# Match-Funding as a Formula for Crowdfunding

A Case Study on the Goteo.org Platform

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# **ABSTRACT**

Since crowdfunding first appeared, and with the proliferation of platforms in recent years, various systems and formulas of operation have appeared within the general crowdfunding model. One such system, still in its early days, is match-funding (co-funding between citizens and institutions), which permits public and private organizations to double financial contributions for projects from individual users. This paper focuses on the Goteo.org platform, a pioneer in the international development of this model. The advantages and impact of this method of crowdfunding compared to the traditional method is analyzed using data collected on the behavior in 14 match-funding calls for projects on Goteo.org in the last 5 years. The results show that match-funding campaigns are more likely to be successful, significantly increase average donations and generate new dynamics of institutional cooperation and proximity in the support for initiatives.

## **CCS CONCEPTS**

• Information systems → Crowdsourcing; Collaborative and social computing systems and tools;

## **KEYWORDS**

Crowdfunding, match-funding, collaboration, open source.

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## 1 INTRODUCTION

Crowdfunding, one of the most significant phenomena in online collaboration in recent years, is a method for funding a wide variety of new projects. It enables individuals or groups with projects of varying aims (for profit, culture, social, political and other aims) to request funds from a large number of people, often in exchange for future products, symbolic thank-you gifts of different types or equity [9]. Creators and entrepreneurs who require funds for their

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projects present them in specific campaigns, normally via specialist online platforms. Crowdfunding projects may vary greatly in both their goals and size, ranging from small artistic projects to entrepreneurs looking for thousands of euros in starting capital as an alternative to traditional investment mechanisms such as risk capital [12]. It has grown exponentially in popularity and acceptance, from a relatively small market of crowdfunding pioneers in 2010 with a turnover of €750 million, to 2014, when turnover exceeded €13 billion [2]. The study *Reshaping the crowd's engagement in culture* [5] shows that in the European cultural and creative sector alone individuals and cultural organizations all over Europe have launched some 75,000 crowdfunding campaigns since 2013, collecting a total of €247 million, most particularly in the United Kingdom and France.

One of the most significant findings from the European data is that only half of crowdfunding campaigns have been successful in meeting their target. Particularly striking is the fact that these €1247 million collected in total represent only 7% of the total committed amount (which was €13.4 billion). This means there is a 'black hole' of over €13 billion that eventually was not assigned to campaigns, as their minimum funding goals were not reached. Besides suggesting that unsuccessful campaigns are over-ambitious in their demands for money, this also demonstrates one of the most common rules of crowdfunding platforms: when projects fail to reach an established funding target within a given time, the all donations received from users are refunded at no extra cost.

Another significant finding in *Reshaping the crowd's engagement in culture* is the relative 'delocalization' of platforms. Although up to 600 crowdfunding platforms have been active at any given time in Europe, almost half the campaigns started by creators of European projects were hosted on US-based platforms, mainly Kickstarter and Indiegogo. These two platforms have a global reach and are, by a large margin, world leaders in hosting campaigns from different countries [15].

In relation to these deficiencies and possibilities in the development of crowdfunding, in parallel with other methods such as equity crowdfunding [11], in 2013, some platforms started pilot projects in match-funding. The method allows money successfully obtained in a campaign to be increased with capital from an institution providing additional funds. Before the appearance of crowdfunding, the concept of match-funding with matching donations or payment of funds was already in use in the contexts of charity, philanthropy or the public good [8]. For institutions, the most popular model was one whereby a public organization, sponsoring body or corporate social responsibility department completed funding in the form of investment (a subsidy or loan) in a project that had already obtained

a substantial amount of its target funding from other sources. The first crowdfunding platforms in Europe that tried different forms of match-funding in 2013 were Goteo in Spain, with the support of the International University of Andalusia (UNIA), and KissKiss-BankBank in France, with the support of La Poste, while in the US it was Indiegogo, with the support of the Kapor Foundation [4].

# 1.1 Goteo match-funding calls

Goteo was one of the first platforms to start operating locally and internationally from Spain in 2011, covering different sectors and fields within so-called 'civic crowdfunding' [3]. Its activity is now undergoing sustained growth, making it especially rich in the types of campaign and diversity of its users and initiatives [6]. Goteo has been chosen for a number of factors that make this case a paradigmatic example of how the match-funding method is applied and develops within crowdfunding. Firstly, it was one of several pioneering platforms and the first to offer the match-funding method internationally [13]. Secondly, it now has consolidated experience in this form of funding (between 2013 and 2018 there were a total of 14 match-funding calls for projects, varying in size and success)<sup>1</sup>. In addition, in line with its philosophy of open knowledge and a commons-based approach [7], it includes a number of transparency measures that make it particularly suitable for third-party research and analysis and an API that permits the generation of related applications to access open data on its operations [14].

Goteo's calls for projects are coordinated around sponsoring bodies, which are both private and public institutions, who call for projects in specific fields they wish to promote, announcing the total amount of capital provided (the so-called 'match-funding pool') to double individual donations, along with the other details and conditions for the call for projects. Managers of projects looking for funding can then offer proposals for specific campaigns within a given period, using the Goteo form. In the final stage, projects are selected that can then access capital from the match-funding pool. This selection phase is normally preceded by a period of training, involving crowdfunding workshops co-organized by the funding institutions, to help project managers design and improve their proposals in line with the most important crowdfunding mechanisms. Since 2013, the platform has worked following this model with universities, regional governments, private foundations, local councils and local innovation agencies in calls for projects related to sociocultural innovation, educational innovation, childhood and cooperation, culture and public domain assets, entrepreneurial spirit, health, smart city projects, education, cultural heritage and the arts.

Once selected and published, the campaigns are given a time limit to reach their established financial target. During this period, each time a user makes a donation, the established match-funding pool directly and simultaneously contributes an equivalent amount to the same campaign. Thus, the contribution instantly doubles the individual donation, displayed on a graphic progress thermometer for each campaign. As agreed beforehand with the organizing institution, limits are established regarding the extent to which the system can double contributions, so that particularly large contributions (such as hundreds of euros) cannot 'drag in' more than €50



Figure 1: Project campaigns within a match-funding call.



Figure 2: Website of Goteo open data statistics.

or other pre-defined maximum amounts. This measure guarantees maximum diversity and a minimum participation level, while preventing fraudulent use of the system. Finally, if campaigns fail to reach their funding target, the same mechanism as used in other campaigns is activated and the displayed donations are refunded, at no extra cost, to both individual users and the organizing institutions.

# 2 METHODOLOGY

Data collection for this analysis was based on access to Goteo's public statistics page<sup>2</sup>, which shows both the aggregate overall behaviour of campaigns and that of specific match-funding calls for projects. As shown in Table 1, the 14 calls for projects since 2013 have involved a variety of different volumes in the selected campaign projects, contributions and participants, covering a total of 123 initiatives that accessed match-funding, supported by a variety of institutions.

The study is based on an analysis comparing some of these data on the behaviour of match-funding campaigns with averages from the other Goteo campaigns since the platform started in November 2011 (a total of 948 projects). In addition, a supplementary part of the analysis is based on data from an experimental website<sup>3</sup> for geolocated viewing of donations and the source of capital in the match-funding pool in Goteo.

 $<sup>^1\</sup>mathrm{Complete}$  list of Goteo.org match-funding calls. Retrieved June 14 from <code>https://en.goteo.org/#matchfunding</code>

 $<sup>^2</sup>$  Goteo.org stats page. Retrieved June 14, 2018 from https://stats.goteo.org/home/es  $^3$  Goteo.org match-funding visualizations. Retrieved June 14, 2018 from https://matchfunding.goteo.org

Feeder capital Total Capital not Contribution funding assigned mobilised Successful Selected from Title of match-funding call (€) (€) institution (€) projects projects Sociocultural innovation (2013) 5 25,988 10,000 31% 2,000 Innovation in healthcare 1 (2013) 5 3 24,897 12,000 38% 2,663 Innovation in education and open knowledge (2013) 5 5 34,715 10,000 27% 560 Entrepreneurship (2013) 5 10 28,002 20,000 42% 8,322 Innovation in cooperation and childhood care (2014) 5 2,517 4 26,882 10,000 28% Innovation in healthcare 2 (2014) 5 5 33,949 12,000 35% 0 Cultural heritage and digital remix (2015) 5 4 26,979 10,000 33% 1,064 Crowdfunding Zaragoza 1 (2015) 4 3 20,054 12,000 42% 3,485 Gipuzkoa cultural projects (2016) 20 20 151,024 70,000 44% 3,428 Strike a match for education (2016) 3 2 16,572 10,000 3,509 44% Supporting education (2017) 13 17,419 11 62,924 40,000 39% Meta Gipuzkoa (2017) 16 15 159,343 70,000 7,369 40% Crowdfunding Zaragoza 2 (2018) 4 4 35,041 14,000 40% 0 Conjuntament Barcelona (2018) 23 22 231,336 96,000 42% 0 Sum / average of all match-funding calls 123 107 877,706 396,000 38% 52,336

Table 1: Statistics on Goteo match-funding calls and organizing institutions

## 3 RESULTS

Results indicate that match-funding offers a number of advantages with regard to traditional crowdfunding: it helps to provide additional funds for project campaigns, significantly increases the average amounts of donations and, accordingly, improves the chances of success for campaigns.

# 3.1 The effectiveness of match-funding

As Table 1 shows, one of the main issues to consider is how 107 out of the 123 campaigns selected in Goteo calls for projects since 2013 finally received the previously defined funding. As shown in Table 2, this 83% success rate is significantly higher than the normal 65% rate for the platform, already among the highest success rates in crowdfunding platforms on the market [10]. This indicates that the match-funding method can indeed achieve a higher rate in channeling individual and common funds to projects, an important factor for projects and initiatives that choose crowdfunding at a specific moment in their development.

This is even more relevant when one considers that Goteo campaigns normally require an average of 123 individual donors to successfully obtain funding. By contrast, in the match-funding campaigns analyzed since this method was first offered, the number drops by half, with an average of 69 users required. Another observation from the overall analysis of match-funding campaign behavior, compared to that of traditional crowdfunding campaigns (lacking this additional multiplying component), is that the average contribution from users is higher in the case of match-funding (average €48) than in other Goteo campaigns (approximately €41). Another relevant aspect with regard to general match-funding behavior on Goteo over time is that only 38% of the €877,706 collected up to mid 2018 by this system came from the institutional matchfunding pool (therefore 62% came from individual donors). This suggests that match-funding offers a motivation and incentive for

the public to finance projects and is thus a formula that supports the assignment of funds and validates social interest in new initiatives, without covering all or even half of the funds needed for their implementation. In other words, the way in which match-funding works on Goteo could provide appropriate dynamics for channeling significant amounts from public or private funds through a donation system that facilitates public participation above and beyond what the funds themselves could achieve. Other similar large-scale initiatives, such as the recent Arts Council England Heritage Lottery Fund match-funding case study, carried out by NESTA in the United Kingdom [1], indicate similar behavior, although based on less developed match-funding formulas (where the contribution is provided at the end): from a starting multipliable capital of £251,500 an additional £405,941 was eventually raised (i.e. twice the capital initially committed for multiplying).

# 3.2 The local dimension

Another key aspect, noted in the introductory section of this study on international 'delocalization' dynamics of crowdfunding, using large American platforms such as Kickstarter and Indiegogo as the technological solutions, suggests a need to establish mechanisms for local participation in this sector. Only 50% of crowdfunding campaigns for European organizations and projects use platforms whose headquarters and main business activity are in EU member states or the European continent, while the rest mostly choose the two large global platforms.

This is a problem, given that match-funding requires agreements and alliances with public and private bodies, often aiming to have an impact on a local area or a specific field. Thus mechanisms that strengthen proximity between crowdfunding platforms and organizations that have traditionally funded innovative, risky or minority projects need to be explored. An example of this behavior from match-funding, favoring dynamics of local support among

Title of match-funding call	Average revenue in projects (€)	Percentage of funding goal	Success rate	Average of donors	Average individual donation (€)
Sociocultural innovation (2013)	6,390	123%	80%	70	32
Innovation in healthcare 1 (2013)	7,629	139%	60%	98	41
Innovation in education and open knowledge (2013)	6,943	118%	100%	66	36
Entrepreneurship (2013)	5,340	135%	50%	44	52
Innovation in cooperation and childhood care (2014)	6,549	119%	80%	68	42
Innovation in healthcare 2 (2014)	6,790	117%	100%	66	50
Cultural heritage and digital remix (2015)	6,715	116%	80%	67	45
Crowdfunding Zaragoza 1 (2015)	6,548	109%	75%	54	58
Gipuzkoa cultural projects (2016)	7,551	166%	100%	70	54
Strike a match for education (2016)	7,551	118%	67%	60	56
Supporting education (2017)	5,276	137%	85%	51	49
Meta Gipuzkoa (2017)	10,447	171%	94%	81	65
Crowdfunding Zaragoza 2 (2018)	8,760	125%	100%	63	47
Conjuntament Barcelona (2018)	10,518	131%	96%	104	52
Sum / average of all match-funding calls Sum / average rest of crowdfunding	7,358	130%	83%	69	48

5,288

121%

Table 2: Statistics on Goteo match-funding projects compared with regular crowdfunding campaigns



campaigns in Goteo (no match-funding)

Figure 3: A match-funding call in Goteo indicating the source of donations.

institutions and local communities, can be found in the Goteo geolocation tool, which provides a clear display of how funds activated by the match-funding usually flow from the area of influence of the 'match-funder' institutions.

## 4 CONCLUSIONS

Our aim in this study was to determine if match-funding represents a viable alternative to crowdfunding, and to what extent it can represent a set of improvements in the usual mechanisms and rules behind the usual crowdfunding platform mechanisms. The data analyzed from Goteo supports the idea that the match-funding model of crowdfunding can help provide additional funds to projects, increase the chances of a campaign's success, significantly increase the average amounts donated and generate new dynamics of institutional cooperation and proximity in the support for initiatives.

65%

123

41

In line with the report Reshaping the crowd's engagement in culture [4], in both culture and other frequently related sectors (education, technology, social sectors, among others), the growing use of crowdfunding by communities of creators in Europe and the world will increase further in forthcoming years. Therefore, options such as match-funding and its tendency to associate trans-institutional funding strategies, where initiatives with a social impact are required, could represent an improvement not just in effectiveness but also in the local visibility and impact of these still new hybrid forms of funding.

In the case of the match-funding model studied here, based on the specific characteristics of the Goteo platform, mechanisms for viewing data help track and analyze behavior in calls for projects. This tracking and analysis permits comparisons of campaign behavior (as in this case) but also interpretations by public and private institutions of their expanded area of influence. This can help provide proactive mapping of areas of needs and initiatives to which funding with institutional cooperation should be targeted.

When one also considers that another specific feature of Goteo campaigns is that they indicate the non-monetary resources that might be needed for their implementation (materials, infrastructure, donations of time, etc.), match-funding thus becomes a tool that, if broadened, could facilitate coordinated collective and institutional action in the participatory assignment of resources, with an open data mechanism and transparent management. It is also significant that the match-funding training actions provided

with calls for projects are co-organized. These tools involve various levels of learning and familiarization with the specific Goteo model, while creating a symbiotic relationship between institutions and the common goal.

## 5 FUTURE RESEARCH AND DEVELOPMENT

Considering the behavior of Goteo's match-funding calls described above, a wider analysis would need to extend the comparison to new match-funding campaigns and also permit comparisons with other platforms that begin to apply the model. This is particularly important because the application of the model to other types of institutions is steadily growing in Goteo, as is the total volume of capital in match-funding pools for multiplying funds.

It would also need to carry out new analyses of data comparing match-funding platform users as opposed to other collaborative funding mechanisms, such as municipal participative budgets, social currencies and digital time banks. Advancing in this direction could provide more in-depth knowledge of viable alternatives for social initiatives that otherwise lack resources in a number of areas.

Advances are also needed in the development of the Goteo data viewing mechanisms, both graphs and maps. It is to be hoped that other platforms will start applying match-funding mechanisms that provide similar open data, as this would permit even broader and richer comparisons with regard to their scope, thereby advancing this significant phenomenon in online collaboration dynamics.

Another element to mention is the dynamic of continual improvement and development of the platform, which, as well as being an open code repository <sup>4</sup>, continues to incorporate different functions in a modular format. Many of these have an impact on the match-funding model analyzed here. Specifically, results from match-founding so far as described in this study, would lead to a number of specific actions:

- More and better tools for viewing all local needs in a given call for projects, thus making it a more effective tool for the organizing institutions in general.
- A user profile that permits capital contributions to the matchfunding pool by individuals and groups of users, not just institutions, and the activation of similar mechanisms to attract third-party donations.
- Activating data entry forms for projects and the organizing institutions, which permit continual match-funding actions (not just for specific topic-based calls for projects) that dynamically match 'supply and demand' for capital in matchfunding pools.
- Advancing in the development of more versatile configurations to view and adapt match-funding to different contexts and types of user, following the example of new algorithms that permit the display of the minimum number of microsponsors required to reach the minimum funding level.

In our opinion these potential improvements for an open source crowdfunding platform, confirmed and validated by the type of action-research that makes the basis of this paper, as well as the results we have discussed here, represent an opportunity for both open innovation and civic crowdfunding, which have in matchfunding practices a growing and promising field.

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<sup>&</sup>lt;sup>4</sup>Goteo Version 3, the Open Source Crowdfunding Platform. Retrieved June 14, 2018 from https://github.com/GoteoFoundation/goteo