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**WHAT IS THE RIGHT REWARD  
FOR PRODUCT CREATIVITY  
DURING AN IDEA GENERATION CONTEST :  
MONETARY, REPUTATIONAL  
OR BRAND FEEDBACK ?\***

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## **What is the right reward for product creativity during an idea generation contest: monetary, reputational or brand feedback?**

Abstract: Idea generation contests are widespread when firms are looking for new ideas of products or services. Integrating the consumer into the New Product Development process is critical and community managers need to tackle the issue of community participation to idea contests. Many incentives are at stake such as monetary, reputational and brand feedback. In an experimentation we found evidence that the best ideas were delivered through the interaction of reputational reward and brand feedbacks. Finally the theoretical and managerial implications are presented.

Key words: Idea generation, reward, reputation, experimentation

Track: Innovation and new product development

## **What is the right reward for product creativity during an idea generation contest: monetary, reputational or brand feedback?**

The *fuzzy front end* stage of the New Product Development process (NPD) is one of the most critical as stated by many scholars (Hauser, Tellis, and Griffin, 2006), one way to tackle this issue is to involve customer in the NPD via innovation contest. Customers are invited to handle many tasks such as sharing new ideas, commenting or voting for the best solution. Firms increasingly use the creativity, skills and intelligence of many individuals encountered in online communities. They are source of ideas and inspiration for new product development (Von Hippel, 2005). Involving the consumer in the NPD has many modalities depending on their implication (high or low), their competence (professionals or amateurs) or depending on who is driving the overall process (company or consumer). This phenomenon is described by scholars and practitioners through different concepts that are used in an interchangeably way: *co-creation of value, user generated content or crowdsourcing*,

Those concepts need further research in order to clarify their understanding, while substantial experience has been gained from the literature addressing the benefits of innovation communities, little is known about the process of involving consumer into NPD from an empirical point of view. In the last few years, a lot of research has been also published related to the design of online innovation contests. Toubia (2006) demonstrated that tailoring carefully the ideation incentives improved the creative output. Introducing monetary rewards has different paradoxical effect on creativity (Byron & Khazanchi, 2012). Moreover participants in ideation contests are not only engaged for monetary motives, other determinants of engagement are at stake since we know that there is a continuum between a pure extrinsic motivation such as a monetary reward, internalized extrinsic motivations such as recognition or community support and pure intrinsic motives such as task enjoyment (Füller, 2011). The interaction experience itself may offer a benefit for participants, as stated by co-creation literature two individual consuming the same product can derive different value according upon the personalized experience they achieved (Prahalad & Ramaswamy, 2004). This experience is shaped by social benefits that consumer obtain by being part of online communities, sense of belongingness is enhanced by interacting with peers or with brands. Jeppesen and Frederiksen (2006) found that members were mainly motivated to innovate not by peer recognition but rather by firm recognition, in line with this research we assume that brand feedback is a key feature of the co-creation process as far as NPD is concerned and needs further research. The aim of this research is to better understand the effects of rewards (e.g., monetary, reputational, brand feedback) on the creative outcome in a co-creation of innovation setting.

### **Theoretical Background**

To go further in this study a clarification between concepts is required, the term customer co-creation is defined as *an active, creative and social process, based on collaboration between producers and customers* (Piller, Vossen, and Ihl, 2012). Co-creation methods include ideation contests, lead user workshops, communities for customer co-creation. User generated content regards all kinds of user contribution from simply posting a video on youtube to

participating to innovation contests, innovation literature posits that successful innovation depends upon sourcing novel ideas and solutions directly from users and marrying these contributions with the internal efforts of the development team (O'Hern & Rindfleisch, 2010). Crowdsourcing means outsourcing a job, traditionally performed by an employee, to a large group of people in the form of an open call (Howe, 2006). Crowdsourcing is performed through online platforms where brands provide a detailed brief and, in order to foster customer engagement, grant several kinds of rewards (monetary, reputation, tokens). The success of such initiative depends on the size of the community, on the participation resulting in an high level of ideas shared on the platform. Crowdsourcing is different from co-creation because it doesn't consider the interaction between peers or between the brand as a key feature, is basically a *winner takes all* model where most of the prizes are won by a small group of participants. According to Gröonros (2011), co-creation of value can take place only if interactions between the firm and the customer occur. If there is no direct interactions no co-creation of value is possible. Co-creation of value better suits the need of this study because the locus of value is in the interaction between firms and customers (Prahalad and Ramaswamy, 2004; Lusch and Vargo, 2004).

In a recent study Wooten and Ulrich (2011) shown the role of feedback quality on idea generation, they found that directed (related to the creative task) feedback is positively associated with quality of entries submitted. In line with this study, Frey and Lüthje (2011) explore the relation between community innovativeness and interaction quality, they demonstrate that there is a strong relation between the two variables. Thus we assume that feedbacks have effects on product creativity because it is rewarding for participants and can be considered as encouraging reward which, in fine, fosters intrinsic motivations. These motivations are responsible for consumer creativity (Burroughs, Dahl, Moreau, Chattopadhyay, and Gorn, 2011). In this paper they invite researchers to study the effect of a new moderator between extrinsic reward and creativity we chose brand feedback. Hence we hypothesize that brand feedback fosters product creativity.

H1: Product creativity is increased when brand feedback is proposed to participants

Many authors highlight the negative impact of monetary rewards, since it reduces intrinsic motivation (Ryan and Deci, 2000) leads to crowding out effect, or lowers task performance. Nevertheless, there is also empirical evidence for the contrary effect. Burroughs et al., (2011), found that with specific creativity training, the negative effect of monetary rewards on creativity turns positive. Researchers who support this effect, are focused on the informational aspects of rewards and their behavioral effects to argue that rewards provide behaviorally relevant information that guides goal-directed behavior and, thus, increase creative performance (Eisenberger, 1992). Thus we hypothesize:

H2: Product creativity is increased when monetary rewards are granted to participants

Economics Nobel Laureate John Harsanyi once said "People's behavior can largely be explained in terms of two dominant interests: economic gain and social acceptance." Marketing literature argues that firms should propose intangible incentives, such as public recognition in order to foster engagement (Sawhney et al., 2005). It is mandatory to study

further the status / reputation mechanism as reputational reward received limited attention (Lampel and Bhalla, 2007). The few studies dealing with reputational rewards argue that they should encourage a broad and comprehensive search for ideas. Prior research suggests that rewards that have a social component (e.g., recognition) prompt individuals to explore broadly while solving a problem. Hence we hypothesize:

H3: Product creativity is increased when reputational rewards are granted to participants

In line with the literature presented previously, we argue that there is an interaction effect regarding rewards and brand feedbacks, product creativity is fostered when participants are rewarded (money or reputational rewards) meanwhile they benefit from brand feedbacks, thus we posit:

H4a: When monetary rewards are combined with brand feedbacks product creativity is enhanced

H4b: When reputational rewards are combined with brand feedbacks product creativity is enhanced

### **Methodology : experiment**

The purpose of this experiment is to test our hypothesis H1 - H4. We designed an online innovation contest very similar to online innovation platforms, we took example on the French website Studyka<sup>1</sup>. In this study we asked the participants to *invent the scooter of the future* for the brand Piaggio. We wrote a brief mentioning all the deliverables such as a clear description of the idea with a sketch showing the design. Our experiment had a 2x2x2 full-factorial between-subjects design: 180 students in engineering participated in this experiment. We manipulated the monetary rewards (with , without reward) x reputational reward (with, without reward) x brand feedback (with, without feedback). We pretested (n=90) the size of reward in order to assess at what level the reward is perceived important: for monetary reward the amount is 250€ and for reputational reward being awarded by Piaggio CEO as *best idea of the year* with the winner's photo on the brand website was perceived important. Regarding brand feedback manipulation, a professor in mechanical engineering was in charge of the comments standing for Piaggio engineer and we included in the web page the mention " *an engineer from Piaggio will comment the quality of your idea*". Participants completed the study individually, as another control, on arrival at the session, the participant was randomly assigned to one of the six treatment cells. The contest lasted 3 weeks, and participants had 2 hours to complete the task. To evaluate the creativity of the idea posted on the platform, we asked two mechanical engineering professors to assess the creative outcome using six-item measure (Burroughs et al., 2011). The manipulation check revealed that participants perceived clearly, the rewards and could remember the comments of Piaggio engineer precisely in the brand feedback condition.

### **Results**

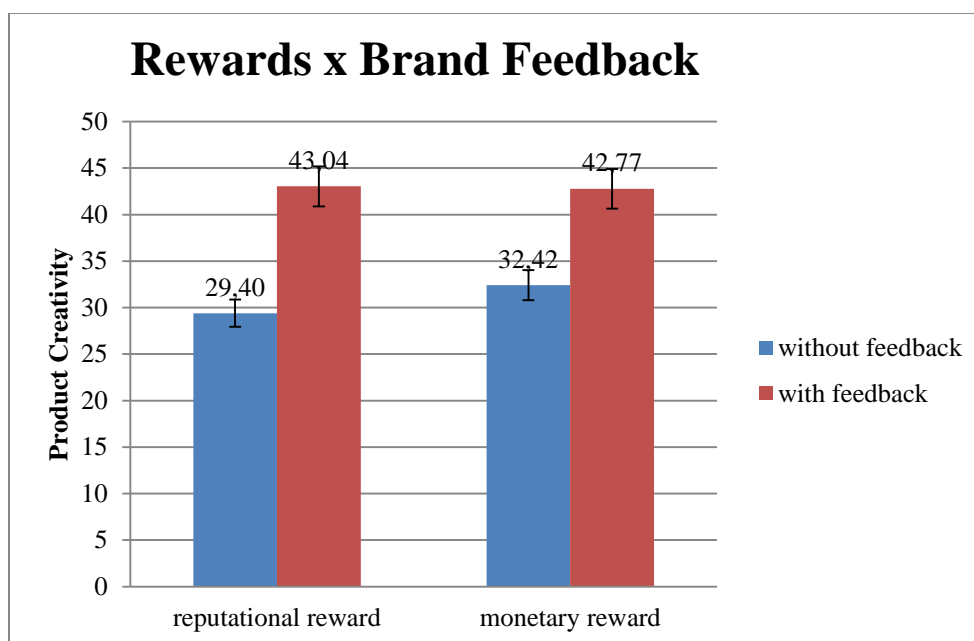
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<sup>1</sup> [www.studyka.com](http://www.studyka.com)

We used a two-way analysis of variance (ANOVA) to assess the influence of the manipulations on product creativity. The results reveal a main effect of rewards and feedback on product creativity. The group with the monetary reward condition was more creative than the group without the reward condition ( $M_{with\ monetary\ reward} = 37.59$  Vs  $M_{without\ monetary\ reward} = 22.20$ ;  $F(1,118) = 61.37$   $p < 0.001$ ). This supports hypothesis H2. As assumed in H1, the group with feedback condition was more creative than the group without feedback condition ( $M_{with\ Feedback} = 31.43$  Vs  $M_{without\ Feedback} = 26.93$ ;  $F(1,118) = 6.27$   $p < 0.001$ ). And finally the group with reputational reward condition was more creative than the group without ( $M_{with\ reputational\ rew.} = 36.21$  Vs  $M_{without\ reputational\ rew.} = 22.63$ ;  $F(1,118) = 46.64$   $p < 0.001$ ), this main effect confirmed our hypothesis H3.

As assumed in H4a, the ideas posted on the website, under the condition of monetary reward, were more creative when combined with brand feedback. ( $M_{with\ monetary\ reward} = 42.77$  Vs  $M_{without\ monetary\ reward} = 20.10$ ;  $F(1,118) = 22.13$   $p < 0.001$ ). There is also a significant interaction effect in figure 1, under the condition of reputational reward, the ideas were more creative when combined with brand feedback ( $M_{with\ reputational\ rew.} = 43.04$  Vs  $M_{without\ reputational\ rew.} = 20.80$  ;  $F(1,118) = 43.27$   $p < 0.001$ ), this result gives empirical support for hypothesis H4b.

**Figure 1. Interaction effects**



### **Theoretical and managerial implications**

This experiment prove evidence that rewards had a positive effect on creativity which is consistent with the Learned Industrious Theory (Eisenberger, 1992), rewards in that case guide goal-directed behavior and thus increase creative performance. This result is contrary to what the Self Determination Theory (Ryan and Deci, 2000) argues, rewards undermine intrinsic motivation and, thus, creative performance (Amabile, Goldfarb, and Brackfield, 1990). Briefly, SDT relies on cognitive processes to explain how rewards increase or decrease

intrinsic motivation, and hence creativity, LIT, on the other hand relies on behavioural processes to explain how rewards may have an effect on the aversiveness of high cognitive effort and thus product creativity. Lastly, LIT and SDT differ in terms of their assumptions regarding performance: LIT assumes that performance is function of learned habits, whereas SDT assumes that intrinsic motivation plays a central role in determining performance.

The main contribution of our research is exemplified by the interaction effect, rewards combined with brand feedback has a greater effect on product creativity. For the groups who were in reward condition, the brand feedback encouraged people to work harder, this is a reinforcement effect, and we argue that the intrinsic motivation is increased because participants felt more competent in approaching the task. As demonstrated by Byron, & Khazanchi, (2012), brand feedback, serves to increase perceived competence and positive affect associated with the task, this clarifies creativity as a performance criterion, and finally all of which will likely to foster creative performance. Our study gives empirical evidence of the central role of brand feedback on creativity, and can be considered as a mediator between reward and creativity, as recommended by Burroughs et al., (2011).

The reputational reward combined with brand feedback has a greater effect on creativity than monetary reward, this result was not expected, and may be explained by an extrinsic internalized motivation effect (Füller, 2011). Reputational rewards enables consumers participating in NPD challenges, to gain peer recognition, in community environment, the ability to vote or like are features which are designed to provide visibility. Recognition belongs to extrinsic motivation but is considered as an internalized motive because it is linked to a psychological trait as self-efficacy (Katz, Blumler, and Gurevitch, 1974). By contributing to new ideas consumers can enhance their expertise-related status and reputation among peer consumers and particularly among brand. Participants, of this study were students who seek brand recognition in order to find a job, this is certainly a limitation of our research as far as it may explain the elevated mean of creativity in the reputational reward condition.

Managerial implications are important. The dominant model of co-creation web sites is composed by confidential settings where nobody sees the submissions of the community, the interaction with peer or brand is reduced to a minimum, the main concern of the organizers is to guarantee participation and confidentiality to sponsors, to do so they grant big rewards, this is the case of Innocentive or E-Yeka. We demonstrated in this research that allowing interaction between brand and community members enables the idea to be upgraded and then the final outcome to be of a better quality. One platform is in line with our point of view is Local Motors, going one step further by allowing their whole community formed by peers, sponsors or webmaster commenting, voting and submitting. This is what co-creation of innovation is about, the value lies in the process of interaction (called value in use by SDT theory).

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