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SITUATIVE OPEN INNOVATION – A MODEL FOR SELECTING THE RIGHT EXTERNAL ACTORS AND INVOLVING THEM IN AN EFFICIENT WAY

Matthias R. GÜRTLER, Udo LINDEMANN
Technische Universität München, Germany

ABSTRACT
Open Innovation describes the opening of companies' innovation process towards their environment (e.g. customers, suppliers, even competitors). Besides other benefits described in literature, companies profit by more radical innovations, shorter time-to-market and better satisfaction of customers' needs. In the context of an explorative interview study with several German large enterprises from different industries we surveyed the application and the transfer of Open Innovation from research into practice, regarding benefits and potential impediments. Besides the overall positive experience of companies using Open Innovation, the majority of them stated that it is still a big challenge to select and involve the right extern actors, fitting to the specific company's situation/condition and issue, as well as to select an appropriate way of involvement. To fulfill this demand, the paper presents a guideline methodology for selecting the right external actors for a specific company's situation and issue, and for selecting the right method for involvement. The concept combines Open Innovation with elements from Requirements Engineering and stakeholder analysis into a holistic approach.

Keywords: open innovation, crowdsourcing, organisation of product development, requirement engineering, stakeholder analysis

Contact:
Matthias R. Gürtler
Technische Universität München
Institute of Product Development
Garching
85748
Germany
guertler@pe.mw.tum.de

1 INTRODUCTION

Open Innovation integrates the company's environment into its innovation process. New innovations are no longer solely created in sealed off R&D departments, but with the active support of external actors, such as customers, suppliers, universities and other companies (Chesbrough et al., 2006), (Lichtenthaler, 2011). Depending on the flow of information, we can distinguish between three possible types of innovations: (1) the outside-in innovation, which uses external knowledge for the development of new or improved products, (2) the inside-out innovation, which specifically gives information/technology to the environment to enable external innovations, and (3) the coupled innovation, a combination of (1) and (2) (Gassmann and Enkel, 2004).

In 2012 we conducted an explorative interview study with 13 innovation managers of different German large-scale enterprises from varied industries (including automotive, aerospace, security engineering, technical-service provider). The goal of the study was to survey the application of Open Innovation in industry compared to research, and to analyze positive aspects in practical utilization, potential shortcomings and points of improvement (Gürtler, 2013). As a whole the companies' feedback was consistently positive. However, the majority of the companies also stated that it is still a challenge to efficiently manage the external actors within an Open Innovation project. This includes aspects such as:

- linking the company's situation/condition, including constraints and potential risks, to the choice of external actors who participate in the Open Innovation project
- selecting the right external actors for a given issue (e.g. customers, suppliers, etc.)
- formulating the issue, fitting to chosen actors
- choosing an efficient way of involvement (methods, tools, constraints) for the selected actors
- addressing the actors in the correct way (e.g. communication medium, trust, time, etc.)

Two exemplary challenges mentioned during the survey were: (1) a manufacturer of semi-finished products had a technical problem and decided to tackle it by an idea contest that was open to an unspecified crowd of people. Due to formulating the task as a design issue, the contest mainly attracted designers and design ideas which were limitedly useful for the original technical problem. (2) a manufacturer of wheeled walkers (rollators) gathered ideas for product improvements from users of the product. In the end the success of the new product was unexpectedly low due to the fact that the wheeled walkers were often not bought by the product's users themselves, but rather, for example, by their relatives who decided using different buying criteria.

Summarizing, the findings were in accord with the statement of van de Vrande et al. (2009, p. 425) that the Open Innovation approach is more complex than the old "closed innovation" due to including more activities and a higher coordination effort. Especially in the beginning due to having minimal experience in Open Innovation, companies usually need support by selecting the right formulation of the issue, selecting the right actors and so on. Normally they get this support from external experts, such as consultant companies. Nevertheless, in the survey companies stated the appreciation of having some kind of methodical guideline they could use autonomously.

This paper presents the model of a methodical guideline supporting companies by analyzing their specific situation and issue, and by deriving adequate external actors or actors' combinations, as well as by selecting efficient ways of integrating the actors in the innovation process in regards, for example, to methods, tools, time and appearance of company's representatives. The "*Situative Open Innovation*" model combines Open Innovation with findings from the interview study mentioned previously and from the research project AKINET which analyzed efficient ways of customer integration (Kirschner et al., 2010), Requirement Engineering and stakeholder analysis. The model enables companies to conduct it autonomously, analyze the characteristics of their company and potential stakeholders in a holistic way, while preventing forgetting of relevant stakeholders. To illustrate the utility of the model of *Situative Open Innovation*, its application for developing new Open Innovation methods is shown in an initial evaluation project presented in chapter 4.

2 STATE OF THE ART

Literature provides a wide variety of descriptions of conducted Open Innovation projects. Also publications about recommendations already exist regarding the planning and performing of Open Innovation projects as well as potential risks when cooperating with external partners (Gassmann and

Enkel, 2004), (von Hippel, 1988), (Sloane, 2011). In some cases first methodical guidelines explicitly support the planning of integrating external actors, e. g (Piller and Ihl, 2009).
However, in the opinions of the authors, the shortcomings of these publications are:

- they often describe singular projects
- the focus is mainly on crowdsourcing while widely neglecting other types of Open Innovation
- a fragmented view mainly on customers' integration. Other groups of external actors are less frequent. Gassmann et al. (2010) states that this fragmented view on single groups of actors is no longer expedient.
- Most of the publications do not give real support or only a quite general one. Hence, it is difficult for companies to decide whether Open Innovation is suitable for them in their specific situation and with the specific issue/task, etc., and in which form.
- Closely connected to this, so far there is no holistic analysis method to determine which external actors can contribute to the Open Innovation project.

The last aspect directly refers to the needs stated during the interview study. A systematic analysis of the potential value gain by external actors in the context of the company's specific situation is essential for the success of Open Innovation. This demand is even reinforced in the context of Open X methodologies which extend Open Innovation to all stages of the Product-Life-Cycle (PLC). Besides the early stages, Open X also considers later stages of the PLC, such as utilization and retirement (Gürtler et al., 2013). This has great potential, but also challenges, for companies, due to different external actors, constraints and potential risks for each stage which need to be considered.
Requirement Engineering (RE) is a cooperative and iterative process. Its origin lies in the field of product/software development but can also be applied to other projects or processes. The goals of RE are gathering all requirements regarding a project/product, analyzing interdependencies as well as documentation and accomplishing a common understanding of requirements by all stakeholders. A sufficient and accurate RE is the basis for the success of a product/project (Pohl and Rupp, 2010). Requirements need to be gathered and defined at the beginning of a project due to high resulting costs in later phases. It also helps to identify potential risks and to solve them at early phases of the project. A major source of requirements is the stakeholders. Missing a relevant stakeholder causes an incomplete list of requirements which might lead to the failure of the project.
Hence, a stakeholder analysis is essential. It helps to identify all stakeholders and their needs. According to Freeman (2010, p. 25) the term stakeholder includes "any group or individual who can affect or is affected by the achievement of the firm's objectives." Figure 1 illustrates possible stakeholders of a company who might affect the success of a company's product or project. The stakeholder concept supports by gathering all stakeholders, analyzing their requirements and grouping them into primary stakeholders who define the business, and secondary stakeholders who might have an impact on the first group. By doing this companies benefit in two ways: they do not oversee potential stakeholders and can concentrate their limited resources on integrating and satisfying only relevant stakeholders. There are already first approaches of combining the advantages of Open Innovation and stakeholder analysis (Gould, 2012).

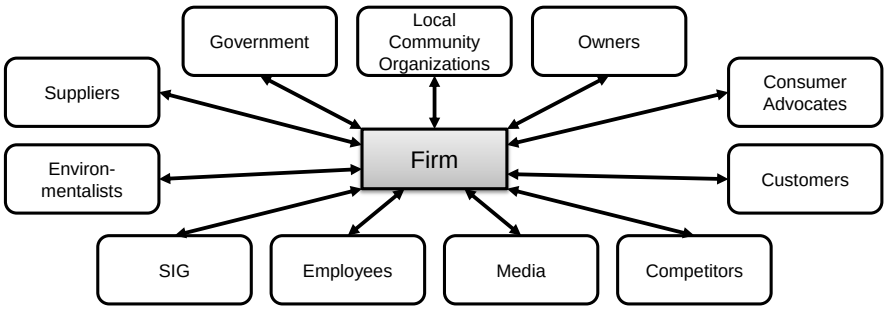

Figure 1 Possible stakeholders of a company, adapted from (Freeman, 2010, Exhibit 1.5)

3 MODEL OF SITUATIVE OPEN INNOVATION (SOI)

The model of *Situative Open Innovation* (*SOI*) represents an integrated methodical guideline. It allows companies to efficiently determine the relevant groups of (external) actors who can support by solving a specific issue/problem of the company. With this *Situative Open Innovation* not only focuses on the

issue itself, but also considers the company's internal and external situation in terms of its characteristics and its market environment.
Situative Open Innovation combines Open Innovation with findings from the research project AKINET, dealing with an efficient customer integration into the product development process, (Kirschner et al., 2010) and from publications which already present first guidelines for involving external actors into the companies' innovation process, e. g (Piller and Ihl, 2009). It is enhanced by aspects of Requirement Engineering and stakeholder analysis. It facilitates the success of the project by defining the project's objectives, by identifying all stakeholders and by evaluating their relevance for the Open Innovation project. The initial focus of *SOI* is on outside-in innovations.
Figure 2 gives an overview of the model of *SOI*. It consists of five steps which are conducted consecutively. However, iterative jumps back to earlier steps are possible as needed, e.g. if boundary conditions have changed during the project and require project readjusting.
The entry into the model is the analytical **step 1 "Analysis of situation and objectives"**. It defines the deliverables of the intended Open Innovation project and analyzes possible constraints. Those can arise from company's characteristics, such as culture, strategy, Open Innovation experience, product portfolio, etc., and the company's market environment. Based on those analysis results, this step also defines requirements towards potential external actors.
Step 2 "Stakeholder Analysis" identifies all stakeholders of the deliverables as well as the Open Innovation project. These are analyzed regarding their relevance to the project.
Based on the previous analyses and requirements (step 1), **step 3 "Access to stakeholders"** determines appropriate actors or combinations of actors. It also defines the degree of involvement and efficient ways of interaction, e.g. regarding communication medium, time, etc.
This serves as input for **step 4 "Methods selection and adaption"** which derives effective methods for integrating the selected stakeholders into the innovation process. It also includes adaptions of methods and potential reformulating of issues to fit specific stakeholder needs or boundary conditions.
Step 5 evaluates the results of the analysis stage and the results of the following steps 3 and 4. If shortcomings are detected due to new information or changed boundary conditions, jumps back to earlier steps and readjustments might be triggered.

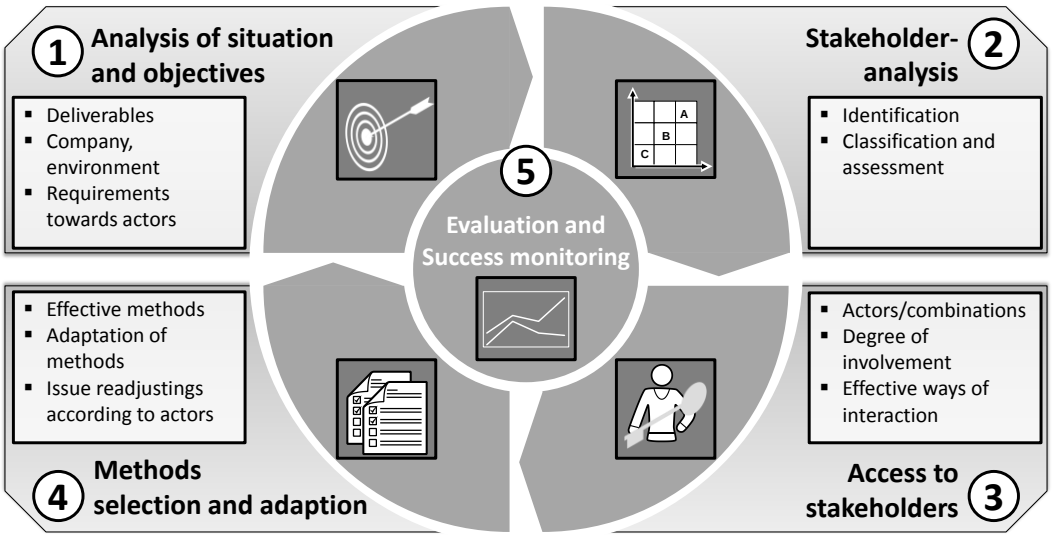

Figure 2 Model of Situative Open Innovation (SOI)

The single steps are explained in detail in the following. In this case "deliverables" stands for the subject of the project (e.g. a product, service, process, etc.) which shall be elaborated upon.

3.1 Analysis of situation and objectives

The goal of this step is to specify the objectives and potential constraints of the Open Innovation project and can be detailed into the sub-steps below. The results of this step serve as requirements and constraints for the following Open Innovation project and selection of external actors.

3.1.1 Analysis of deliverables

The analysis of deliverables defines the issue of the project and the target and type of innovation intended. The target of innovation might be an improvement or new version of a product, a production process, source of supply, exploitation of markets, ways of organizing business or an improved PR. The type of innovation is differentiated between incremental and radical innovations (Inauen and Schenker-Wicki, 2012), (Gürtler et al., 2013). Depending on the stage of the product engineering process, the external actors might support, for example, the design of product concept, the definition of project or commercialization (Gruner, 1997) or even provide services as an aid for disposing of old products (Gürtler et al., 2013). The previous aspects also determine the quality and amount of information which needs to be published in order to enable actors to elaborate within the project.

3.1.2 Analysis of the company's characteristics

Due to the company's characteristics having a major influence on the success of Open Innovation projects, this sub-step analyzes aspects, such as existing Open Innovation expertise, business culture, business processes, core competencies, product portfolio etc. (Gianiodis et al., 2010), (Gassmann et al., 2010).

3.1.3 Analysis of company's market environment

Another success factor for Open Innovation projects is also the company's environment. For example, the amount and quality of information can vary depending on the market size and number of competitors. Porter's Five Forces can be used for analyzing the company's environment: rivalry in the market, threat of substitutes, buyer power, supplier power and threat of new entrants and entry barriers (Porter, 2004).

3.1.4 Deriving requirements towards external actors

Requirements towards potential actors are derived based on the previous analysis results. This includes, for example, specific expertise, non-disclosure-agreements, critical number of actors, etc. The requirements act as constraints for the subsequent stakeholder analysis.

3.2 Stakeholder Analysis

The goal of the stakeholder analysis is the determination of relevant stakeholders who are necessary for the success of the Open Innovation project and the product. The stakeholder analysis ensures the identification of all stakeholders without potentially neglecting important ones.

3.2.1 Identification of stakeholders

In order to ensure a holistic view on potential innovation partners and prevent forgetting a potentially important stakeholder, it is necessary to identify "any group or individual who can affect or is affected" (Freeman, 2010) by the deliverables and the Open Innovation project. As Figure 1 shows, this includes not only external actors such as suppliers, but also internal actors such as employees.

3.2.2 Identification of stakeholders' characteristics and relationships

After identifying all stakeholders, their potential interests or motivations are determined regarding the deliverable and the project, since these define their behavior towards the project. Conflicts of interest and stakeholders personalities are determined and documented, since the "human factor" bears a great influence on an Open Innovation project (Giannopoulou et al., 2011). Gould (2012) also stresses the importance of analyzing relationships among stakeholder groups. In some cases secondary groups might have a great influence on primary groups and therefore need to be treated as a primary group.

3.2.3 Determining relevant stakeholders

Due to normally limited resources, time and financial budget it is not expedient to involve each stakeholder into the project. Freeman (2010) suggests differentiation into a primary business defining group and a secondary outer group. However, Gould (2012) states that this traditional stakeholder categorization is not sufficient in the context of Open Innovation. Therefore we suggest categorizing stakeholders by their:

1. **innovative capacities for the project**
   In this context, innovative capacities include the expertise and know-how to contribute a surplus value to the project's task, for example by generating creative ideas, providing

technologies, services, etc. Lead user methods for determining the innovative capacity of stakeholders, such as screening can be adapted, including questionnaires/checklists for examining project-specific criteria.

2. **influence on the project/product success (e.g., buying decision)**
   This criteria takes into account that some stakeholder groups might not directly contribute to the deliverable/project but have great power or influence on the buying decision or the product's/project's success. It addresses the case that users and buyers are different stakeholder groups.

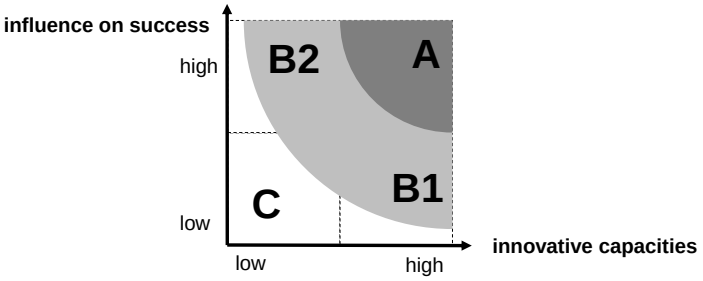

Figure 3 Situative Open Innovation: categorization of stakeholders

We suggest using a five point scale to assess each property, containing: low – medium-low – medium – medium-high and high. The categorizations of each stakeholder are inserted into a portfolio, as shown in Figure 3. Within the portfolio three groups of stakeholders can be distinguished:

- **A-stakeholders:**
  Due to their high innovative capacity and their influence on the success of the project/product, these are stakeholders who should absolutely be integrated into the project.
- **B-stakeholders:**
  They can be separated into stakeholders with a (B1) high innovative capacity but low influence on the success and (B2) with high influence on the project's or product's success but with low innovative capacity. B1 stakeholders should be integrated into the generation of innovations, while B2 stakeholders might contribute by evaluating the projects results.
- **C-stakeholders:**
  Due to their low innovative capacity and low influence on the success, these stakeholders can be neglected for the project. However, it might be useful to recheck possible relations/influence from C-stakeholders to the other stakeholder groups.

The suggested categorization, as well the derived three groups of stakeholders, need to be evaluated in detail within the midterm planned industry projects and adapted if necessary.

3.3 Access to stakeholders

The goal of this step is deriving optimal stakeholders or combination of stakeholders and effective ways to integrate them into the Open Innovation project.

3.3.1 Deriving appropriate actors or their combinations

The appropriate stakeholders or their combinations are derived based on the previous determination of stakeholder characteristics, the portfolio analysis and the requirements from step 1.

3.3.2 Definition of degree of involvement

The degree of stakeholders' involvement differs depending on the analysis results of the deliverables and the requirements towards external actors from step 1. It is differentiated as to whether stakeholders contribute by providing ideas, technologies or services, for example (Gürtler et al., 2013).

3.3.3 Determination of effective ways of interaction

The ways of effective involvement differs based on the deliverables and the type of each stakeholder group. For this selecting the right way is important due to influencing the motivation and possibility of stakeholders to participate. Inauen and Schenker-Wicki (2012) stress the relevance of the motivation

for the success of an Open Innovation project. Thus, it needs to be determined how which stakeholder group should be involved when and where. The resulting dimensions are:

- **Communication medium:**
  Which medium is most suitable for which stakeholders? For example, young actors might be addressed via internet, while older actors might prefer personal contact. Similar aspects apply to companies, universities, etc.
- **Location:**
  Where are stakeholders accessible? A trivial example could be: air passengers seem valuable for aerospace issues and can easily addressed at airports or at aircrafts.
- **Time:**
  When are stakeholders efficiently accessible and in the mood for collaborating? For example, regarding the aerospace issue: passengers could be addressed while waiting at the gate or while traveling in the aircraft and they may even be pleased to have some kind of distraction. However, cultural and religious aspects also need to be considered, e.g. if events/workshops would collide with religious holidays.
- **Company's behavior:**
  Since the human factor is a critical success-factor for Open Innovation (Giannopoulou et al., 2011), the company and its employees need to behave in different ways towards external actors depending on the type of stakeholder. For example, in one case a formal dress code is essential and in the other case it is counter-productive and a casual dress code is much more suitable. This also includes language, cultural aspects, etc., which support establishing a trustful relationship between company and stakeholders.
- **Incentives**
  Depending on the type of stakeholder, incentives or a different kind of incentive might be necessary to motivate stakeholders to participate, e.g. money, tribute, challenge, etc.
- **Scalability:**
  It should be defined whether and how the stakeholder involvement can be scaled. Thus, it is possible to integrate just a few at the beginning and continuously increase the number of actors. On the contrary, it could also be suitable to integrate all actors from the beginning.

3.4 Method's selection and adaption

Suitable methods are derived and adapted to the individual characteristics of stakeholders, deliverables and project constraints, based on previously defined requirements and constraints.

3.4.1 Deriving effective methods

Different methods are suitable for involving each stakeholder group, according to the previously defined communication medium, location and time. With this results from the analysis of step 1 regarding the company and market constraints need to be considered.

3.4.2 Adopting methods

As for every method application, the derived methods need to be adapted to the specific operating conditions in regards to the characteristics of actors, company and project issue. Depending on this particular situation, the extent of adaptions might vary and can also mean combining several methods.

3.4.3 Readjusting issue description

Though this task is already implicitly part of step 5 and the iterative character of the *SOI* model itself, due to its relevance it is explicitly part of step 4. Depending on the selected stakeholders and methods it might be necessary to readjust the issue formulation to improve the project's success.

3.5 Evaluation and success monitoring

The goal of this step is monitoring the success of the Open Innovation project and determining whether it is necessary to readjust the project by, for example, involving further stakeholders, changing single methods or increasing the interaction between company and stakeholders. Since classical key-figures from economics such as Return-On-Invest are not suitable for Open Innovation (Gürtler, 2013), Hilgers and Piller (2009) suggest the use of specific Key-Performance-Indicators (KPI), for example,

the number of ideas in an idea-contest, size of a community, etc. Which of the KPIs are most useful for *SOI* must be determined in evaluation projects with industry.

4 INITIAL PRACTICAL EVALUATION: DEVELOPING NEW OPEN INNOVATION METHODS

The model was evaluated in the context of a project at university in order to illustrate its utility. The project's goal was to develop new Open Innovation methods which could be utilized at the institute and in industry. Considering the length of the paper, only the relevant aspects are presented.

Analyzing the institute's characteristics in **step 1**, among other things we assessed a high methodical expertise and a high involvement in daily business and teaching tasks. The "market" was characterized by rivalry between different research groups in the same field and the unlikely but theoretical threat that the publicly accessible results of the project might be utilized by others. Due to developing new methods, the main requirements towards actors were (1) creativity, (2) experience with methods and (3) a high number of actors to achieve a high quantity of potential methods. Special needs for NDA, etc. did not exist.

Possible stakeholders were identified and categorized in **step 2**, as illustrated in Figure 4. Students (a) were seen as creative as well as potential users of the new methods and therefore ranked as A-stakeholders. Institute employees (b) were regarded as methodical experienced and as potential users of the new methods, but without capacity to actively contribute in the project due to their workload in daily business. Therefore, they were categorized as B2-stakeholders for evaluating the newly developed methods. Other research groups (c) were also grouped B2 due to having the expertise for evaluating the methods and being potential users but potentially having less interest in directly contributing to another researchers' work. Industry partners (d) as potential users of the new methods have a large influence on their success, but often might not have the necessary methodical expertise to contribute to their development. Thus they are here grouped as B2-stakeholders. Open Innovation service providers (e) are seen as secondary C-stakeholders in this case.

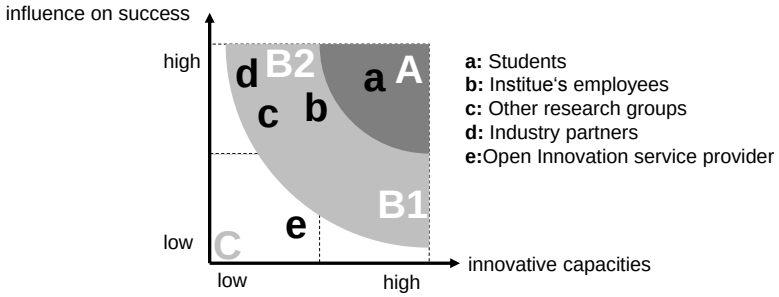

Figure 4 Stakeholders' categories for "Open Innovation method development"

After selecting the students as A-stakeholders for the method-development project, the optimal access conditions were analyzed in **step 3**. When asking students, they stated as requirements: no additional effort by traveling somewhere or by spending additional time in university. Based on this and bad experiences from previous online evaluations of lectures with only a low number of participates, this medium was ranked as insufficient. A face-to-face interaction was identified as most convenient due to the possibility of students motivating and inspiring each other and the students being observed. Regarding time and location, the campus during the semester was identified as most suitable. Thus students were not discouraged by the additional effort of traveling or spending extra time.

Based on these boundary conditions, in **step 4** we selected a workshop for involving the students as a method. This also fulfills the requirements from step 1 of being internal and not accessible to public. To reach the defined high number of participants we took **6 groups** with **12 students** (72 students in total). The workshop itself lasted 2 days with 8 hours per day. The groups consisted of bachelor students from mechanical engineering who had been working with methods for up to five years, as well as students who had little experience. By this, we intended to stimulate the groups' creativity.

In the end we received a number of interesting methods. Though some of them were quite close to the initial example given of an online idea contest, other ones were new and innovative. In the near future we will evaluate the innovative methods in industry projects to prove their potential in application.

5 DISCUSSION

The previous example illustrates the utilization and potential value gain of applying the *Situative Open Innovation* model, even though some (sub-) steps of the model were only conducted in a general way due to restrictions by the described use case. By using elements of Requirement Engineering, the *SOI* model supports by holistically determining the characteristics of the regarded company, its market environment and boundary conditions (including resources). This increases the transparency of the project's goal and constraints for stakeholder collaboration, methods and tools. The stakeholder analysis facilitates an integrated identification of all stakeholders and assesses them. In the example we could define two groups: the first one (including the students) for directly contributing to the project, and the second group for evaluating the utility of the developed methods. The access analysis of the *SOI* model supported finding an efficient way to cooperate with the students. Initially a web-based type of interaction was favored, but then discarded after analyzing the students' requirements. A workshop was chosen instead. In the end, direct cooperation and interaction between the members of each group led to high quantity and creativity of new methods.

Though the example was "only" conducted in a university setting, it indicates the general utility of the *SOI* model. For the future we will evaluate the model by industry cases and further elaborate the model in detail. In parallel, out of all possible characteristics, a set of relevant key-parameters need to be determined in order to keep the analyzing process efficient. Also the connection between these key-parameters, relevant stakeholders and convenient methods is to be defined. Despite this deficiency, the *SOI* model already offers valuable support in terms of an integrated methodology for systematically planning an Open Innovation project and reflecting goals and entrenched patterns of thinking.

6 CONCLUSION AND FUTURE RESEARCH

The model of *Situative Open Innovation* (*SOI*) combines aspects from Open Innovation, Requirements Engineering and stakeholder analysis to support companies conducting Open Innovation projects more goal-oriented, in regards to the choice of external actors and methods. The performance and cost-benefit-ratio of the project and of the project's deliverables can be increased by using this holistic approach.

Using aspects of Requirement Engineering facilitates an integrated analysis of project objectives and the defining goals to reach. This prevents forgetting relevant requirements and boundary conditions and supports considering potential risks right at the very beginning, for example by using assessment methods from Open X. This ensures that the involvement of external actors meets the specific situation and characteristics of the company and the intended issue of the project.

In comparison, stakeholder analysis aids in identifying all potential stakeholders of the project's issue, including their basic motivations and interdependencies among them. This prevents forgetting relevant external actors who might hinder the success of the project and the deliverables. The subsequent assessment ensures only the involvement of relevant stakeholders/external actors and the use of resources (as financial budget, time, etc.) in an efficient way. By evaluating all potential stakeholders, on the one hand by their innovative capability and on the other hand by their influence on product/project success, both the actors who directly contribute to the project and the actors who take the later buying decision are incorporated. This tackles the challenge of users often not being the buyers of a product. The following access analysis defines the most suitable time, location and manner of involvement of each external actor and supports the choice of adequate methods for each group of actors. In conclusion, the model of *Situative Open Innovation (SOI)* bears the potential to avoid project failure and wasting resources by applying an incorrect method to a wrong group of stakeholders, insufficient results due to not adapting the method to the project constraints or the failure of the project due to an inadequate choice and formulation of issue.

In its current state the *SOI* model is a methodical framework supporting the structured and reflected proceeding of the project. It is suitable for users with no or little experience regarding Open Innovation, as well as for experienced users by stimulating the questioning of entrenched patterns of thinking. In the future we will enhance the model by including further methods, such as SWOT-analysis, Design Structure Matrix, and by determining relevant key-parameters of a company's characteristics, its situation, stakeholders etc. This also includes the development of measurement metrics and mapping the key-parameters to adequate methods and suggestion of adaptions. The goal is a semi-automated derived suggestion for companies. This will be achieved by literature review of published Open Innovation case studies and existing guidelines. It will be accompanied by an industry

interview-study retrospectively analyzing former Open Innovation projects and by prospectively applying the model of *Situative Open Innovation* in the planning and implementation of new industrial Open Innovation projects.

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