

# Making Nongovernmental Organizations More Innovative Through Donor Surveys

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**Abstract**—We analyze if it is worthwhile for Nongovernmental Organizations (NGOs) to ask donors for creativity suggestions. First, we sent a survey asking for innovative ideas to 38,794 donors to four of the most relevant Spanish NGOs. In a second phase, we asked Spanish NGOs to evaluate their interest in the list of innovative ideas derived from the first survey. Only 0.65% of the donors provided suggestions with a high degree of innovation, but these were enough to elaborate a list of 35 interesting ideas. In their evaluation of the list as a whole, 40% of the NGOs considered the list of interest and 25% of high interest. As far as we know, it is the first time that this type of research has been conducted.

**Index Terms**—Innovation, nonprofit, NGO, survey, Spain.

## I. OPEN INNOVATION AND NGOS

An organization that wants to foster creativity should want everyone in their institution to produce novel and useful ideas [1]. Organizations should increasingly take advantage of ideas and knowledge developed externally, even if it is highly disseminated. Reference [2] pointed out that “innovating firms are searching for interesting ideas far beyond their organizational boundaries”. Evidence suggests that NGOs follow this example, but probably to a much lower degree than firms - especially as it seems that NGOs do not rely much on donors for innovations.

We framed this research around the idea of open innovation. It is a successful concept proposed by [3]. It has been criticized by [4], for whom “this paradigm represents little more than the repackaging and representation of concepts and findings presented over the past forty years”. Open innovation comes from business innovation, but we believe that with adaptation it can be applied to any type of organization. It is not a clearly defined concept [5], [6]. By open innovation we understand the organization’s search for external sources that can be relevant in the generation, application or distribution of innovations. After analyzing the literature on open innovation [7] conclude that there is “a tendency towards a broader definition and application of the term.” Our research follows this line. Some authors are concerned that “as more studies on open innovation are published, the confusion of terms used invariably would arise leading to an increasing need to clarify the terminology used” [8]. Although this is a valid concern, we have found that, in the majority of cases, it is possible to know the specific meaning of open innovation that the authors are using from the context of each study. In such

instances, clarification is less of a requirement.

Many innovations can come from outside the organization, although most of them are normally carried out internally [9], [10]. Reference [11] indicates that closed and open innovation should be “a continuum rather than two clearly separated alternative models”.

Reference [12] claims that companies would die if their employees did not find new ways to improve them. In a similar argument [3] states that, even if most innovations fail, companies that do not innovate will not survive. For him, “the task of managing innovation is vital for companies of every size in every industry”. The prospects may be less dramatic for NGOs than for businesses, but NGOs will be much better off if they are capable of finding new ways to be innovative; if they succeed, NGOs could work more efficiently. Reference [13] comments that benefitting from the contributions of external participants is crucial to NGOs.

Reference [14] states “the trend in corporate practice towards opening up the firm’s boundaries to outside innovation seems to continue”. The study of [15] concludes “that it is worthwhile for companies to adopt the open approach to innovation”. Reference [16] also found that the firm’s performance improves with open innovation. He demonstrates that “strong innovators have a more open innovation process”. For [17] open innovation not only stimulates the generation of ideas and products, but “strengthens an organization’s social capital, which is, in turn, positively related to firm performance”. Reference [18] concludes that, in the long-term, open innovation is a beneficial strategy, especially for the inbound side, while closed innovation may be better in the short-term. Inbound is the exploitation of externally sourced knowledge, taking advantage of the discoveries of others, while outbound is the external commercialization of internally held knowledge [9]. These authors discovered that open innovation is useful not only for high tech companies, but also for more mature and traditional industries. We have found that it is valuable for NGOs as well.

Some authors have found that open innovation is beneficial in some cases, but not in others. Reference [19] stated that “openness towards external sources can result in a higher level of innovation performance” but also that “openness towards cross-sector companies decreases the process innovation performance”. Reference [20] confirmed their hypothesis that “more openness in the inside-out process leads to a higher process innovation performance” and “to a higher radical innovation performance”, but their study did not support the hypothesis that “more openness in the inside-out process leads to more product innovations” and “to a higher share of sales of new products”. A study of Taiwan automotive electronics firms concluded that the most technological have a higher level of cooperation with

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scientific agents, but that it is not a key factor to develop new products, especially if they have strong in-house research and development [21].

Open innovation is not easy. According to [22], its practice lags behind its promises and needs “a deep involvement to really pay off”. One of the problems is that the difficulty of accessing knowledge “challenges the ability to induce total control over the generation process and its end results” [23]. For [24] the interaction of people for innovation “requires a great deal of thought, planning, and preparation”. Reference [25] conclude that “the enthusiasm for openness needs to be tempered by an understanding of the costs of such search efforts”. For them, the use of too many search channels may dissipate efforts. And there are risks with open innovation, such as “the access to valuable information by competitors or the loss of control over the innovation” [26]. Reference [27] recognize the effectiveness of open innovation, but also that it has potential problems, like the lack of coordination. For them it is necessary to find out the appropriate methods and practices. Reference [28] advise that more openness does not always lead to greater success in the market if it cannot be guaranteed that it will fit with other parameters, such as strategy. For [29] different levels of openness may be adequate at different stages. Reference [30] explains that a trend toward open innovation can be appreciated, but it is not an imperative for all companies or innovators. All these problems and nuances regarding open innovation are important, but many researchers indicate that they may be compensated by its advantages [9], [15], [16], [18], [31].

In promoting innovation, what is good for business most of the time is also good for NGOs, and what is bad for business is bad for NGOs, but to a different degree. Perhaps innovation is less pressing for NGOs than for businesses, but not innovating may also cause NGOs serious problems and may even lead to their disappearance. To a certain degree, NGOs compete for donors, volunteers, governmental attention and prestige. Reference [32] emphasize that in some aspects like fundraising, competition among NGOs is very strong. This competition includes the permanent need to get new donors, reactivate lapsed supporters and to not only ensure that existing donors do not quit, but also increase their donations in the following year. It seems that the competitive pressure among NGOs will be greater in the future, especially in countries with economic crises. This will demand a more business-like approach on a larger scale. Reference [33] advises that, if adopted, open innovation should not occur at the expense of concentration on goals, or its performance may decline.

The importance of innovation in NGOs has been recognized often. Reference [34] considers that a basic function of NGOs is to be innovative. Reference [35], commenting on the UK and the US, claims “the allure of innovation in finding solutions to social problems has been a holy grail, driving the grant-making programs of many foundations and public bodies”. He criticizes this process, but we believe that it is a good policy, because innovation allows for better output with lower resources. The relevance of innovation in charity websites has been pointed out by [36]: “it will require continuous and innovative

development, regular re-evaluation and numerous adjustments to meet changing conditions”. There are non-profit organizations dedicated to enhancing innovation, like the Social Innovation Park Ltd located in Singapore [37]. They are very abundant. In Canada alone there are 14,000 [38].

The needs that NGOs try to face are so important and overwhelming, that they desperately need new ways to do things better. Problems like world poverty or climate change need new approaches because the actual practice of NGOs is only a small palliative and not a real solution. The activity of NGOs is extremely relevant for the people and the environments that benefit from it, but much more is needed to be done. NGOs will probably always be capable of only achieving relatively small improvements, but innovation could multiply their effect. The role of the NGO managers is essential. According to [39], “it is critical that leaders be willing to experiment and introduce new projects in their organizations”.

## II. HYPOTHESES OF THE RESEARCH

The hypotheses that we analyzed in this research are:

**H1.** “It is possible to obtain interesting innovative ideas by asking a large number of NGO donors”. We will consider that the hypothesis seems to be valid if we are able to elaborate a relevant list of innovative ideas based on donor suggestions. These suggestions were requested in the first survey.

**H2.** “The majority of NGOs will consider the whole list of innovations suggested by donors to be of interest”. In a second survey, we asked the Spanish NGOs to evaluate the complete list of innovative ideas. The suggestions were derived from the first survey.

**H3.** “An appreciable number of innovative ideas, evaluated individually, are applicable to a high degree by an appreciable number of NGOs.” We asked the Spanish NGOs to evaluate the list of innovative ideas one by one.

As far as we know, those hypotheses have not been tested before. Of course, there are many precedents of researchers and companies that have asked for ideas from their stakeholders. For example, on November 25, 2013, José I. Goirigolzarri, President of Bankia Bank, sent a personal letter to his clients in which, after informing them about the bank’s situation, he asked for opinions and suggestions, and provided his e-mail for replies. We asked him for the results of the initiative and in an email on December 18, 2013, Mr. Goirigolzarri answered that he sent around 4 million letters and that he had received, up to that date, more than 5,000 responses and 500 suggestions. The rate of responses (0.1%) and of suggestions (0.01%) were very low, but the quantity was not, because of the large number of survey’s.

Another of the many cases of opening to the world to harvest innovative ideas was the IBM Jam of 2006, a massive online conference aimed to accelerate the launch of new technologies. According to [40], IBM Jam “involved 150,000 IBM employees, family members, business partners, clients (from 67 companies) and university researchers”. They consider that it was, to a considerable degree, a success. Reference [41] studied the process of generating ideas by asking employees in two automotive

firms, and in both cases they were relatively successful.

Advances in telecommunication technologies enable a better and easier integration of suppliers, clients and other stakeholders into the innovation process. To a certain degree, donors can be considered a special type of supplier, but they are also a kind of client that should be treated very well by their organizations. In contrast with what seems to be a low use of donors by NGOs for obtaining innovative ideas, firms use suppliers and clients (or users) as their primary source of external innovation. Reference [25] found that among UK companies, suppliers were the most utilized source of knowledge innovation. Suppliers were used by 67% of the sample, ranking first among 16 sources, but they nearly tied with clients or customers. Reference [31] obtained relatively similar results from a list of eight types of external innovation sources but, on the contrary, there was a very small advantage for costumers as main source for innovation. Reference [42] concluded that the involvement of users is important for open innovation implementation and [43] found that "firms involving users for the purpose of innovation perform better in terms of innovative sales than do other firms". Reference [44] discovered that clients are a good source of incremental innovation, but sometimes they may be counter-productive for radical innovations because they tend to be conservative. That may also happen with donors. The solution is to also use other internal and external sources of innovation. For NGOs, donors should only be a part of their systematic search for innovation, while maintaining diverse, intense and efficient relationships with all their stakeholders, among other measures.

### III. A SURVEY TO GATHER INNOVATIVE IDEAS FROM DONORS OF NGOS

We have analyzed to which degree the donors of four of the biggest NGOs in Spain could be a source of innovative ideas to them. We studied Manos Unidas, Ayuda en Acción and two more who wished to remain anonymous, each with more than 10,000 donors. All are among the 20 biggest NGOs in Spain, in terms of the number of donors. Three are dedicated to promoting development and one to preserving the environment.

We elaborated on a survey in which we wanted to reach as many donors as possible to gather their creative ideas. If an extensive base of donors were asked for something as scarce and valuable as innovative ideas, a greater number of different relevant ideas could be obtained than if the same survey was sent to a smaller number of donors, even if it is a representative sample. The proportion of excellent answers will always be very small, but the larger the survey is, the greater the chances are of gathering ideas that are both different and better. The logic is that, as more donors are reached by the research, the better the result will be.

If the survey is sent to a large enough population instead of a sample, there are greater chances that the first email inviting them to participate in the survey may be enough to get representative results and to obtain the relevant information. Reference [45] proposed that the researcher may increase the sample size instead of spending a larger proportion of the budget trying to increase response rates. If

the sample is large enough, it may not be necessary to bother donors with follow-up emails, which can often be multiple; [46] consider that it is convenient to send at least two reminder emails in order to obtain better response rates. For [47] multiple reminders provide better results than one-time follow-ups. In his study, the first reminder increased returns on average by 20%, the second by 12% and the third by 10%. All these reminders annoy recipients, which can be avoided if the survey is sent to a large enough population. That is very important in the case of donors, because NGOs want to bother them as little as possible. Surveys should only be sent to a large population when absolutely necessary because, if many researchers do it frequently, the population may receive more surveys and the survey saturation will be even higher. Reference [48], analyzing published studies that utilize e-mail surveys, found that response rates have significantly decreased since 1986. One of the reasons he points out is survey saturation, an increasing problem for researchers.

We requested that the NGOs send an invitation with a link to the survey to all the donors for whom they had an e-mail address. We offered the NGOs a confidential individual report with their own data, and a report with the aggregated data of all participants, so that they could compare their results. Of the four NGOs that did the survey (see Table I), B, C, and D sent it to all the donors for whom they had an email, and A to part of them, because they did not want to bother all their donors. We are not commenting on to which NGO the data belongs, since we guaranteed them anonymity.

TABLE I: SURVEY DATA

N G O	Sur- veys sent	Ans- wers	Res- pon- se rate	Sam- ple size nee- ded <sup>1</sup>	Equi- valent res- ponse rate <sup>2</sup>
A	4700	222	4.7	808	27
B	16060	2489	15.5	780	319
C	11034	767	7.0	764	100
D	7000	856	12.2	734	117
TO- TAL	38794	4334	11.2	813	533

<sup>1</sup>With a confidence level of 95.5% and margin of error of 3.5%, in relation to total donors of whom the NGO has their email.

<sup>2</sup>In relation to sample size needed  
Source: own survey

The survey was sent to 38,794 donors and 4,334 answers were received, with an 11.2% response rate. The percentage of participation was small, but the number of answers was high because of the large amount of surveys sent. With a confidence level of 95.5% and margin of error of 3.5, the sample should have been of 813 people and the equivalent response rate would have been 533%. The equivalent response rate would have been needed if a representative sample were used, instead of sending the survey to the largest possible number of recipients that is reasonable.

Our data supports our suggestion that with a large sample, it is easier for a single e-mail with the initial invitation to be enough to get representative results without needing reminders. This is shown by the aggregate data and the data of each NGO. The three NGOs that sent the survey to their whole population had an equivalent response rate (in

relation to the sample size needed for a confidence level of 95.5% and margin of error of 3.5%) of over 100%, but with big differences between them: 319% (B), 116% (D) and 100% (C). A, the only NGO in which the survey was sent to a large part of their donors instead of to the whole population, got a low equivalent response rate of 27.5%. Of course, other factors may influence this, such as the number of emails that the NGOs sent to their donors (if there are too many, the response level could be lower, but that was not the case) or maybe the type of organization (dedicated to development or to environment, if it is religious or not, etc.).

Several authors have found that e-mail and web-based surveys have a lower response rate than postal surveys [49]-[53], although fewer authors did not find differences [54], [55]. For [56], if web surveys are not combined with other survey modes, they tend to have a moderate or poor performance in response rates. Reference [48] found that, in e-mail surveys, the factors with the greatest influence were the year in which the survey was taken (the longer ago the better) and the number of reminders. By analyzing student feedback, [49] did not find differences in the quality of the answers between both methods. On the contrary, [57] found that the students answered more freely and with more extreme opinions in web-based surveys than when using an in-class survey administrative method. A study of [58] found that, in their case study, in comparison with face-to-face interviews, web-based surveys have a similar rate of participation, but a lower rate of full responses. Reference [59] believe that the advantages of web-based surveys (cost-reductions, time saving and the circulation in real time of the results) overcome its disadvantages. The main argument against e-mail surveys seems to be its lower response rate, but this is less applicable in surveys sent to a great number of recipients. By e-mail it is possible to access larger populations more easily. It also has the advantage of being cheaper than postal surveys, at least for big samples. Surveys sent to larger populations do not imply extra costs and they can be administered at the same speed, except in open questions with many answers.

#### IV. WHAT WILL DONORS DO IF THEY HAVE AN INNOVATIVE IDEA

In our survey, we asked the donors *Suppose that you think of some innovative idea to improve this NGO*. The number of donors that answered this question was 4,030. Of these donors, 63.47% answered *I would share it*. The majority of donors would communicate an innovative idea to the NGO, but taking into account that donors usually are highly motivated (if not they would not give an economic contribution), that percentage is not that high. The fact that 37% would not share their suggestions implies the potential loss of many interesting ideas. NGOs should strive to obtain better results.

Of the respondents, 19.85% answered *I do not know the adequate channel to communicate it*. Since the four NGOs have means of contacting their donors, this demonstrates a deficiency in their communication strategy, especially in providing donors with an easy channel to relate with them. One of the main reasons why donors might not share

innovative ideas has a simple remedy: the creation and awareness of a better channel to communicate any type of suggestion. In any case, 20.63% of those that do not know the current channel for getting in contact would communicate innovative ideas. That implies that the donors are confident in finding a way to do it.

Of the respondents, 10.99% answered *I do not have time to think about innovative ideas*. It is a small percentage. Another reason why NGOs should develop ways to make donors think creatively about them is that the majority of donors seem to have enough time for it.

Of the respondents, 7.69% answered *I think they will ignore me*. That is a very low figure which shows that the majority of donors have a great level of confidence that the NGO will respond. In a box for comments, four of the respondents that said the NGO will ignore them stated that they had sent a suggestion but did not receive an answer; one respondent said that he received the answer 18 months later, after having sent several reminder emails to the NGO. Those comments reflect bad practices from the NGO, because it should always answer donor requests. In any case, 22.58% of the donors that think they will be ignored would still communicate an innovative idea to the NGO if they had one.

The donors that think the NGO will ignore their innovative suggestions have a lower degree of satisfaction than donors in general (table II). In order to conclude this, a Pearson's Chi-square test was performed to contrast independence between these two variables (donors who think their suggestions will be ignored and degree of satisfaction). The outputs for the test showed a significant relationship among them with  $\chi^2(4, N=4306) = 364.84, p < 0.05$ . Within the categories of average, low and very low satisfaction, the number of donors who believe they will be ignored is greater than expected. This would suggest that lower levels of satisfaction are related to higher chances of feeling that they will be ignored. That may suggest that one of the causes of dissatisfaction is the belief that the NGO will not take them into account, in some cases because they had a bad experience in this regard. It can also be observed that the donors have an elevated degree of satisfaction with their NGO: 87.29% answered high or very high.

TABLE II: THEY WILL IGNORE MY IDEA \* DEGREE OF SATISFACTION

	General degree of satisfaction. Number (%)	Donors who think they will be ignored. Number (%)
Very high	1372 (31.86)	38 (12.38)
High	2387 (55.43)	131 (42.67)
Average	465 (10.80)	103 (33.55)
Low	54 (1.25)	24 (7.82)
Very low	28 (0.65)	11 (3.58)

Source: own survey

Of the respondents, 7.64% answered *An innovative idea will never occur to me related with this NGO*. This result shows that there is a good level of self-confidence among donors about their own ability to be creative, and reflects that there is a high potential of getting creative ideas by

asking donors.

#### V. ASKING DONORS FOR INNOVATIVE IDEAS

We asked donors to write any innovative idea that they had to improve the functioning of the NGO. This question was answered by 1,198 donors, 28% of all respondents of the whole survey, but 14% of the answers were void, mainly because they wrote that they do not have anything to say. 24% of all respondents provided valid ideas, which is an appreciable result. It shows that, to a certain degree, donors are willing to participate, even in a difficult task like providing innovative ideas. It seems that NGOs should ask their opinion more often. Table III reflects on the number of innovative suggestions received by degree of innovation, according to the criteria of the researchers. Sometimes an idea was considered highly innovative, not necessarily in itself, but because it suggested an idea of interest to the authors of this article.

Highly innovative ideas were scarce, but they do exist. They were provided by only 0.65% of the people that answered the survey. In relation to all the surveys that were sent, the percentage is even lower, at 0.07%. That is why it is better to send as many surveys as possible, up to a point, rather than just to a representative sample. Reference [60] claimed “the development of innovative products benefits from the generation of a high number of creative ideas”. In the case of NGO donors, our research shows that it is necessary to ask a large number of them to get an appreciable number of innovative suggestions. We obtained one idea of high interest for every 1,368 surveys sent, and many of them were repeated. Nevertheless, the donors provide 28 different ideas of a high degree of innovation. Hypothesis 1 states: “It is possible to obtain interesting innovative ideas by asking a large number of NGO donors”. Our research validates it.

TABLE III: NUMBER OF RECEIVED IDEAS AND THEIR DEGREE OF INNOVATION

Degree of Innovation	Number of ideas received	% of ideas received	% of total survey answered (4,334)	% of surveys sent (38,794)
High	28	2.34	0.65	0.07
Average	264	22.04	6.09	0.68
Low	736	61.44	16.98	1.90
Void	170	14.19	3.92	0.44
Total	1,198	100		

The majority of the ideas obtained were considered of low innovation (61%), but nevertheless many of them are of some interest. The most frequent idea was of a very low degree of innovation. It was to stop sending information on paper and instead send it by email. That answer was given by 127 donors, 13.61% of all the answers to this question. The donors believe that the NGO is wasting money on them, when these funds could be used to help resolve problems. It is valuable information, although not innovative.

Reference [61] indicated three challenges of open innovation. The first is the harvesting cost, although in this case the cost was not that high because the number of answers was manageable. Secondly, unsystematic coverage, meaning that the ideas submitted do not comprehensively

cover all of the most critical facets of the problem. In our survey, donors did not tackle all the problems of the NGOs, but at least a great part of them. The third challenge is that the process generates large numbers of shallow ideas. That has happened but donors have provided some good ideas, which is what's most important.

#### VI. THE INNOVATIVE IDEAS PROVIDED BY THE DONORS, EVALUATED BY THE NGOS

We created a second survey to evaluate 35 innovative ideas, which were selected from donor suggestions and elaborated on taking into account our reflection about them. Most of those ideas come from the category of high degree of innovation, with some from the average degree and some from a combination of both. We sent the survey by email to 56 Spanish NGOs, usually to the top operating manager. The survey was sent to all the Spanish NGOs with more than 12,000 donors and to some others that were smaller, but well known and in which it was possible to obtain the email of a person in charge. We asked the NGOs to rate every one of the innovative ideas and to evaluate all of them as a whole. For each idea we wanted to know to which degree (high, average or low) were they applicable to each NGO, or if they were already applied, or if it was not applicable to that type of NGO. We got 20 responses. We believe that nearly all must be from different NGOs, but the survey was anonymous; responses from more than one person from the same NGO were very rare. It is hard enough to get one organization to complete a long survey of 36 questions, and it is much more difficult getting two or more people from that organization to do it. But we know that it happened at least once, because in one compiler there was one more answer than there were NGOs. We did not detect any more repetition. The response rate was 34%, or a little below what it would be if there were additional cases of more than one answer from the same NGO. For [62], surveys of organizations normally receive significantly lower return rates than surveys of individuals. Reference [63]-[65] agree that, in surveys of organizations, return rates of 15% sometimes reach a level of acceptability.

The last question of the survey was *As a whole, to what degree has this list of innovative ideas been of interest to you?* There were 20 responses. The results were: 25% very high interest; 40% high interest; 25% average interest; 10% low interest and 0% of very low interest. Hypothesis 2 states “The majority of NGOs will consider the whole list of innovations suggested by donors to be of interest”. The data tends to validate it: 65% of the NGOs considered the list of ideas suggested by donors to be of high interest or of interest and only 10% of low interest.

Hypothesis 3 states: “An appreciable number of innovative ideas, evaluated individually, are applicable to a high degree by an appreciable number of NGOs”. We asked for applicability because an idea is not a real innovation until it has been put into practice. In the evaluation of the ideas as a whole, 65% of the NGOs considered them of interest or of high interest, but most of them have never applied the majority of these suggestions. Only 11% of the ideas have been applied already by 50% or more of the NGOs. In relation to the applicability of each innovative

suggestion, 40% of the ideas were applicable in a high degree for at least 25% of the NGOs, 46% were applicable in a high or average degree for at least 50% of the NGOs and, for 100% of the proposed innovative ideas, at least one NGO said that the idea was highly applicable. These are appreciable results and the hypothesis seems to be validated. However, other interpretations of the data can be more negative. For example, it can be pointed out that the results do not indicate that at least 50% of the NGOs found 50% of the ideas to be highly applicable.

A reason why the results could have been better is that the innovative ideas have come from donors to development and environmental organizations. Some of the NGOs that received the evaluation survey were dedicated to other fields, such as health or political rights. Most of the ideas were not suitable to them and their interest in the survey may have been lower. For 84% of the questions, there was one or more NGO that said that it was not applicable to their type of organization.

All the ideas but one (97%) were already applied by at least one NGO. It implies that nearly all the ideas were not new to the world, but rather they were new only to some NGOs. The single idea that was not applied by any NGO is: "An informatics program could distribute the projects among the donors, so that each donor participates in a specific project. The distribution of projects should be communicated to the donor, as well as where and how they can obtain more information about the project. Also, it is convenient to inform about what their contribution is capable of doing (provide 20 vaccines, contribute to 1% of the building of a wheel, finance 2% of the cost of feeding of a wounded animal, etc.)". Of the 13 answers that considered that the idea may be applicable to their organizations, 23% considered it applicable to a high degree, 23% to an average degree and 54% to a low degree. It may be a radical innovation, although we do not know if it is applied by other NGOs that were not included in the survey.

We are going to comment on the nine ideas which more than 25% of the NGOs indicated were highly applicable to them. We will exclude a further five ideas in which 25% of the NGOs said that they are of high applicability. We are going to arrange them in order of more support to less support, giving priority to the answer of high applicability. In case of a tie, we will comment first on the one that has a higher sum of high applicability and average applicability.

Idea 1: "More work in condemning, especially of governments, and of proposing alternatives. Put pressure on first world governments to promote policies that are more favorable toward development, the conservation of natural spaces, etc. and to discourage third world governments from creating obstacles for the development and conservation of their own country". Of the 17 answers that considered this idea to be applicable to their organizations, 47% considered it applicable to a high degree, 6% to an average degree, 0% to a low degree and 47% already did it. In this context, Spanish NGOs are very critical or would like to be very critical. Reference [66] comments that many Spanish NGOs have a critical stance. We analyzed the websites of the 22 major Spanish NGOs and 50% of them say that they do some kind of advocacy.

Idea 2: "Offer detailed information of specific projects to

those donors that want it, by email and on the web, such as by holding project evaluation meetings with the communities involved and to record and publish them. Illustrate the projects with faces, images and stories of the NGO's beneficiaries, with a focus on positive messages, achievements and good news. Maybe some projects could be selected (one per month or one per year) and information about it could be sent in a more general way". Of the 19 answers that considered this idea to be applicable to their organizations, 42% considered it applicable to a high degree, 21% to an average degree, 0% to a low degree and 37% already did it.

Idea 3: "Request those donors who are interested to voluntarily publicize the NGO. For example, prepare a presentation that volunteers can give in schools, especially those that have children in the schools. Also, the presentations could be done in other places, like cultural centers or churches". Of the 20 answers that considered this idea to be applicable to their organizations, 30% considered it applicable to a high degree, 25% to an average degree, 10% to a low degree and 35% already did it.

Idea 4: "Let donors finance specific projects. When a donor makes a specific contribution, send them an email confirming that their donation has been dedicated to it, together with information about all the project expenses". Of the 17 answers that considered it to be applicable to their organizations, 29% considered it applicable to a high degree, 35% to an average degree, 6% to a low degree and 29% already did it.

Idea 5: "The implementation of specific online projects that take advantage of the specialized knowledge of donors, such as the creation of online training courses on specific needs or about topics of interest. Depending on the skills, specific measures could be taken. For example: with doctors, a first level of remote disease diagnosis or the advice of local doctors online". Of the 17 answers that considered this idea to be applicable to their organizations, 29% considered it applicable to a high degree, 18% to an average degree, 41% to a low degree and 12% already did it.

Idea 6: "Greater transparency in accountability, including making manager and employee salaries public". Of the 18 answers that considered this idea to be applicable to their organizations, 28% considered it applicable to a high degree, 11% to an average degree, 22% to a low degree and 39% already did it.

Idea 7: "The creation of a survey on the NGO's web page open to all kinds of visitors, that allows the NGO to obtain information about them (if they are donors or not, their email, etc.). This survey should give them the chance to express their opinion (e.g., evaluate the website) and to sign up to receive information (the NGO magazine, about projects, etc.)". Of the 19 answers that considered it to be applicable to their organizations, 26% considered it applicable to a high degree, 47% to an average degree, 11% to a low degree and 16% already did it. 73% of the NGOs considered it applicable in a high or average degree, achieving in this regard the best score of all of them.

Idea 8: "Take advantage of the specialized knowledge of the donors through online interactions. Establish a database of knowledge volunteers (computer specialists, doctors, architects, biologists, geographers, managers, etc.) that

could solve occasional problems that arise in the projects. These databases should be accessible to employees and voluntary workers if required". Of the 19 answers that consider it to be applicable to their organizations, 26% considered the idea applicable to a high degree, 26% to an average degree, 21% to a low degree and 26% already did it.

Idea 9: "The creation of an e-mail inbox for the donor so that they can ask questions, make suggestions, etc. If they ask a question or make a comment, the response should be fast". Of the 19 answers that consider the idea to be applicable to their organizations, 26% consider it applicable to a high degree, 21% to an average degree, 0% to a low degree and 53% already did it.

## VII. CONCLUSIONS

Open innovation seems to be useful to at least some NGOs in some cases and to a certain degree. Our first hypothesis stated that "It is possible to obtain interesting innovative ideas by asking a large number of NGO donors". Donors provided 28 different ideas with a high degree of innovation and 264 with an average degree of innovation. These ideas included a significant number of suggestions, which, although not global innovations (except maybe in one case), point towards incremental innovations that would represent serious improvements to how NGOs function. The accumulation of many of those innovative ideas in an NGO could make a big difference in its performance.

The second hypothesis states "The majority of NGOs will consider the whole list of innovations suggested by donors to be of interest". We asked the NGOs to evaluate 35 ideas based on suggestions by donors. They analyzed the ideas one by one and also answered the following last question: *As a whole, to what degree has this list of innovative ideas been of interest to you?* The answers were divided as follows: 25% of high interest; 40% of interest; 25% of average interest; 10% of low interest and 0% of very low interest. Therefore, the majority of the NGOs consider these suggestions to be of interest or of high interest and the hypothesis seems to be validated.

In the individual evaluation of the ideas, 40% were applicable in a high degree for at least 25% of the NGOs and 46% were applicable in a high or average degree for at least 50% of the NGOs. The third hypothesis states that "an appreciable number of innovative ideas, evaluated individually, are applicable to a high degree by an appreciable number of NGOs"; this hypothesis also seems to be validated to a certain degree. The results are appreciable, but did not reach the level in which 50% of the ideas were applicable for at least 50% of the NGOs. In any case, the results shows that a certain number of ideas are valuable for NGOs.

It is comforting when an academic study seems to be useful to NGOs, as there are more chances that, in part, it may be applied by them. We cannot compare those results with other studies, because we do not know any previously done on similar ways. We consider that it would be of great interest to do similar studies that would allow the contrast of our results.

This research shows that asking donors for innovative ideas may be a successful type of collaboration. The results

generated have not been excellent (only one radical innovation was produced), but were valuable. In this regard, it would be a shame if incentives are not provided for continuous innovation [67]. In order to try to obtain a continuous stream of innovations from donors, we propose that the survey is repeated regularly. If donors know that they are going to be asked repeatedly about innovation, they may think in a more creative way. It would be a regular method of connecting the NGO with the ideas of the donors, and taking advantage of their intelligence. There is a lot of talent in donors and it is a waste of resources not to take this talent into account systematically and periodically. For example, research of this type could be done every three years, generating a permanent process of obtaining new ideas for improving the NGOs.

In this project, the four NGOs shared the suggestions between them, benefiting from the ideas of the others and they have agreed on its publication. For the NGOs, it has been a worthy experience and they are happy to share it.

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