R&D?

The R&D intensity of each adoption group (see figure 4) is significantly different. Whereas companies in the inbound- or coupled group both have a R&D intensity of around 7.4%, the companies in the outbound group have a significantly higher R&D intensity of 9.5%. Hence we conclude that open innovation seems to be a complement to internal R&D when companies focus on outbound open innovation. Companies who externalize a lot of their internal knowledge, have to produce this knowledge through internal R&D. On the other hand, open innovation can be a substitute for internal R&D if companies use inbound open innovation methods. In this case companies often try to reduce the costs of internal R&D through integrating external knowledge (often for free). But companies who use open innovation extensively (coupled-group), sell a lot of their internal knowledge but keep the cost of internal R&D low through inbound open innovation.

### 4. More information & individual report

We are happy to generate an individual report with more detailed information, including an analysis of your companies’ position within your industry.

Please contact us for details: [alexander.schroll@wu.ac.at](mailto:alexander.schroll@wu.ac.at)

**Alexander Schroll** is doctoral student and researcher at the [WU Vienna](http://www.wu.ac.at). His main research areas are open innovation, user innovation and community based innovation. His work has a special focus on the firm perspective of open innovation, e.g. how companies use open innovation.

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