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Paul Alpar

*Philipps-Universität Marburg, Germany, [alpar@wiwi.uni-marburg.de](mailto:alpar@wiwi.uni-marburg.de)*

Christian Heinz

*Toys "R" Us, Germany, [ChristianH1@gmx.de](mailto:ChristianH1@gmx.de)*

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# INTEGRATION OF INTERNET USERS IN INNOVATION PROCESSES

*Paul Alpar, Philipps-Universität Marburg, Germany*

*alpar@wiwi.uni-marburg.de*

*Christian Heinz, Toys "R" Us Germany, ChristianH1@gmx.de*

## Abstract

*Development of new products or services was originally under exclusive control of product or service suppliers. With maturation of consumers, first in the industrial sector but today also in the consumer goods sector, the situation has changed. Many new ideas for product improvement or even completely new products come from their users who possess extensive product knowledge or expertise in a specific area. Companies are increasingly trying to actively tap this potential in a process called open innovation.*

*Companies' efforts to integrate (potential) customers into the product development can best be observed on the internet. On a number of websites special tools are implemented which capture users input related to early or later phases of product development. In other cases, companies initiate or support virtual communities organized around a theme that relates to their offerings. For these reasons, an online survey of internet users with respect to their experiences and attitudes towards products co-creation was conducted. The results show that there is a big, still untapped potential for involvement of users in co-creation.*

*Keywords: Open Innovation, Customer Integration, Co-creation, Community-based innovation.*

## 1 INTRODUCTION

Development of new products was originally almost exclusively initiated and guided by producers following the so called manufacturer-active paradigm (MAP) (von Hippel 1978). Manufacturers chose which (potential) customers to involve in the process and what information to seek from them. Customers were often involved only in the late stages of the process, e.g. in prototype testing. In business-to-business relationships, esp. in the area of industrial products customers are personally known and they often possess extensive product knowledge. Therefore, they sometimes suggest or request new products what has been called the customer-active paradigm (CAP) (von Hippel 1978). Both approaches can be considered extremes of a continuum of customer integration in today's innovation processes. In the area of consumer products the innovation process has been seriously opened to customers only in the recent years. There, the customers have been mostly anonymous and the belief existed that they are "functionally fixed", i.e., only able to suggest improvements of existing products but not to initiate real innovations. However, this view has changed and there are accounts of substantial customer input in the area of high involvement consumer products (e.g., Shah 2006).

Today, many companies are actively trying to integrate their customers into new product (or service) development. This process is also referred to as *open innovation* (Chesbrough 2006). These efforts often use the internet as a platform. Potential co-creators can be exposed to toolkits that represent an environment for idea generation or product design (von Hippel and Katz, 2001), virtual stock markets (Dahan and Hauser 2002) in which they bet on their beliefs about products, or other websites that are openly or secretly designed for community-based innovation (Füller et al. 2007). In order to empirically explore how aware consumers are of these possibilities and how much they actually cooperate in product development, we designed an internet-based survey.

## 2 DATA COLLECTION

Survey participants were recruited in two social networks: studiVz, at that time the biggest social community of students in Germany (meanwhile surpassed by Facebook), and Xing, an international community for business networking with its main customer base in Germany. Thus, the results are only valid for internet users but as indicated above, internet is the medium of choice for many open innovation projects. The majority of participants (76%) are (young) adults in the age bracket of 21-40. These are, except for teens, age groups with the highest internet penetration and extensive use of internet. The survey was offered as an online questionnaire in the fall of 2008. 243 people decided to participate.

The questionnaire contained questions about their experience with new product ideas, subjective drivers and inhibitors of co-creation, their habits and characteristics as consumers, and, of course, some demographic data.

## 3 RESULTS

We present first the figures that analyze the willingness of people to co-create in a fashion similar to Bughin (2008) who studied user co-creation in Second Life. While only a small percentage of the respondents already cooperated with companies in new product development, a high percentage of them (81%) would be willing to cooperate in principle as Figure 1 shows. From the 31 respondents with experience in co-creation only three would not like to participate again.

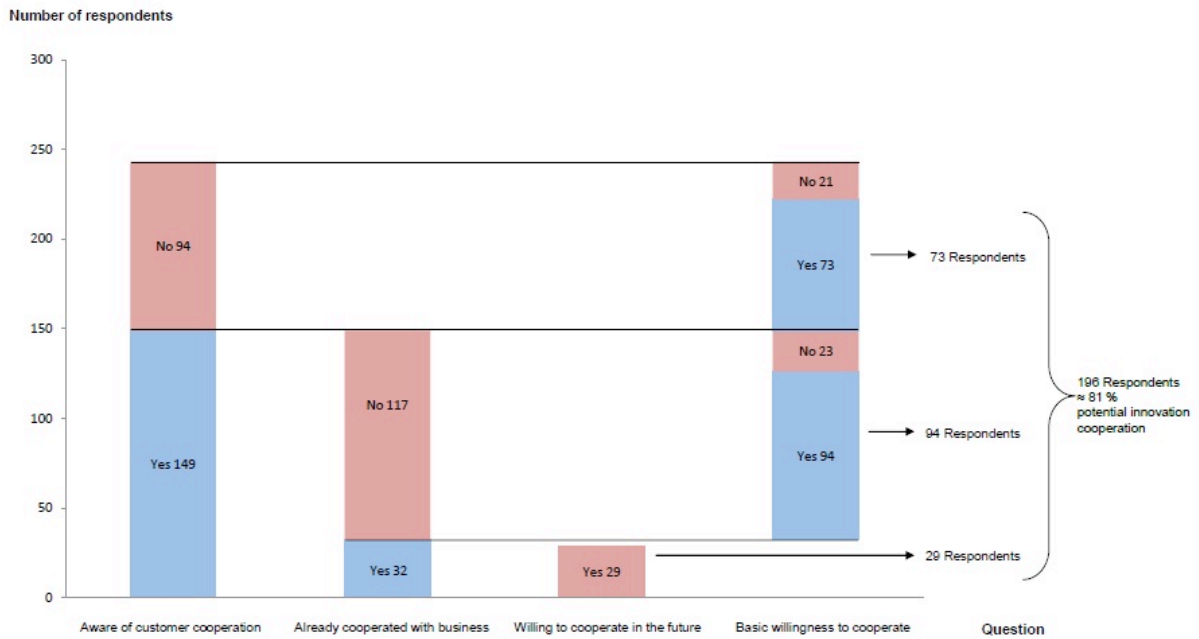


Figure 1. Potential for cooperation of internet users in innovation processes

It is interesting to analyze the cooperation of respondents with businesses with respect to their knowledge and interest in a specific area. This relationship is shown in Table 1.

	Area of special knowledge/ interest exists	No area of special knowledge/ interest	All
Already co-created	21	11	32
Did not co-create yet	55	62	117
All	76	73	149

Table 1. Contingency table for co-creation vs. specific knowledge/interest

The corresponding statistics show a small but significant correlation between the two variables. This result confirms that companies should try to identify consumers with high involvement in an area. They need not be their customers yet. Such an involvement may be another characteristic of a so called *lead user* (von Hippel 1988) who is sought after as a potential co-creator.

## 4 FUTURE WORK

We plan to examine the attitudes of respondents towards companies as partners in co-creation, the possible incentives (money, reputation, and so on) for co-creation, and the (perceived) obstacles to co-creation all in relationship to the actual behaviour of respondents. Possible demographic differences in co-creation behaviour and willingness to co-operate will be studied as well. Finally, the role of the internet as an information and communication channel in the context of co-creation will be also analyzed.

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