Organizational Challenges of Customer Co-creation

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ABSTRACT:

Many firms are facing challenges by applying customer co-creation approaches. While recent research provides extensive insights on the formal methods and theoretical concepts, there is still a research gap concerning the difficulties in the intra-organizational implementation of customer co-creation projects. This piece of work attempts to close the gap by exploring the organizational challenges in customer co-creation projects based on an analysis of twenty interviews with innovation managers and intermediaries. As a result, a framework with three distinct categories of organizational challenges, i.e. structural, procedural and communicational challenges is developed. The paper closes with recommendations for actions to meet these co-creation challenges successfully.

1   CURRENT UNDERSTANDING OF CO-CREATION IN ORGANIZATIONS

Current developments in the scientific field of Innovation Management (IM) and New Product Development (NPD) show that customers are receiving noticeable attention as source of information [1–3]. Progressing technological developments such as Information and Communication Technologies (ICT) are increasingly empowering customers. Moreover, these co-creation technologies facilitate an active, creative, and social collaboration process between producers and customers (users) [4]. The active collaboration with customers allows firms not only to get insights in future customer needs. The application of these co-creation methods enable organizations to gather specific technical knowledge as well as need information, both valuable for the design and development of new products [1,5].

Already a number of scientific publications show successful cases how to set-up various business models using such co-creation methods. Most famous examples are Apple, Lego, SAP, Nestle and Threadless showing a wide range of benefits using co-creation approaches [6].

Benefits emerge vitally for both the actors (indicated by noticeable competitive advantages for firms) and for the participating customers. Kristenssen [7] recognized that customer involvement provides the potential to firms to produce ideas that are more creative and higher valued by the customer. Reichwald and Piller [8] show that information from customers can be used for developing radical new products with high fit-to-market (based on need information), as well as to improve time-to-market or decrease development costs (based on solution information). On the other hand Harhoff [9] explains customers' reasons for contributing: higher economic value (higher product value, lower price) as well as psychological value (self-esteem, satisfaction) are motivating customers to participate. Furthermore enjoyment and playfulness are positively influencing the process of participation.

Nevertheless, firms are not successful in every case in such collaboration. In practice, firms question increasingly the profitability of such expensive approaches for opening their boundaries and managing customer participation (e.g. Siemens as outlined by Lakhani et al. [10]). Consequently, it seems to be apparent that organizations still face certain challenges to benefit from customer co-creation in the long-term [4,11].

Lagrosen [12] mentioned that the use of formal methods for customer involvement is relatively limited. Current research provides valuable insights for an adequate method choice as well as

the fundamental characteristics of such methods [4]. The methodological choice of tools along the innovation process, their relation to the kinds of customers to select and the kind of information, which the customers can contribute are vitally discussed in literature. Customer relationship management, enjoyment on participation and the psychological aspect of customer's contribution are elementary investigated. The handling of information during collaboration, information asymmetry, issues on intellectual property and the not-invented-here syndrome [3] have been mentioned as barriers for communication.

Firms need advanced capabilities to handle customers as external partners appropriately. During the participation it is important for customers to have substantial benefits as otherwise the participation will decrease [13]. Selecting the customers who are skilled and willing to contribute can be considered as a basic prerequisite [14]. Content-wise, Schweitzer, Gassmann and Rau [15] show that the types of customers (e.g. users with high technical skills or trend aware users) determines the kind of ideas customers are likely to generate in creativity workshops. Within such insights on customer handling we can recognize the complexity of the active collaboration with customers.

Having conducted an in-depth literature review on co-creation, Perks and Roberts [16] come to the conclusion that research has up-to-now delivered too little insights on the organizational impact of co-creation with customers. The review of the literature suggests that research provides only limited answers how organizations can cope with the changes in their innovation processes resulting from co-creation activities. To allow companies to realize long-term benefits from customer co-creation projects, the challenges arising from these projects have to be understood in a first step. Consequently, we adopt a practice-based perspective and ask:

- Which intra-organizational challenges can result from implementing customer-co-creation methods in the innovation process?

2 METHOD

To gain an in-depth understanding for the challenges of co-creation projects within organizations, rich information about the situations is needed. Hence, an exploratory research design has been chosen [17]. In total, 20 in-depth narrative interviews have been conducted. The data set consists of 10 interviews with innovation managers experienced in implementing co-creation projects as well as 10 interviews with innovation intermediaries who provide a meta-perspective on the implementation of co-creation projects. Data analysis was performed using the standard qualitative research process according to Mayring [18].

3 EMPIRICAL FINDINGS

Deduced from the interview data, a framework to structure the intra-organizational challenges of customer co-creation projects was elaborated (see figure 1). It consists of three major interrelated challenges:

(1) Structural challenges: This category consists of challenges related to the set-up of an adequate organizational surrounding. Putting a stronger focus on customer integration leads to long-lasting decisions by adapting the internal structure. According to the business model and depending on the co-creation scope a suitable customer involvement has to be defined, which fits to the market conditions and internal requirements such as handling of internal knowledge.

(2) Procedural challenges: After defining a suitable customer involvement inside the enterprise, it's about selecting the proper methods or mix of methods. Depending on the required external inputs along the innovation process, different methodical competences and tools are needed.

(3) Communication challenges: Adequate communication styles and processes within the enterprise and towards involved customers are essential to keep all participants pleased during various co-creation activities. The communication itself is a strong instrument to set rules, generate and uniform a common understanding and ensure an overall commitment.
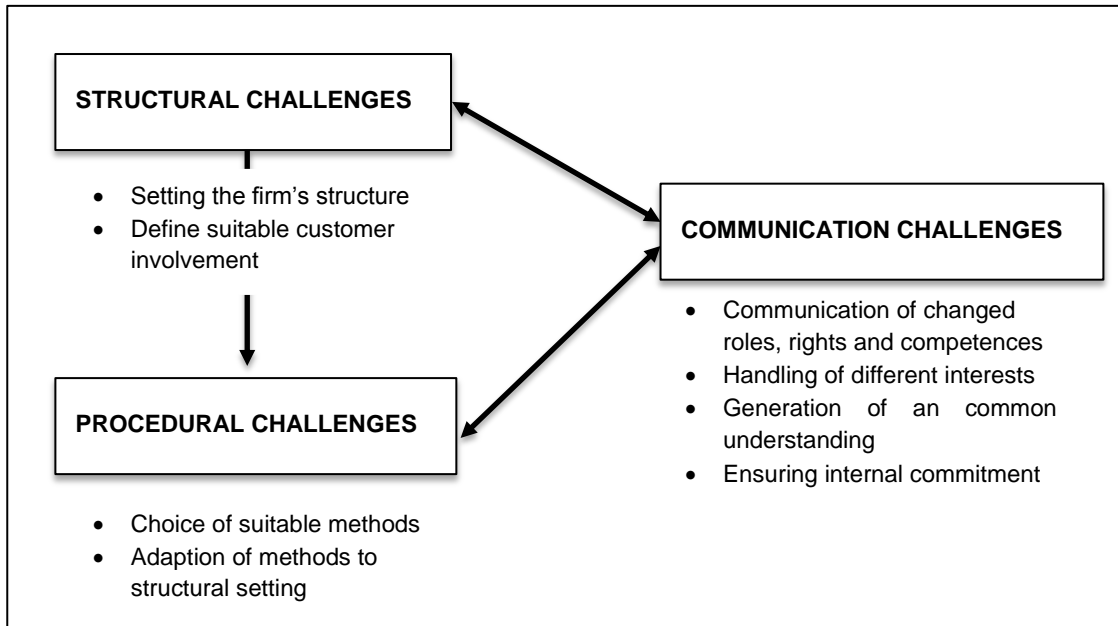
Figure 1. Framework of Interorganizational Challenges in Customer Co-Creation Projects

If the customer is included as co-creation partner, companies' innovation process changes. Our data reveals that this leads to structural challenges, companies have to face. Research shows that firms need to set up their organizational structure to cope with the changing circumstances deliberately. One interview partner states: "…in reality, what happens mostly from my experience…the big discussion on these open innovation approaches, all of these innovation contests, they are mostly driven by the marketing department and, hence, at the end most of the times nothing happens." Setting up specific project teams for co-creation projects or early integration of concerned departments is a common means to cope with this challenge. In particular, interview partners stressed the importance of carefully defining the degree of customer involvement considering the information needed, but also with regard to the social structure and cultural behavior of the organization. For instance, if developers and marketers perceive the growing importance of the customer input as threat, communication challenges might rapidly get fierce.

Considering the degree of inclusion, questions of non-disclosure have been repeatedly mentioned in the interviews. How deep customers should be able to look inside a firm and which kind of internal information they will receive are questions that need to be addressed. The decisions on the degree of openness and related IPR issues have been perceived as rather critical by the interviewees. To cope with these issues interview partners outlined a practice, which they perceive as promising. They report that initial projects should be set up with only a few customers involved. Personal contact between customers and employees is kept close and NDAs are signed. With growing experience in managing IPR issues in co-creation projects, companies then gradually enhance their abilities, develop trust in interactions with customers, and can extend the number of co-creation partners. Based on regular experience in various kinds of co-creation projects, an interviewee who works as innovation intermediary reports about his experiences: *"Of course, there is the problem that you have to open up, reveal information in one or the other way. Immediately concerns that competitors could become aware of generated ideas emerge, or fear of contravening property rights or patents. Somehow it is important that there is a little bit of courage to open up. That's why we often did lead user projects, because companies do not need to be that open, only a limited number of people is involved and they all have to sign NDAs and then you act in a closed controllable circle."*

In addition, data analysis suggests that innovation managers face particular **procedural challenges**. First of all, the data analysis suggests the challenge of selecting an adequate co-

creation method under consideration of the needs of the particular phase of the innovation project (e.g. idea generation or selection). This decision towards a certain co-creation method determines the kind of ideas and information that will be created collaboratively with the customer.

An innovation intermediary explains: *"Well…mostly there is a very, very high need for information. A lot of things are asked before the project starts. A lot of consulting service is demanded from the customers. Of course this is necessary so that we can gain customers. … Often it is about the same topics. Of course community management is a big issue: How do I motivate suitable participants? How do I encourage them to contribute in the long run? How to incentivize? Then, mostly we need to stress the fact that these methods only work well, if the participants are taken seriously and if it is not … if they see it as a serious dialog, right?"*

Related to business strategy (e.g. openness) and information requirements (submitted content), it can be regarded as the firm's task to choose and create the appropriate methodological co-creative setting. Data analysis suggests that standard methods (such as the lead user method) are regularly adapted to the structural context of the specific organizational requirements.

The inclusion of customers as co-creation partners has evoked distinct **communication challenges** according to the interviewees' statements. If the customers are integrated as co-creation partners, the division of labor in the innovation process changes. Customers deliver not only solution, but also need information. As such, they overtake tasks, which are traditionally located within the R&D department. Our data suggests that this leads to challenges of *communicating new as well as changed roles, rights and competences* to internal actors. For instance, tasks of an R&D department can include explaining technical requirements to customers, motivating them to contribute or developing feasible technical concepts building on ideas delivered by customers. Besides analytical skills, empathic communication skills receive increasingly importance. Innovation managers and intermediaries report that a deliberate moderation can enforce roles. Furthermore, they stress the importance of rights, which help to bring all actors on similar levels and to reduce barriers in interaction and communication.

The changes within the roles fulfilled by organizational members can also lead to resistance based on *different* and often confronting *interests*. While dissent can lead to creative outcomes, often this is not the case. Innovation managers report that individual interests of employees often drive resistance. One respondent intermediary outlines the communicational challenge he has observed as follows: *"These projects gain very high transparency and visibility inside the company. This means project leaders can use these projects to push their career. "Hey, he established community xy. That was a great success! Who was it? Good guy!" Then there are people who say: "Hey, somebody is only trying to gain reputation with this community. He so gets on my nerves! That is exactly why I won't contribute!" These persons want to hinder it."* In this context innovation managers' ability to handle different competences and interests has been identified as critical to overcome resistance in co-creation projects.

Data analysis confirms the interdisciplinary character of co-creation projects. Mostly, representatives of several departments within a firm are included. Especially when co-creation projects are implemented for the first time, a major communication challenge is to provoke a *uniform understanding* of what co-creation actually means amongst all internal actors who participate in these projects. If a congruent understanding is missing, collaboration is increasingly inefficient. To cope with this challenge, innovation managers report to support open-minded thinking and communication in their organization.

A key practice to ensure commitment is to communicate benefits of co-creation and in particular success stories. Innovation managers report that they would appreciate quantitative performance measurements of co-creation efforts, but they see difficulties to achieve this in a meaningful way. However communicating the positive effect of collaboration helps to stimulate contribution.

DISCUSSION AND CONCLUSION

With its focus on the organizational perspective of co-creation research, this paper contributes to the ongoing discussion in literature to enhance the organizational viewpoint on co-creation activities [e.g. 4,16], Considering the current debates of co-creation researchers and practitioners, organizations still face certain challenges with the application and conduction of co-creation

projects that hinder to profit from such co-creation activities in the long-term. Based on 20 semi-structured interviews with innovation managers and intermediaries, we explore challenges that organizations face along the conduction of co-creation projects. The results suggest three types of challenges that organizations face for the conduction of co-creation projects. We identified structural, procedural and communicational challenges. The results further suggest that these challenges can be considered as interrelated with each other. Considering the structural challenges, the results suggest that the interviewees perceive the degree of customer involvement and related IPR issues as rather critical. Moreover, considering the procedural challenges, the results suggest the related choice of an appropriate co-creation method as critical. These findings regarding the structural and procedural challenges support the research by Hoyer et al. [19]. Hoyer et al. [19] focus on the general motivations of organizations and users towards collaborative innovation activities and identify IPR issues as one factor influencing the overall degree of co-creation. Considering the communicational challenges, the results suggest the need to address organizational stakeholders in an appropriate way to communicate changed roles, rights as well as competences. These findings can be related to research of Jonas, Möslein and Roth [20] and Ramaswamy & Ozcan [2] who regard organizations as co-creative systems into which each affected organizational stakeholders have to be integrated in an appropriate manner.

The findings of this paper are further supported by research dealing with pilot projects in the field of open innovation, and particular, co-creation [e.g.21]. Moreover, the findings of this paper further suggest that the challenges that organizations face do not only occur for pilot projects. They still seem to remain in the long-term. Thus, it might be advisable for firms to concentrate on the identified challenges to profit from co-creation projects in the long-term.

Even though, this paper addresses a current gap in co-creation literature and research, there are particular limitations that should be kept in mind when considering the results. This study is of pure qualitative nature to gain an in-depth understanding for intra-organizational challenges firms have to cope with during the conduction of co-creation projects. Consequently, future research should use the results of this study as a preliminary basis to set up complementary research designs [e.g.17].

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