

Please quote as: Kipp, P. & Bretschneider, U. (2012): Collaboration Engineering to Improve the Idea Quality in Ideas Communities. In: Ancillary Proceedings of the 20th European Conference on Information Systems (ECIS), Barcelona, Spain.

COLLABORATION ENGINEERING TO IMPROVE THE IDEA QUALITY IN IDEA COMMUNITIES

Kipp, Philipp, Kassel University, Pfannkuchstraße 1, 34121 Kassel, Germany,
philipp.kipp@uni-kassel.de

Bretschneider, Ulrich, Kassel University, Pfannkuchstraße 1, 34121 Kassel, Germany,
bretschneider@uni-kassel.de

Abstract

Idea Communities allow their users to contribute to a company's innovation activities by sharing their ideas with the Community. These ideas are then improved according to the Mass-Collaboration principle. Due to the high diversity among the participants, a shared understanding and a common goal is hard to develop in a mass collaboration environment. According to Bounded Ideation Theory, this leads to a limitation in the quality that the mass collaboration approach can achieve on the elaboration of ideas. This research in progress paper uses a theory based design approach to develop an approach that circumvents the problems of mass collaboration in Ideas Communities. Based on Bounded Ideation Theory, Collaboration Theory and Lead User Theory, this paper suggests an approach that allows small groups of community members to collaborate on the elaboration of pre-selected ideas. These users are selected based on the ideas they shared with the community, are brought together to define a common goal of collaboration and supported by a set of virtual collaboration tools. The goal of the research is development, piloting and evaluation of an adaptable process that can be implemented for any existing Ideas Community Platform.

Keywords: Open Innovation, Ideas Community, Collaboration Engineering

1 Introduction

In order to keep up with the increasing innovation pressure, many companies are searching for new product ideas not only among the members of their Research and Development department but also from external stakeholders of the company. Possibly the most important of a company's external stakeholders are the customers. Customers have a very deep and detailed knowledge regarding the products, and often have new radical ideas for product improvements or even completely new products. In order to communicate with the large group of customers, Idea Community Platforms (ICPs) have proven to be a useful tool for a company to open up to their customer's ideas (Reichwald and Piller, 2009). Popular ICPs such as Dell Ideastorm or MyStarbucksIdea.com, as well as a number of studies (Bretschneider et al., 2012; Bretschneider and Leimeister, 2011; Di Gangi and Wasko, 2009), have proven that many customers are motivated to share their demands and ideas with companies. This has led to ICPs becoming more and more popular as an instrument for supporting ideation among users. ICPs have proven particularly helpful for the integration of customers into the product development according to the Open Innovation principle. Although ICPs are based on the collaboration principle, most ICPs feature only very basic collaboration tools such as a comment section or a simple voting mechanism. While these are helpful for the communication among users they neither support the users in finding ideas they can contribute to nor do they offer them a structured process guiding the next steps of idea elaboration. In order to utilize the full potential of the Open Innovation principle, supporting the collaboration among all participants is critical. This research in progress paper proposes a structured process that allows companies to identify valuable contributors to their innovative processes and support them in their collaboration within an already existing ICP.

Successful ICPs show that they can attract considerable very active users who produce a lot of helpful ideas. It is obvious that a company cannot be able to adopt the majority of these ideas. This suggests that in order to gain most profit out of ICPs, effort should be invested in increasing the quality of the best ideas. Therefore the suggested process will focus on the most promising ideas and identify users able and willing to further elaborate these ideas. Basic research on Collaboration Engineering shows that a structured collaboration process needs a clearly defined goal, a well structured and described process, as well as highly motivated and creative participants (Briggs and Reinig, 2010; Kolfshoten and De Vreede, 2009; De Vreede et al., 2009). Blohm, Bretschneider et al. (2011) have shown that user collaboration on web-based platforms has the potential for radical improvement on idea quality. In order to seize the potential of user collaboration for Idea Communities, this work-in-progress paper suggests a systematic tool supported collaboration process that aims at improving idea quality in general and idea elaboration in particular. To come up with a process, which is able to deliver the desired results, the following research questions will be addressed in this paper:

- 1) What are design implications for a structured collaboration process on ICPs that can be drawn from collaboration literature?
- 2) What is a feasible example process that can increase the quality of ideas contributed to an Ideas Community?

2 An online toolkit to support collaborative idea generation on Ideas Community Platforms

Following the insights of Bounded Ideation Theory (Briggs and Reinig, 2010) and Lead User Theory (von Hippel, 1986) regarding the selection of appropriate users and environment for creative collaboration, a first draft for the web based collaborative ideation process was developed. And will briefly be presented on the following pages.

2.1 Identification of similar idea clusters from the Idea Pool

The first step in the newly developed tool supported collaboration process is the identification of clusters with similar ideas from the pool of ideas of the community. A detailed description and evaluation of different approaches will be subject to future research. The outcome of this process phase is a set of topics that can be addressed by the following phases of the collaboration process.

2.2 Definition of a collaboration project

Based on the topic to be addressed as defined in the previous step of the process, the purpose of this process step is to achieve a clear definition for the collaboration project to be set up. This serves the purpose of creating a shared understanding as well as ensuring a common goal among participants. The deliverable of this process step is a clear definition of the collaboration project's scope and goals. The document defining the task of the Lead User group addresses the “Common Goal Boundary” identified by Briggs and Reinig (2010) as part of Bounded Ideation Theory.

2.3 Concept development

The concept development phase is carried out by the collaboration group defined in the previous step of the process. The goal of this step is the elaboration of a feasible concept that meets the criteria pointed out in step 2 of the process. The concept development is a collaborative process that needs to be defined and structured in a way that enables the platform operator to carry it out multiple times for different topics and with different groups of participants. Therefore, future research will concentrate on developing this process based on tools and methods from the area of Collaboration Engineering. Collaboration Engineering aims at the definition of collaboration processes that can be executed multiple times by different participants, thus achieving a predictable outcome (Kolfshoten and De Vreede, 2009; De Vreede et al., 2009).

2.4 Concept review

The Concept review is carried out by the organization operating the Ideas Community Platform. The goal of the Concept review step is the identification of the best ideas to be realized. Research opportunities in this area can be the identification of good criteria for idea evaluation as well as possible methods for crowdsourcing of idea rating. Some research in this area has been carried out by Riedl, Blohm et al. (2010).

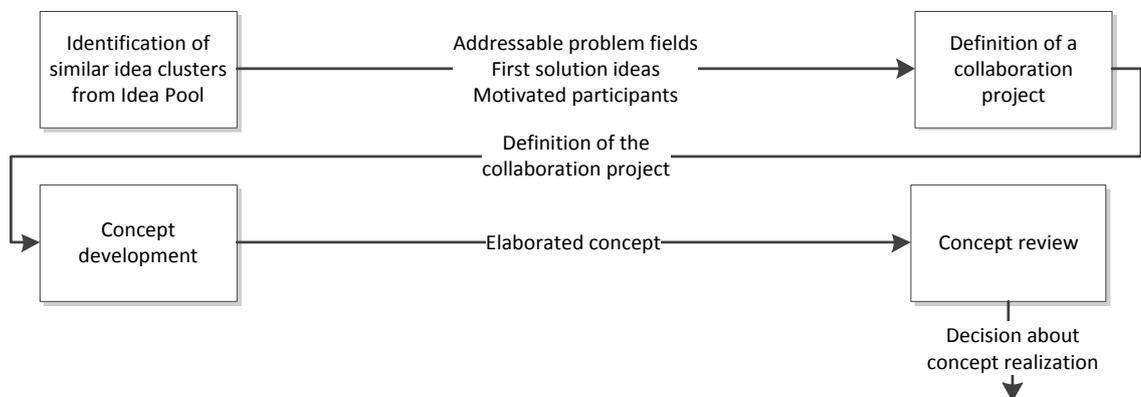


Figure 1 The phases of the tool supported collaboration process

3 Outlook and contribution

The process suggested in this paper is still in an early stage of development. After implementation of the process on the pilot platform “Co-create your University”, a first evaluation of the process will be possible. The ongoing research will then focus on a more detailed specification of the process phases. Specific research opportunities have been pointed out in the respective sections of this paper. This includes tool evaluation of the supporting tools in the concept development phase and evaluation of different methods of Lead-User identification that can be applied to the page. The goal of the ongoing research project is a detailed description and example implementation of a well evaluated collaboration process that can be adapted to other Ideas Community platforms.

The practical contribution of the research is the development of an adaptable tool supported collaboration process that has a positive impact on the idea quality generated by the Ideas Community.

The theoretical contribution lays in the adaption of well established offline collaboration principles to an online platform. This shows the usability and validity of the used theories in other fields, and provides a guideline for future research and further elaboration of the collaboration process.

References

- Blohm, I., Bretschneider, U., Leimeister, J. M. & Krcmar, H. 2011. Does collaboration among participants lead to better ideas in IT-based idea competitions? An empirical investigation. *International Journal of Networking and Virtual Organizations*, 9, 106-122.
- Bretschneider, U. & Leimeister, J. M. Year. Getting costumers' motives: Lean on motivation theor for designing virtual ideas communities. *In: Governance and Sustainability in Information Systems: Managing the Transfer and Diffusion of IT*, Proceedings International Working Conference IFIP, 2011 Hamburg. Nüttgens, M.; Gadatsch, A.; Kautz, K.; Schirmer, I.; Blinn, N., 171-187.
- Bretschneider, U., Rajagopalan, B. & Leimeister, J. M. 2012. Idea Generation in Virtual Communities for Innovation: The Influence of Participants' Motivation on Idea Quality. *HICSS 45*. Hawaii.
- Briggs, R. O. & Reinig, B. A. 2010. Bounded Ideation Theory. *Journal of Management Information Systems*, 27, 127-149.
- De Vreede, G.-J., Massey, A. P. & Briggs, R. O. 2009. Collaboration Engineering: Foundations and Opportunities. *Journal of the Association of Information Systems*, 10, 121-137.
- Di Gangi, P. M. & Wasko, M. 2009. Steal my idea! Organizational adoption of user innovations from a user innovation community: A case study of Dell IdeaStorm. *Decision Support Systems*, 48, 303-312.
- Kolfschoten, G. L. & De Vreede, G.-J. 2009. A Design Approach for Collaboration Processes: A Multimethod Design Science Study in Collaboration Engineering. *Journal of Management Information Systems*, 26, 225-256.
- Reichwald, R. & Piller, F. 2009. *Interaktive Wertschöpfung - Open Innovation, Individualisierung und neue Formen der Arbeitsteilung*, Wiesbaden, Gabler.
- Riedl, C., Blohm, I., Leimeister, J. M. & Krcmar, H. 2010. Rating scales for collective intelligence in innovation communities: Why quick and easy decision making does not get it right. *ICIS 2010*.
- Von Hippel, E. 1986. Lead Users: A Source of Novel Product Concepts. *Management Science*, 32, 791-805.