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**Article**

## Beware of Sore Losers! Crowdsourcing Might Have Backfiring Effects Among Participants

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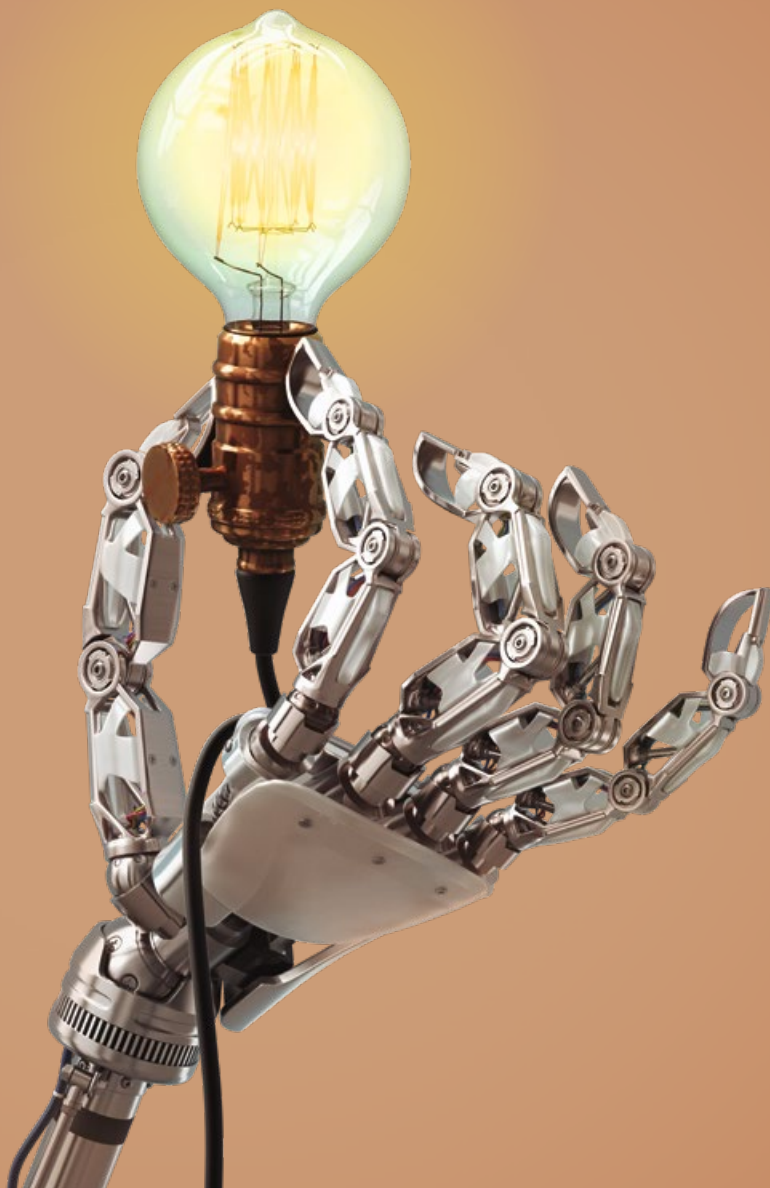
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# Marketing Review

## St.Gallen

### Open Innovation & Crowdsourcing



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# Beware of Sore Losers!

Crowdsourcing Might Have Backfiring  
Effects Among Participants

This research identifies a surprising downside of crowdsourcing: Those participants whose ideas are not selected disengage from the brand after having learned about the outcome. From this perspective, crowdsourcing might better be framed as a communal effort rather than a competition.

Tatiana Karpukhina, Martin Schreier, Chris Janiszewski, Hidehiko Nishikawa

Crowdsourcing, that is, soliciting ideas from a crowd of anonymous participants, has gained popularity among companies across industries over the last few decades. In particular, firms are frequently observed to collect ideas from their customers, and customers seem to be excited. For example, PepsiCo's Doritos brand has been regularly inviting its customers to create their Super Bowl commercials for over a decade, Starbucks has implemented over 200 ideas from 150,000 customers to improve their operations and service offerings, and Lay's "Do Us a Flavor" campaign generated an impressive 3.8 million submissions.

For companies the benefit of launching a crowdsourcing campaign is two-fold. First, crowdsourcing may be an effective means to innovate. In particular, studies show that crowdsourced ideas can be more novel and provide a better customer benefit compared to internally developed ideas for new products (Kristensson et al., 2004; Magnusson et al., 2003; Poetz & Schreier, 2012). In addition—or because of these unique characteristics—, crowdsourced new products have also been shown to sell better – and for longer (Nishikawa et al., 2013).

Second, research has demonstrated that crowdsourcing may function as a marketing tool. Specifically, merely knowing that a company engages in crowdsourcing makes observing customers feel psychologically empowered and they perceive such user-driven brands, compared to more traditional brands, as more customer-oriented and innovative (Dahl et al., 2015; Paharia & Swaminathan, 2019; Schreier et al., 2012). In short, customers value companies that actively seek feedback from people like themselves (Hoyer et al., 2010; Liu & Gal, 2011) and they value the products that result from such initiatives. Indeed, marketing crowdsourced new products as such, that is, marketing the focal product as "customer-ideated" at the point-of-sale has been shown to incrementally increase the

sales of the focal product by up to 20% in the course of a series of field experiments conducted with the Japanese retail chain Muji (Nishikawa et al., 2017).

Furthermore, inviting customers to participate in a crowdsourcing campaign may be an effective engagement tool. Theoretically, any form of customer engagement should have a positive marketing impact (Harmeling et al., 2017; Verhoef et al., 2010). Thus, we might also predict positive effects from crowdsourcing participation. Importantly, however, a crowdsourcing campaign does not end with idea collection. Out of the many ideas submitted the company selects only one or a handful of winners. It is here where an unresolved tension exists: among those whose ideas are not selected, will there be positive or negative effects? Likely the latter.

Not winning implies that one's idea is rejected. Experiencing rejection can be emotionally frustrating and disappointing despite objectively the low a priori odds of winning (Blackhart et al., 2009; DeWall & Bushman, 2011). Can this experience taint the focal consumer-brand relationship? Crowdsourcing participants tend to demonstrate high levels of involvement and identification with the firm to begin with, as they are often recruited from the company's fan base via Facebook, Twitter and other social media platforms (Djelassi & Decoopman, 2013; Franke et al., 2013). Hence, firms should be wary of upsetting these valuable customer groups. If the non-winning participants indeed take the rejection close to heart, is there a way to frame crowdsourcing differently without compromising on the quality of the ideas or the cost of the campaign?

In order to address these questions, we conducted four experiments (the original research is reported in more detail in Karpukhina et al., 2022). In short, this research tested whether backfiring effects indeed exist and how the framing



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Table 1: Study Design Summary (Studies 1–3)

Study	Experimental Design
<b>Study 1</b>	<b>N = 183 (full study completion including 3 winners), M<sub>age</sub> = 22.32, 61.4% female</b>
Crowdsourcing firm	Local student café on campus (WU Vienna)
Task	New “grab&go” breakfast bundle
Experimental design	2-part between-participants (student sample)
Experimental manipulation	Crowdsourcing participants vs. non-participants
Winner announcement	In the second lab session (Time 2)
Dependent measure	50% off coffee voucher redemption behavior (incidence and time)
<b>Study 2a</b>	<b>N = 152 (full study completion including 4 winners), M<sub>age</sub> = 22.23, 72.7% female</b>
Crowdsourcing firm	University merchandise store (WU Vienna)
Task	New product ideas
Experimental design	2-part 2 x 2 between-participants (student sample)
Experimental manipulations	1. crowdsourcing participants vs. non-participants 2. competitive vs. communal framing of the crowdsourcing task
Winner announcement	In the second lab session (Time 2)
Dependent measures	Customer engagement composed of purchase and word-of-mouth intention (1=low, 7=high)
<b>Study 2b</b>	<b>N = 169 (full study completion including 1 winner), M<sub>age</sub> = 22.54, 50.5% female</b>
Crowdsourcing firm	New Asian restaurant on campus (WU Vienna)
Task	Name for the restaurant
Experimental design	2-part between-participants (student sample)
Experimental manipulation	Competitive vs. communal framing of the crowdsourcing task
Winner announcement	In the second lab session (Time 2)
Dependent measures	Customer engagement composed of purchase and word-of-mouth intention (1=low, 7=high)
<b>Study 3</b>	<b>N = 169 (full study completion including 1 winner), M<sub>age</sub> = 22.54, 50.5% female</b>
Crowdsourcing firm	One of the top three convenience store chains in Japan
Task	Name for a new mascot
Experimental design	Difference-in-differences field experiment
Experimental manipulation	Competitive vs. communal framing of the crowdsourcing task
Winner announcement	By email invitation to log-in and check the results
Dependent measure	Loyalty card spending tracking for 28 days pre- and 28 days post winner announcement. Pre-announcement spendings allows for balanced comparison of the experimental groups post-intervention.

Note: For more details regarding the studies' methods and findings see Karpukhina et al., 2022.

of crowdsourcing affects participants' post-campaign engagement.

## Methodology

We ran four experiments embedded in real crowdsourcing campaigns in cooperation with local brands.

All studies encompassed three major phases: (1) collection of ideas by means of crowdsourcing; the key experimental manipulations took place at this stage; (2) announcement of the winning idea(s) selected by the focal brand representative(s); (3) collection of customer engagement measures, such as voucher redemption behavior, future purchase and word-of-mouth intention, and actual spending behavior.

With the aim to investigate potential negative effects among non-winning crowdsourcing participants, we compared customers who participated in a firm's crowdsourcing to those who did not. Critically, the decision to participate was not left to the customer as this would have posed a severe threat to the internal validity of the test: customers who decide to participate in a crowdsourcing initiative may be systematically different from those who decide against it. Thus, participants were randomly assigned to a crowdsourcing participation or a control condition. Therefore, any differences observed between conditions are due to the treatment, the focal crowdsourcing participation.

In addition to testing the backfiring effect of crowdsourcing, we utilized three different contexts to assess how the framing of crowdsourcing affects results. In particular, we developed a fundamentally different approach to framing the focal crowdsourcing call (communal effort vs. competition).

Importantly, all studies followed the recommended best practices of conduc-

## Management Summary

Crowdsourcing is frequently used by firms to leverage the collective creativity of their customers. This research identifies a backfiring effect among crowdsourcing participants: those whose ideas are not selected (i.e., the overwhelming majority), disengage from the crowdsourcing brand, with implications for subsequent sales. From this perspective, firms might consider framing crowdsourcing as a communal effort rather than a competition.

ting crowdsourcing (Hanine & Steils, 2019; Hofstetter et al., 2018; Piezunka & Dahlander, 2019). Specifically, we actively informed participants about the result of the crowdsourcing and thanked them for their contributions. Furthermore, to recognize their time and effort, parti-

icipants were offered small gifts that either were available to all or raffled out to some. Finally, standard monetary incentives were paid to all participants enrolled in the crowdsourcing through the research lab.

A total of 5,481 unique customers (72.8% female) submitted 5,217 ideas in the course of four experiments. For a summary of the various study designs employed, see table 1.

## Findings and Recommendations

### The Overlooked Downside

Study 1 provides initial evidence for the unintended negative effect of crowdsourcing. The study was conducted in cooperation with a local student café. The owner was looking to add “grab&go” breakfast bundles to their offerings and

needed ideas. All participants received a 50% off coffee coupon as a small token of appreciation at the end of the study. We observed voucher redemption behavior at the focal café over a 30-day period. The results demonstrate that non-winning crowdsourcing participants significantly delayed their next interaction with the local café. Despite an attractive discount, only 9% of crowdsourcing participants redeemed their coffee voucher within the first ten days; this percentage was more than twice higher for control participants (21%). Given students’ need for coffee on campus, and the good deal of the voucher, the focal effect continuously decreased over time resulting in similar overall redemption behavior after a 30-day period. Yet, crowdsourcing participants took almost twice longer ( $M = 18.87$  days) to redeem their coupons compared to control participants ( $M = 10.53$  days). This effect was statistically significant. Thus, there is a sharp and immediate drop in brand engagement following the feedback that one’s idea was not among the winners.



Source: © Adobe Stock.



Study 2a conceptually replicates the backfiring effect of participating in crowdsourcing in the context of new product idea generation for a university merchandise store. In particular, the results demonstrate that the bitterness of losing manifests also in other key marketing measures such as future purchase and word-of-mouth intentions.

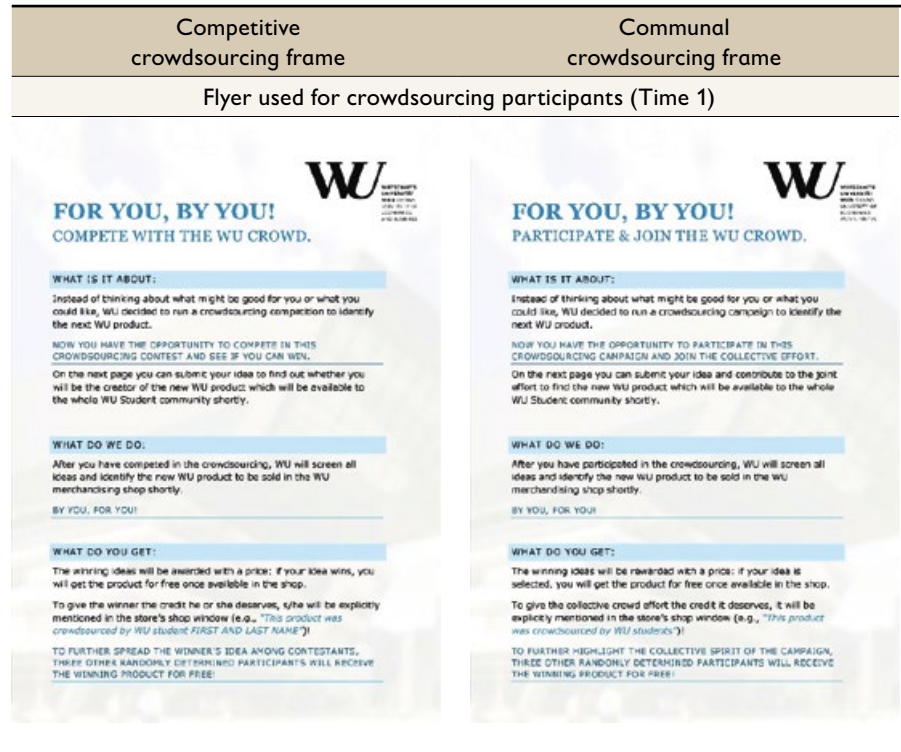
What can managers do about this negative effect?

### Credit to All

With the crowd as the key element of crowdsourcing, managers typically need to engage a high number of customers within the community to get a few high-quality ideas (Fombelle et al., 2016). Crowdsourcing initiatives are typically framed as individualistic competitions or contests where the winner competes against all others and takes all. Such framing implies that all others are losers, while in fact they are contributors who as a joint community brought about the final outcome. With this in mind, we propose that it might be better to frame (= phrase) a crowdsourcing initiative as a joint communal effort rather than a competition as this may strengthen consumers' feeling of having contributed to the final outcome even if factually the winning idea was submitted by someone else (see figure 1 for a visualization of the competitive vs. communal crowdsourcing frame employed in study 2a).

Empirical evidence indeed shows that compared to crowdsourcing participants exposed to a typical competitive framing, participants in a communal framing condition scored significantly higher on future purchase and word-of-mouth intention. This effect was obtained across two different crowdsourcing settings (studies 2a and 2b). Interestingly, we found no interaction between the focal framing and the participation factor (but instead two main

Figure 1: Sample Study Design Materials (Study 2a)



effects; study 2a). This suggests that the communal framing also helped to lift observing customers' engagement (and not only the post-campaign engagement of crowdsourcing participants). While this finding resonates with prior research on

customers who merely observe crowdsourcing efforts of brands (Dahl et al., 2015), future research might dig deeper into the processes underlying this interesting pattern of effects.

Moreover, study 3, a difference-in-differences field experiment utilizing loyalty card data obtained from a Japanese convenience store chain, demonstrated that after learning about the outcome, participants in the communal (vs. control) condition exhibited significantly higher aggregated spendings within the first 3 days (+8.34%), 7 days (+5.41%) and even 14 days (+4.53%). Similarly to study 1, the effect is attenuated over a longer time period. This again is likely due to the specific study set-up: leading market position of the focal brand (20% market share), initially high customer loyalty, habitual purchasing behavior, and economically incentivized study participation.

#### Main Propositions

- 1 Crowdsourcing might have a backfiring effect among crowdsourcing participants.
- 2 Not seeing one's idea win might negatively affect customers' subsequent brand engagement, with potential implications for sales.
- 3 The way crowdsourcing is framed might matter in this regard.

## Winner Announcement (Time 2)

Here is the result of the crowdsourcing competition. The product that will be produced and available at WU store soon.

**LIBRARY SEE-THROUGH BACKPACK**  
By contest winners [redacted]  
A stylish see-through backpack made from extra-strong plastic that can hold all the knowledge those heavy books can give!  
This comfortable backpack will relieve the stress from your shoulders and make carrying the knowledge light and easy. Provided in 3 different color tunings, tastefully designed, with multiple pockets for all your things, this transparent backpack will make your student life stylish and efficient.  
NO THINGS LEFT BEHIND: You Can Take It With You To The Library!

Here is the result of the crowdsourcing campaign: The product that will be produced and available at WU store soon.

**LIBRARY SEE-THROUGH BACKPACK**  
Crowdsourced by WU Students  
A stylish see-through backpack made from extra-strong plastic that can hold all the knowledge those heavy books can give!  
This comfortable backpack will relieve the stress from your shoulders and make carrying the knowledge light and easy. Provided in 3 different color tunings, tastefully designed, with multiple pockets for all your things, this transparent backpack will make your student life stylish and efficient.  
NO THINGS LEFT BEHIND: You Can Take It With You To The Library!

## All conditions

### Thank you note (Time 2)

The WU store thanks you for your help and feedback in the course of this study.

Why don't you check out the store at some point?

Stay in touch and have a nice day!

## Resulting product (approx. 3 months after data collection)



Source: Karpukhina et al. 2022.

## The Best of Both Worlds

There was a concern that the communal framing intervention may interfere with the benefits of crowdsourcing, namely, consumers' eagerness to participate and the resulting quality of their submissions. A thorough investigation of this possibility (studies 2a and 2b) demonstrated that the quality of the ideas per se and participants' efforts did not differ across the framing conditions. Thus, framing a given crowdsourcing initiative as a communal effort (rather than a competition) does not have any negative impact on idea quality.

## Discussion

Prior research has predominantly focused on the positive effects of crowdsourcing as an effective means to innovate (Kristensson et al., 2004;

There are two sides to every coin, and there is a downside to crowdsourcing, too.

Magnusson et al., 2003; Nishikawa et al., 2013; Poetz & Schreier, 2012) and a powerful marketing tool (Dahl et al., 2015; Hoyer et al., 2010; Liu & Gal, 2011; Nishikawa et al., 2017; Paharia & Swaminathan, 2019). Yet, there are two sides to every coin, and there is a downside to crowdsourcing, too. In particular, our findings demonstrate that consumers who actively participate in crowdsourcing and lose – that is, the overwhelming majority of all participants – temporarily disengage from the brand, reflected in slower coupon redemption (study 1) and lower purchase intent and

desire to engage in word-of-mouth (studies 2a and 2b).

Theoretically, the best way to keep all the participating customers happy is to create a setting where everyone is a winner or, at least, the number of winners is maximized. While seemingly unrealistic, this could be possible in online contexts where the cost of “producing” a winning idea is very small. For example, IKEA and Gatwick Airport invited their customers to use Instagram to post brand-related visual content (e.g., home interior, terminal view). The content was then reposted on the brand's official Instagram page quoting the creator. Our own exploratory studies on this topic show that such treatments have a significant positive effect on brand-related marketing measures. That is, making customers winners in the course of crowdsourcing might boost their subsequent brand engagement.



Nonetheless, even in contexts where only one or a few winners are feasible, the overwhelming majority of contributors do not have to feel like losers. Firms can give the credit where credit is due and acknowledge every customer's contribution. This approach is inexpensive and can be adopted from the very beginning: by the framing of the focal crowdsourcing call. As such, reframing crowdsourcing from a competitive contest to a communal effort was shown to increase participants' intention to patronize the brand (studies 2a and 2b) and led to higher actual spending with the hosting brand shortly after learning about the campaign's outcome (study 3).

A limitation of the experiments presented here is that we did not capture the effects' underlying psychological process. What is driving the negative participation effect and the positive effect of the communal framing intervention (among participants and observers)? Future research might look into this matter and thereby provide further actionable advice for crowdsourcing managers. Our own exploratory follow-up studies on this topic revealed that the communal framing increases the participants' feeling of contribution. In other words, despite the factually identical outcome of the crowdsourcing campaign, the non-winning participants no longer feel like losers, but rather as contributors.

Future research might also look into potential nuances within competitive crowdsourcing. How does the specific feedback provided to losers affect results and to what extent does the number and type of winners as well as the underlying selection process (e.g., company executives vs. target customers) matter?

In sum, our work uncovers an unintended negative effect of crowdsourcing. Importantly, this negative effect occurs among highly loyal and involved

customers, namely among those who voluntarily invest their time and effort to support a brand's crowdsourcing initiative. However, the overwhelming majority of these consumers do not win the crowdsourcing contest. The resulting bitterness of losing manifests itself in subsequent disengagement with the brand. To counter this negative effect,

we propose an inexpensive and easy-to-implement strategy that might not only have positive effects among participants but also among observing customers. Specifically, reframing crowdsourcing to stress its communal element – as a call to join efforts of the community instead of entering a contest, to “participate” instead of “compete”.

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