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Crowdsourcing: A Double-Edged Sword Outsourcing Strategy

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Abstract

Nowadays, companies have to increasingly face a lack of internal creative ideas. This has led them to outsource their ideation process through crowdsourcing contests in order to benefit from the creativity of participants on the Internet. Crowdsourcing is a successful outsourcing strategy for companies but includes some limitations that the authors recall in this chapter. Since some authors tend to praise the merits of this new practice, others are suspicious regarding certain aspects of its application. It is in this context that the authors offer a synthetic view on the benefits and risks of creative crowdsourcing. They also offer an analysis of applicable strategies that are commonly used to circumvent major obstacles related to the organization of creative contests and to improve the success of a crowdsourcing campaign. Based on the literature and the results of two qualitative studies, the authors point out the main managerial implications of crowdsourcing initiatives in terms of implementation, benefits, limits and conditions of success.

Keywords: outsourcing, crowdsourcing, benefits, limits, conditions of success

1. Introduction

Crowdsourcing is defined as “the act of taking a job done by the employees of a company or institution and outsourcing this task to a large and undefined group of Internet users in the form of an open call for contribution” [1, 2]. Crowdsourcing is implemented by companies to meet a variety of needs, ranging from simple or routine tasks (e.g., data collection, proposal of informational content) to creative or ideational such as artistic design [3, 4].

A company is invited to choose among two broad options when it comes to setting up crowdsourcing practices. The first is based on the creation of dedicated platforms allowing

them to permanently receive fresh ideas and suggestions (e.g., IdeaStorm of Dell, Cvous, Open Oxyane, MyStarbucks Idea). The second is to use specialized intermediation platforms (e.g., Mechanical Turk for simple crowdsourcing or routine activities; eYeka, Creads ou Studyka for creative crowdsourcing activities; and Innocentive for crowdsourcing of inventive activities) [5–7].

One of the most popular and promising crowdsourcing initiatives is crowdsourcing contests [8]. Companies are increasingly using crowdsourcing contests in different industries for both problem-solving and decision-making. They may take the form of idea competitions, design competitions, idea contests or innovation and research tournaments [9].

The increased use of crowdsourcing activities can be explained by the different benefits it provides for companies: the possibility of gathering new ideas to complement those of professionals [10, 11], accelerating innovation [12], reducing the launch failure rates of new products and services [13], low cost innovation [14, 15] or strengthening the customer relationship and improving the image of the company [10, 16].

While several researchers recommend the use of crowdsourcing for its multiple benefits [2, 3, 17], others agree on the difficulties encountered in setting up these campaigns. They allude the difficulty of finding potential participants or evaluating the large number of proposals received by the crowd [4, 11, 18]. Similarly, some authors argue about the risk of generating negative feelings, which is essentially linked to the perceived unfairness by participants (i.e., not all participants are equally rewarded at the height of their efforts) (Decoopman and Djelassi, 2009; [3, 19, 20]).

Based on the context provided earlier, this chapter seeks to provide a comprehensive overview on creative crowdsourcing strategies. Prominent authors have different opinions regarding crowdsourcing practices. Some authors tend to praise the merits of this new practice, while others are skeptical regarding certain aspects of its application. It is in this context that the authors offer a synthetic view on the benefits and risks of creative crowdsourcing. This chapter will also offer an analysis of applicable strategies that are commonly used to circumvent major obstacles related to the organization of creative contests, and to improve the success of a crowdsourcing campaign. The chapter is organized as follows. The authors begin with presenting the methodology employed to systematically provide an insightful synthetic framework. Then, based on the literature and the results of two qualitative studies, the authors point out the main managerial implication of crowdsourcing initiatives in terms of implementation, benefits, limits and conditions of success.

2. Research methodology

Using a qualitative approach by interviewing experts and participants in crowdsourcing contests, this chapter seeks to understand the main benefits and limits of this particular outsourcing strategy. The authors also aim to shed light on its conditions of success. Therefore, we collected insights from fifteen semi-structured interviews with participants in crowdsourcing contests (cf. **Table 1**), and ten interviews with managers in charge of crowdsourcing contests (cf. **Table 2**).

Interview	Interviewee	Occupation	Age	Recruited via	Interview duration
IN01	Sami	Designer	28	Eyeka.com	35'10
IN02	Coralie	Engineer	23	Studyka.com	23'
IN03	Terrence	Master's student	22	Studyka.com	22'
IN04	Freddy	Student	24	Studyka.com	20'
IN05	Paul	Consultant in big data	27	Studyka.com	32'
IN06	Julien	Student	22	Studyka.com	19'33
IN07	Maxence	Entrepreneur	25	Studyka.com	62'
IN08	Amine	Master's student	24	Studyka.com	43'
IN09	Jean-Louis	Financial project manager	26	Studyka.com	67'
IN10	Carine	Master's student	22	Studyka.com	35'32"
IN11	Florence	Developer-writer	57	Creads.fr	46'21"
IN12	Robert	Computer engineer	25	Studyka.com	33'
IN13	Nadine	Senior advertising manager	29	Eyeka.com	41'49"
IN14	Doriane	Artistic director	43	Creads.fr	20'
IN15	Amina	Educational specialist	29	Creads.fr	25'25"

Table 1. Sample of participants in crowdsourcing contests.

Company	Crowdsourcing initiative	Respondent's position	Interview duration
French multinational food-products corporation	Voting for the next version of a product	Product manager	31'
Intermediary platform organizing individual creative contests	Creative contests for well-known brands	Responsible marketing	55'
		Regional director	3'
French home-improvement and gardening retailer serving thirteen countries	Idea proposal and preference voting from DIY enthusiasts	Responsible for coordinating innovation projects	47'
Intermediary platform and French leader of student challenges	Student competitions focused on generating new ideas	Technical department manager	50'
		Marketing responsible	33'
		Commercial director	23'
Intermediary platform organizing individual creative contests for freelance designers	Creative contests about creating logos, slogans, etc. for companies	Associate director	21'
French multinational food-products corporation	Proposal and vote for the products to see shelves	Policy officer	60'
Intermediary platform organizing individual creative contests	Example contest: Submitting innovative ideas to reinvent the delivery and installation of kitchens and bathrooms	CEO	48'

Table 2. Profile of interviewed managers.

We ensured for information richness through sample diversity [21]. Both, participants and managers, were rigorously selected according to diversity criteria, i.e. age, gender, and profession [22]. Moreover, the authors ensured that participants varied in their amount of experience with crowdsourcing contests and the type of contests they participated in or managed.

All participants were recruited through three creative contest platforms namely Studyka, eYeka and Creads. The selected platforms were of different types: The first is the French leader of student innovation group challenges. The second platform offers individual challenges asking participants to submit ideas and original content. The last mediation platform is composed of a community of freelance graphic designers. Managers of these platforms were interviewed as well. The latter sample was completed by managers of international companies, which have launched creative contests on a national level.

3. Implementation of crowdsourcing contests

The results of the interviews with expert managers enabled us to identify six steps required to implement a crowdsourcing contest. Indeed, and far from being a simple promotional tool, crowdsourcing is a thoughtful strategy and a process structured around several steps. First (1) step is to define the problem. The question that arises is *“What is the problem to be solved?”*. It starts with how this problem can be communicated to the community. *“Identification of any problem could vary; from the search of new ideas, new concepts, products, packaging or advertising to new communication media or customer experience.”* For Instance, a manager could pursue a goal of brand promotion to make it more visible and acceptable. *“I would like my brand to be better known.”* Next comes (2) the formalization step and the declination of the problem in a brief (i.e., instructions). *“We will transform the problematic of the company in a brief to the creators, that directs the people towards the problem,” “It has been formalized in our business brief, in a PDF document that is four pages long.”* The next phase (3) refers to launching the contest online. This step is backed up by intensive communication efforts, which aim to maximize the number of participants *“We will put the operation online and we will try to set up a communication plan to ensure maximum participation.”* This phase is followed by the reception of participants’ contributions (4). In the next step (5), the authors observe a phase in which a jury chooses the best solution among the mass of received contributions. *“We make a first selection of about thirty files in general. This was followed by the request for further information and detailed input. Based on this, we select about five contributions. Then these five teams are invited to a ceremony to present their projects in front of the jury.”* After going through several proposals, the companies could reward the winning proposals. In the sixth and step (6), the winners are offered a proper contract to ensure that they get the reward they deserve. At this step, the participants are also provided professional assistance to bring positive changes to their input.

By carefully studying different companies’ approaches toward the organization of crowdsourcing campaigns, the authors have concluded that some companies prefer outsourcing the crowdsourcing procedure to specialized mediating platforms such as eYeka, Studyka or Creads. This is mainly due to a lack of internal resources or expertise *“Maybe because they lack in either the*

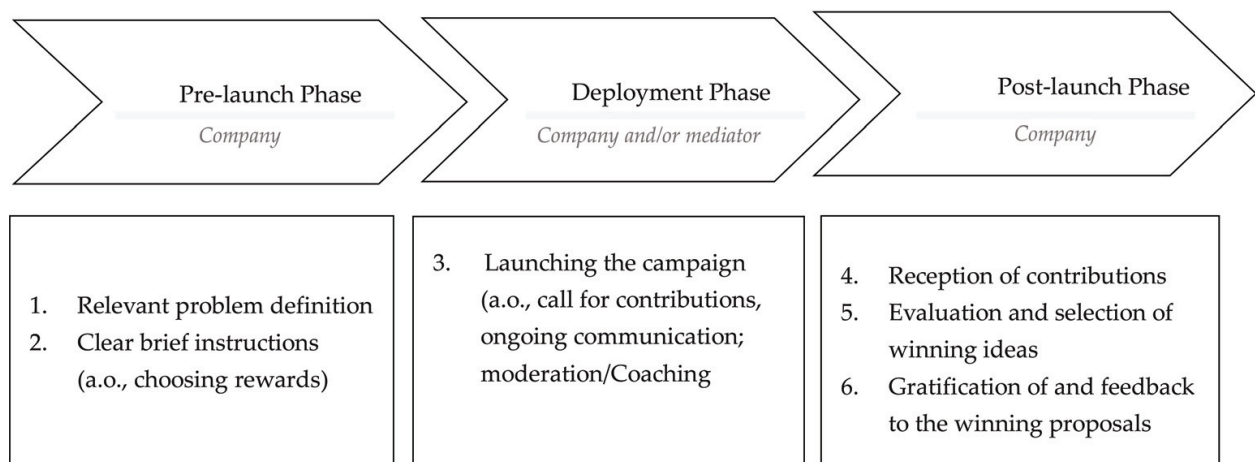


Figure 1. Implementation stages of creative crowdsourcing campaigns.

required skills or the network of collaborators such as professional agencies. Lack of creativity could be another obstacle." Companies also choose mediating platforms to save time and improve reactivity.

These mediating platforms position themselves as advisers and support companies by giving companies access to a community and to technical tools *"We accompany companies in carrying out these campaigns so that it takes them less time," "Because they cannot do it on their own, because they do not have the technical tools," "It's very difficult for a company to organize a crowdsourcing campaign on its own. It is very complicated so I see no reason for a company to take this step alone."*

While several experts agree on the benefits of outsourcing crowdsourcing competitions, others, on the contrary, do not share this opinion. They advise companies to be autonomous in the management of their call for contributions. They put forward arguments related to the lack of transparency toward participants *"It seems odd to me to subcontract this campaign because it is an activity which often means being transparent to consumers."* **Figure 1** summarizes the different stages of implementing a crowdsourcing initiative.

For instance, a recent contest launched by the French mediating platform "Studyka" (cf. **Figure 2**) illustrates the main steps described above.

4. When crowdsourcing is profitable for companies

The first part of this chapter shows that organizing a crowdsourcing campaign requires considerable efforts and a careful consideration of the structure and the steps of such competitions. Whether these efforts are favorable or risky has been discussed in the scientific literature. It is a difficult task to provide a clear answer regarding the profitability of creative contests. In this chapter, the authors argue that creative crowdsourcing refers to a double-edged sword, which depends on the company's investment and involvement to a great extent. To illustrate this assumption, the authors first present the benefits that are commonly cited in the crowdsourcing literature, before addressing the risks that are generally associated with it.

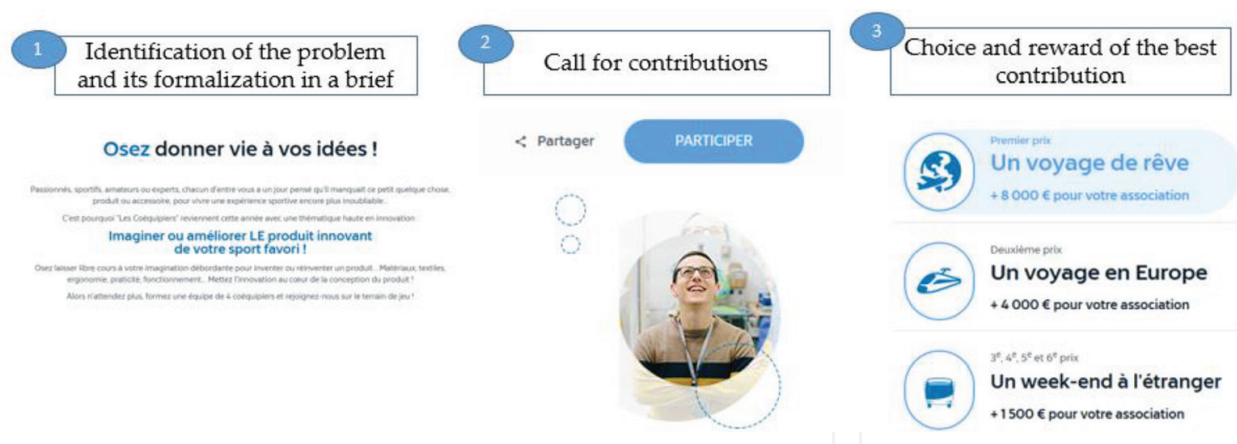


Figure 2. Example of the main organizational stages of creative crowdsourcing.

While presenting the different benefits and risks, the authors include citations of interviewed managers and participants to face scientific arguments to real-life observations.

4.1. Improving the commercial acceptability of products and services by the market

Even though many crowdsourcing benefits may be cited, previous research discusses the generation of new ideas tailored to the needs and expectations of consumers. It addresses the critical issue of launch failure rates of new products and services [13] and maximizing their commercial acceptance rate [20]. Crowdsourcing is here perceived as a pre-test of the product before it is launched on the market [23]. In addition, the crowd benefits through its participation from the opportunity to express its needs and to make proposals to improve existing products [24]. Companies can probe the need of the market by having access to customer and prospect preferences, which serve them in a useful way [25].

As a result, by using the wisdom of the crowd, companies benefit from a broad access to participants' skills. They thereby circumvent the limits of internal innovation [26]. Using the crowd also allows the company to access consumer ideas and resources if they cannot solve the problem internally [4]. Over the last years, the number of crowdsourcing initiatives, which seek to gather the freshness and diversified ideas and solutions has increased [3, 11].

In this context, Poetz and Shreirer [11] demonstrated that the crowdsourcing process makes it possible to produce attractive ideas whose score is significantly higher in terms of profit and novelty, and thus allows the company to gather new ideas to complement internal suggestions.

Interviewing experts shows that their sayings are in line with the scientific literature. They are unanimous in considering the need to innovate as one of the biggest priorities of crowdsourcing *"The first one will be of course to innovate, so to appeal to a community that helps to find ideas and which will provide potential solutions to problems."* Interviewed professionals consider crowdsourcing as an undeniable source of ideas, which allows companies to collect the preferences of current and potential customers more quickly compared to traditional means of co-determination of needs and expectations with customers *"The novelty first, other things second, like the speed with which they can harvest ideas compared to what is traditionally possible, such as focus groups. It is much faster."*

4.2. Mass of proposals at a low cost

Proponents of crowdsourcing consider that the major advantage of this practice lies in its relatively low cost [3, 4, 12]. Crowdsourcing allows the company to access a large pool of individuals around the world [27] and to reduce the relative cost [28]. Several researchers point out the benefits of integrating non-experts into the innovation process, both in solving scientific problems and in the design of products and services. They offer better and less expensive solutions in comparison with traditional research development programs [8].

Lebraty [15] points out that the cost advantage is not always guaranteed because some crowdsourcing initiatives can have counterproductive effects, as the company must manage the risks of dissatisfaction. Similarly, Le Nagard and Reniou [29] consider that some companies perceive the cost of crowdsourcing as high (human and financial resources).

4.3. Strengthening the customer relationship and the brand image of the company

Another benefit associated with crowdsourcing is of the strengthening of the customer relationship and the brand image of the company [10]. Crowdsourcing allows the company to improve its visibility through accessing a large group of users online [30].

Experts reveal that crowdsourcing allows firms to be present on the Internet and to speak about the brand, which generates positive word-of-mouth: *"We also try to create buzz, to improve our visibility on the web."* They evoke their desire to improve their brand image by using crowdsourcing. *"From an image point of view, it's important to say that we are customer-centric."*

Similarly, managers recognize the positive impact this proximity can have on the company's results. *"If we do well and we succeed in creating proximity and commitment to consumers, it will certainly be reflected in sales and in the market share."* For them, the relational objective manifested in the proximity complements the commercial objective of maximizing sales.

5. When crowdsourcing carries risks for companies

Besides the many benefits of crowdsourcing as an innovation strategy, the scientific literature warns about some side effects or risks that can appear if the campaign is not managed properly. In the following paragraphs, the authors present the main limits of creative contests and confront them to the interviewed managers' vision.

5.1. Risk of loss of control by the company

Enkel et al. [31] identified a set of risks that companies must manage when investing in crowdsourcing projects. For these authors, when the company loses control over the crowdsourcing process, it also risks losing control over its long-term innovation strategy. The potential risk of losing control is associated with the potential impact on the image of the company. In this case, participants who do not win become hostile toward the company [32]. They generate negative word-of-mouth by sharing their negative experience online, which can

be detrimental to the company's brand image [33, 34]. Some researchers talk about "crowdslapping" to describe this phenomenon [2, 23].

Participants, who question the credibility of such competitions, often highlight the random and subjective nature of the gain. As a result, they do not feel rewarded for the effort they provide *"The gain is too random to settle on it, we are too disappointed if we focus on the gain"* (Paul, participant).

5.2. Risk of disclosure of key information

When it comes to discussing the potential risks of crowdsourcing, some researchers do not hold back to stress the risk of losing the confidentiality of certain strategic information. The open and visible nature of crowdsourcing is likely to divulge the company's strategy to competitors [32].

This risk makes the company lose the advantage of benefiting from relevant ideas and proposals of the crowd ([14]b). The risk is greater when the company engages in crowdsourcing initiatives to solve complex problems or develop new products. This finding explains why companies prefer to use traditional means of innovation and internal teams in the case of breakthrough innovations [29].

5.3. Risks related to ethical and legal issues

Consumer empowerment increases the complexity of managing crowdsourcing initiatives for businesses [35]. They face ethical issues related to the management of intellectual property rights. Indeed, some participants claim the total ownership of their ideas. The absence of a clear intellectual property policy can lead to a feeling of unfairness [10, 14]. Intellectual property is considered as a sensitive topic that companies must manage with great care [29]. Researchers insist on the need to clarify the rules related to intellectual property rights [3, 4] and on the use of ideas received by the crowd [29]. As a result, companies need to inform participants upstream on generating new ideas. They have to make clear if they remain owners of their ideas or not [36].

Another ethical point is what some authors call "free work" or "free exploitation" of participants [14, 37]. If crowdsourcing is based on the voluntary participation of individuals, few proposals are "paid." In this case, the authors talk about "over-exploitation" [23]. They compare the amount of work provided by the crowd and its real value on the market, with the remunerations paid by the companies. Participants fear being exploited by the company, which results in a feeling of mistrust and skepticism in the way of interacting with brands.

"I had no knowledge of property rights, which troubled me, but it's true that my parents told me to not be exploited" (Amina, participant). The mistrust refers to the feeling of participants of being manipulated by the company."

Participants mention the negative effects that crowdsourcing generates when it comes to the exploitation of their ideas *"I feel like companies only do this for their human resources department. So, they don't care for ideas"* (Caroline, participant) and the lack of transparency *"Often, even if we won the first place and when our recommendations were accepted, we received no return. We received*

no acknowledgement regarding the confirmation that our strategies were accepted. There was lack of communication and that is very disappointing.” (Paul, participant).

6. Crowdsourcing success determinants

To avoid any failure of crowdsourcing operations, we asked managers to decide on the possible determinants of success. According to them, the success of a crowdsourcing operation is often attributed by the experts to a good preparation by the company or the mediating platform “It is crucial for the company and the management to focus on preparation and clearly defining the objective of the whole exercise.” According to the managers, if the team is ready and well prepared, it is far easier to explain the objectives and to solve the problem. *“I think that what is needed is to have a clear brief that must be unambiguous, keep it simple and seek input for new idea generation only. The participants must not be involved beyond idea generation level. They should not be requested to take part in product positioning. It is necessary that the request is very clear and understandable. In short, it is mighty important to have a clear brief.”* The professionals managing the crowdsourcing process should also be prepared to face negative participants’ reactions. *“Because it takes great effort of preparation and framing, so you should anticipate the possible reactions of consumers.”*

The analysis of expert interviews shows that only a good preparation is not enough. It is pivotal to communicate the message effectively through the right media to encourage consumers to participate. *“Good communication before and after the event could make a big impact on the outcome.”* Managers also stress the need to provide feedback after the participation of consumers. By providing feedback to participants, companies show that they value their participation.

As far as the management of the reward system and intellectual property is concerned, professionals insist on the transparency and the clarity of the roles between the company and participants.” *That it has a fair remuneration system for participants and is clear about intellectual*

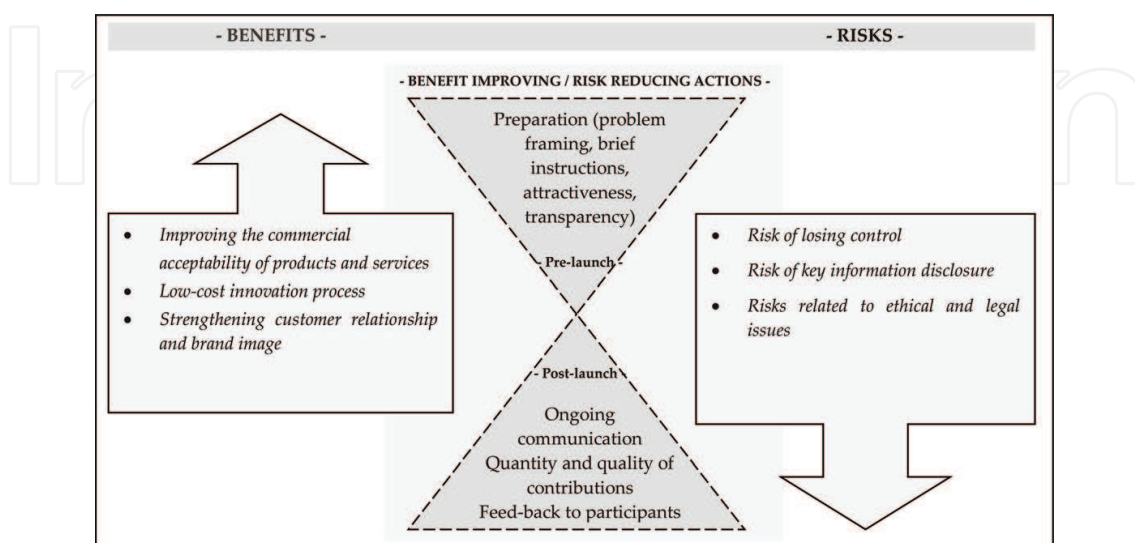


Figure 3. Benefits, risks and success determinants of creative crowdsourcing.

property rights”, “It is therefore necessary that the rules are clear and transparent. “The company must communicate these rules upstream. Another factor of success of crowdsourcing initiatives is the nature of the problem companies need to solve. It must be interesting enough to attract the target audience. “This is an interesting topic for communities, so there is no crowdsourcing if the problem is not interesting. The second thing is that we need to have a community and third are the technical tools that bring companies and participants closer together.”

Finally, managers consider that the success of any crowdsourcing initiative depends on the number of participants and the mass of contributions they are capable to submit. *“The number of ideas, the number of participants and on the other hand the quality of participation,” “First by looking at how many participants we had and second the quality of the contributions”* overall findings are summarized in **Figure 3**.

7. Conclusion

This chapter provides a synthetic overview on a relatively recent phenomenon from a scientific point of view. While some authors support crowdsourcing initiatives by focusing on the benefits of this practice, other researchers fear that the limits linked to this outsourcing strategy outweigh its benefits. In this chapter, the authors confronted both views and analyzed the conditions of success. The authors conclude that crowdsourcing presents clear benefits and helps circumventing companies’ major internal obstacles.

However, the financial aspects of running a crowdsourcing program need to be studied carefully. Moreover, the company and the concerned professionals should commit themselves fully to this program. Their level of commitment would determine the outcome. Therefore, it is important to engage themselves at every step of the crowdsourcing program. Crowdsourcing should not be considered as a low-cost strategy. This comprehensive approach requires time and investment to yield the benefits discussed in the literature.

Crowdsourcing campaigns, if managed effectively, can reap positive results such as the inclusion of fresh and innovative ideas. It can also maximize the commercial acceptance rate of new products or services. Therefore, the professionals must be very aware of the importance of managing this strategy with great care. The failure of crowdsourcing contests can be detrimental for firms as it influences the company’s innovation strategy over the long term and can strongly affect their brand image.

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References

- [1] Howe J. Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business. Crown Business; 2008
- [2] Howe J. The rise of crowdsourcing, *Wired* n°14-06, article disponible en ligne. 2006. Available from: <http://www.wired.com/wired/archive/14.06/crowds.html>
- [3] Burger-Helmchen T, Penin J. Crowdsourcing: Définition, enjeux, typologie. *Management et Avenir*. 2011;**1**(41):254-269
- [4] Schenk E, Guittard C, et al. Towards a characterization of crowdsourcing practices. *Journal of Innovation Economics*. 2011;**7**(1):93-107
- [5] Bayus BL. Crowdsourcing new product ideas over time: An analysis of the Dell IdeaStorm community. *Management Science*. 2013;**59**(1):226-244
- [6] Djelassi S, Decoopman I, et al. Les facteurs de non-participation au crowdsourcing créatif: Quid des professionnels et des non-professionnels du monde de la création? In: *Proceedings of the 31st congress of the AFM*; 20-21 May; Marrakesh, Morocco; 2015
- [7] Roth Y, Brabham DC, Lemoine JF, et al. Recruiting individuals to a crowdsourcing community: Applying motivational categories to an ad copy test. In: Garrigos Simon FJ, Pechuán IG, and Estelles-Miguel D, editors. *Advances in Crowdsourcing*, 15-31. Springer: New York, NY; 2015
- [8] Piller F, Walcher D, et al. Toolkits for idea competitions: A novel method to integrate users in new product development. *RandD Management*. 2006;**36**(3):307-318
- [9] Zhao YC, Zhu Q, et al. Effects of extrinsic and intrinsic motivation on participation in crowdsourcing contest: A perspective of self-determination theory." *Online Information Review*. 2014;**38**(7):896-917
- [10] Djelassi S, Decoopman I, et al. Customers participation in product development through crowdsourcing: Issues and implications. *Industrial Marketing Management*. 2013;**42**(5): 683-692
- [11] Poetz MK, Schreier M, et al. The value of crowdsourcing: Can users really compete with professionals in generating new product ideas? *Journal of Product Innovation Management*. 2012;**29**(2):245-256
- [12] Whitla P. Crowdsourcing and its application in marketing activities. *Contemporary Management Research*. 2009;**5**(1):15-28
- [13] Piller F. *Innovation and Value-Creation: Integrating Customers in the Innovation Process*. Cambridge, MA: Academic Press; 2005
- [14] Renault S. Travailler pour des fèves de cacao. Crowdsourcing ou pourquoi les organisations jouissent de la contribution des Oompa-Loompas. *Gestion*. 2013;**30**(4):67-86
- [15] Lebraty JF. Externalisation ouverte et pérennité, Une nouvelle étape de la vie des organisations. *Revue Française de Gestion*. 2009;**192**(2):151-165

- [16] Divard R. La participation du consommateur aux campagnes publicitaires: ses formes, ses avantages et ses limites. *Gestion*. 2014;**38**(4):51-73
- [17] Schenk E, Guittard C, et al. Crowdsourcing: What can be outsourced to the crowd, and why? Technical report, available online. 2009. Available on: <http://raptor1.bizlab.mtsu.edu/sdrive/DMORRELL/Mgmt%204990/Crowdsourcing/Schenk%20and%20Guittard.pdf>
- [18] Carpenter H. Motivating the crowd to participate in your innovation initiative. In: Sloan P, editor. *A Guide to Open Innovation and Crowdsourcing*, 76–84. Kogan Page Limited: United Kingdom; 2011
- [19] Djelassi S, Decoopman I. Innovation through interactive crowdsourcing: The role of boundary objects. *Recherche et Applications en Marketing*. 2009;**31**(3):131-152
- [20] Füller J. Refining virtual co-creation from a consumer perspective. *California Management Review*. 2010;**52**(2):98-122
- [21] Glaser B, Strauss A. *The Discover yof Grounded Theory*. Hawthorne, NY: Aldine Publishing Company; 1967
- [22] Yin RK. *Qualitative Research from Start to Finish*. New York: The Guilford Press; 2011
- [23] Brabham DC. Crowdsourcing as a model for problem solving: An introduction and cases. *Convergence: The International Journal of Research into New Media Technologies*. 2008; **14**(1):75-90
- [24] Zwass V. Co-creation: Toward a taxonomy and an integrated research perspective. *International Journal of Electronic Commerce*. 2010;**15**(1):11-48
- [25] Morgan J, Wang R, et al. Tournaments for ideas. *California Management Review*. 2010; **52**(2):77-97
- [26] Surowiecki J. *The Wisdom of Crowds: Why the Many are Smarter than the Few*. US: Doubleday; 2005
- [27] Schweitzer FM, Buchinger W, Gassmann O, Obrist M. Crowdsourcing: Leveraging innovation through online idea competitions. *Research-Technology Management*. 2012;**55**(3): 32-38
- [28] Kohler T. Crowdsourcing-based business-models: How to create and capture value with the crowd. *California Management Review*. 2015;**57**(4):63-84
- [29] Le NE, Reniou F, et al. Co-innover avec les clients: entre intérêt et réticence pour les entreprises grand public. *Décisions Marketing*. 2013;(71):59-75
- [30] Kankanhalli A, Ye H, Hock Hai T. Comparing potential and actual innovators: An empirical study of mobile data services innovation. *MIS Quarterly*. 2015;**39**(3):667-686
- [31] Enkel E, Gassmann O, Chesbrough H, et al. Open RandD and open innovation: Exploring the phenomenon. *RandD Management*. 2009;**39**(4):311-316

- [32] Roth Y. Comprendre la participation des internautes au crowdsourcing: une étude des antécédents de l'intention de participation à une plateforme créative, PhD thesis in management. Université Paris 1 Panthéon Sorbonne; 2016
- [33] Blazevic V, Hammedi W, Garnefeld I, Rust RT, Keiningham T, Andreassen T.W, et Walter C. Beyond traditional word-of-mouth: An expanded model of Customer Driven influence. *Journal of Service Management*. 2013; **24**(3):294-313
- [34] Gebauer J, Füller J, Pezzeri R, et al. The dark and the bright side of co-creation: Triggers of member behavior in online innovation communities. *Journal of Business Research*. 2013; **66**(9):1516-1527
- [35] Hoyer WD, Chandy R, Dorotic M, Krafft M, Singh SS. Consumer co-creation in new product development. *Journal of Service Research*. 2010; **13**(3):283-296
- [36] Enkel E, Perez-Freije J, Gassmann O. Minimizing market risks through customer integration in new product development: Learning from bad practice. *The authors Journal Compilation*. 2005; **14**(4):425-437
- [37] Favreau E, Roth Y, Lemoine JF, et al. Travail ou pas? L'autonomie des participants au crowdsourcing et ses implications juridiques, 7èmes journées d'études TIC.IS, Nîmes (France); 2014

