

# SUCCESS DRIVERS OF SPORTS CROWDFUNDING CAMPAIGNS

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## ABSTRACT

Crowdfunding combines social networking with microfinance in a method of financing new ventures that has become increasingly popular. Crowdfunding offers entrepreneurs an opportunity to find a large number of investors for projects, but many campaigns tend to remain unfunded. This study's main objective was to access the main success drivers of crowdfunded projects, focusing, in particular, on sports projects. The dataset comprised 4,952 donation- and rewards-based projects launched in three platforms. Two models were estimated to explain both the success over failure rate and overfunding of crowdfunding projects in terms of specific campaign characteristics. The results reveal that higher project funding goals are correlated with a lower probability of success and overfunding, while successful projects are associated with a higher number of backers and flexible funding. Donation-based projects appear to increase the likelihood of success compared with reward-based projects.

**Keywords:** crowdfunding, success, sports, donation-based, reward-based

## 1. INTRODUCTION

Traditional finance – the banking system, venture capital firms, certain private equity groups dealing with start-ups and traditional angel investors – subjects entrepreneurs to unfavourable terms. These funding sources are currently being challenged by the efficiency gains of crowdfunding, which presents itself as a faster,

less bureaucratic process that offers more deal flow, lower commissions and fees and more industry diversification options to borrowers who get access to more loans at better rates and accredited investors who get higher interest rates (Judd, 2013).

Crowdfunding derives from concepts such as microfinance and crowdsourcing (Howe, 2008; Kleemann et al., 2008; Poetz and Schreier, 2012; Rubinton, 2011), but crowdfunding has its own unique method of fundraising (Mollick, 2014). This usually involves a process whereby promoters use a growing number of specific Internet platforms to access funding from the crowd for several quite specific activities within the production, marketing or sales processes of a product, project or idea (Kleemann et al., 2008). Crowdfunding differs from the traditional financing of new ventures in that funding is provided through relatively small contributions of many individuals over a limited period. Potential funders can see the level of support from other backers, as well as projects' timing, before making their own funding decisions (Kuppuswamy and Bayus, 2013).

Despite the increasing popularity of crowdfunding, a high percentage of campaigns fail to achieve their funding target (Mollick, 2014). Therefore, the success drivers of crowdfunding campaigns have attracted growing numbers of researchers' attention (Lukkarinen et al., 2016). Drawing on the resulting literature, the present study sought to answer the following research

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question: What are the main campaign characteristics of successful sports crowdfunding campaigns?

## 2. LITERATURE REVIEW

This section presents an overview of the conceptualisation, types and dynamics of crowdfunding. This includes the main actors and their motivations, as well as a brief overview of the determinants of crowdfunding success.

### 2.1 Overview of crowdfunding

#### 2.1.1 *Concept*

The most recurrent definition of crowdfunding is the one provided by Schwienbacher and Larralde (2010) in one of the few published overviews of this topic. The cited authors define crowdfunding as ‘an open call, essentially through the Internet, for the provision of financial resources either in the form of donations or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes’. Mollick (2014, p. 2) further suggests a more specific definition for crowdfunding in an entrepreneurial context as ‘the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the Internet, without standard financial intermediaries’.

Clearly, the most significant stimulus for crowdfunding is fundraising. Crowdfunding is often used to raise small amounts of capital to launch one-time projects, in which cases capital is often provided by friends and family (Mollick, 2014). Crowdfunding can also serve as a way to raise the entrepreneurial seed capital needed to start new ventures (Schwienbacher and Larralde, 2010) for people and organisations that do not have easy access

to banks, angel investors and venture capitalists. Crowdfunding is also less time intensive than other traditional options since it does not involve legal or approval procedures (Brown et al., 2017).

In addition, crowdfunding, like other forms of venture finance (Ferrary and Granovetter, 2009), offers a potential set of beneficial resources that go beyond capital. For example, early stage investors typically offer not only monetary funding but also advice, governance and prestige (Ferrary and Granovetter, 2009; Gorman and Sahlman, 1989; Hsu, 2004). Crowdfunding can also be used as a marketing tool, assessment of the quality of creative ideas, promotion of a new product and demonstration of the demand for it, which can lead to funding from more traditional sources. Crowdfunding further functions as a direct sales channel by rewarding backers with the first samples or versions of offerings and ensuring a readily available sales pipeline. This is thus a way to form relationships with backers that can be used to obtain feedback, generate returning customers (Gerber and Hui, 2013) and raise press attention, which can be beneficial to the project founders (Brown et al., 2017; Mollick, 2014).

#### 2.1.2 *Crowdfunding types*

Crowdfunding projects can be classified into different categories such as for-profit or non-profit ventures (Carvajal et al., 2012), that is, investment-based or reward and donation-based projects. The first category includes equity-based, royalty-based and lending-based ventures in which funders are investors in a campaign and they may receive monetary benefits. In the second category, funders do not expect monetary compensation. They fund a campaign because they obtain a product and/or because they support the cause in question (Belleflamme et al., 2013).

### 2.1.2.1 *Equity-based crowdfunding*

In equity-based projects, funders are treated as investors and receive an ownership stake in return for their funding whenever the supported project succeeds (Mollick, 2014). Backers can get shares of future profits, a portion of the returns on public offerings or acquisitions and/or shares of real estate investments (Mollick, 2014). Equity crowdfunding – also known as ‘crowd-investing’ – is a way to attract multiple investors (Ahlers et al., 2015), serving as a substitute for early day funding through other channels.

Equity crowdfunding is subject to high levels of regulation (Carni, 2014; Heminway and Hoffman, 2010) that differs by country and limits totally or partially the scope of equity-based crowdfunding (Moutinho and Leite, 2013). Although its popularity has increased in recent years (Stanko and Henard, 2017), equity crowdfunding is a relatively new phenomenon compared with other forms of crowdfunding (Lukkarinen et al., 2016), making up less than 5% of all crowdfunding investment (Massolution, 2013).

### 2.1.2.2 *Loan-based crowdfunding*

Loan-based or debt-based projects involve peer-to-peer and peer-to-business loans (Moutinho and Leite, 2013) by means of credit contracts including an expected rate of return on the capital invested (Mollick, 2014). Investors can thus support borrowers and maximise their financial returns while minimising the risk of default. Lenders and borrowers interact directly, bypassing traditional banks (Belleflamme et al., 2015) and enabling the cost structure to be lighter and the interest rates to be up to half of those of traditional microloans. Therefore, borrowers can obtain lower interest rates, and

investors receive higher returns compared with traditional methods.

### 2.1.2.3 *Reward-based crowdfunding*

In reward-based projects, funders receive tangible but non-financial benefits (Kuppuswamy and Bayus, 2013) that are normally the result of entrepreneurial activities (Moutinho and Leite, 2013) in exchange for their contributions. Funders mainly play the role of ‘prosumers’ (Belleflamme et al., 2015) or early customers who have access to the products produced by funded projects at an earlier date or better price – or with some other special benefit (Mollick, 2014). These funders can prove to be important promoters, as well as a valuable source of feedback and ideas (Stanko and Henard, 2017). Backers may be involved in the product development process through ongoing updates, contributing creative input into products under development and enjoying opportunities for direct communication with innovating entrepreneurs (Agrawal et al., 2014; Mollick, 2014; Stanko and Henard, 2017).

Reward-based crowdfunding is the most popular model (Belleflamme et al., 2012; Mollick, 2014), and it offers a relatively risk-free way for entrepreneurs to generate new product awareness, reach a broad base of interested early adopters and measure potential market response (Stanko and Henard, 2017). In addition to allowing project founders to price discriminate (Belleflamme et al., 2012), reward-based crowdfunding can also function as market validation, demonstrating the viability of a product concept. In this way, the process may act as a predictor of future demand that might be useful as an indication of credibility for future funding rounds (e.g. venture capital or bank loans) (Belleflamme et al., 2015; Stanko and Henard, 2017).

#### 2.1.2.4 *Donation-based crowdfunding*

Donation-based crowdfunding is used to collect charitable funding in support of social entrepreneurship projects and causes without profit objectives, relying on voluntary contributions to a public good (Belleflamme et al., 2015; Lukkarinen et al., 2016). This process follows a patronage model in which funders fulfil philanthropic or sponsorship purposes, expecting no direct return for their donations (Mollick, 2014; Moutinho and Leite, 2013). In donation-based crowdfunding, fundraisers do not offer monetary returns or in-kind payments apart from recognition within the relevant community (Belleflamme et al., 2015).

### 2.2 Dynamics of crowdfunding

#### 2.2.1 *Crowdfunding participants*

The crowdfunding process involves three important components. The first is project founders, namely, entrepreneurs or creators who propose their projects or ideas to raise funds. The second is crowdfunders who are backers or individuals around the world who pledge money to support creative projects. The last component is crowdfunding platforms that organise the funds and provide a setting in which entrepreneurs can advertise and citizens can obtain information about projects.

Project founders might be individuals, teams or organisations who either want to implement their ideas or to promote their businesses (Stemler, 2013). These creators need to understand fund raising tactics and have expertise in social media and digital marketing communication in order to reach, communicate to and engage with potential investors. Founders need to present creative ideas and projects with detailed descriptions or videos that appeal to a large number of people. Individuals who use the Internet to provide funding by pledging an

amount of their choosing to specific projects are called funders or backers (Boeuf et al., 2014). Crowdfunding platforms allow entrepreneurs and investors to interact without the intermediation of standard financial institutions.

#### 2.2.2 *Participants' motivations*

Unlike many other forms of venture financing, project founders engage in crowdfunding to meet a wide variety of goals (Mollick, 2014), including to raise money, get public attention and obtain feedback on products and/or services. The main reasons why crowdfunders use these platforms are to raise funds while maintaining full control over projects, receive validation, connect with others, replicate successful previous experiences and expand awareness of their work through social media. Gerber and Hui (2013) also found that founders engage in crowdfunding to raise capital, form relationships with backers, obtain approval, maintain control, learn funding skills and expand their awareness of entrepreneurship processes.

Motivations for backers are extremely complex and heterogeneous and differ according to the form of crowdfunding (Mollick, 2014). While investors in equity-based projects wish to earn financial benefits, funders of reward-based campaigns are also driven by other motives, such as the wish to be part of a community and help others (Cholakova and Clarysse, 2015). Backers of donation-based projects may want to support a cause that they view as important, personally support the project founders or make a political statement – or backers may even see supporting a project as a joke, among any number of other reasons (Mollick, 2014).

Funders may invest because of the overall benefits derived from their contribution (i.e. economic value) or projects' guaranteed tangible output (i.e. certainty effect). Funders can also seek to satisfy individual functional needs

through projects' outcome (i.e. personal utility) or engage in a form of self-expression and enjoyment. Researchers have also distinguished between extrinsic motivations – financial rewards – and intrinsic motivations – enjoyment, a sense of involvement, control over how an innovation is used and improvement of current circumstances. Funders are motivated to participate in order to receive rewards, support creators and causes and strengthen connections with individuals in social networks. Ordanini et al. (2011) found that the main motivations for individuals to participate into crowdfunding were to explore innovative ideas, enhance social participation, obtain financial rewards, gain public recognition and engage in patronage. Crowdfunding is thus motivated by both consumer and philanthropic behaviours, while backers' participate to enjoy rewards, support innovative ideas and contribute to a community.

### **2.3 Determinants of crowdfunding success**

The existing literature on the success drivers of crowdfunding campaigns ranges across several fields of research. These drivers include networks, campaign characteristics and the understandability of crowdfunders' concepts and offerings (Lukkarinen et al., 2016). The key characteristics of crowdfunding campaigns can be pre-determined by entrepreneurs and crowdfunding platforms prior to campaigns, such as the funding target and campaign duration, while entrepreneurs' personality traits and skills may also be success drivers of crowdfunding campaigns. Other categories apparently extrinsic to project founders, namely, the amounts pledged and number of backers, are also key drivers for successful crowdfunding campaigns.

#### **2.3.1 Funding target**

Crowdfunding campaigns typically set a funding target, for which crowdfunders must find a balance between raising sufficient funds to cov-

er budgetary requirements and ensuring that the minimum seed capital is achievable (Hobbs et al., 2016; Lukkarinen et al., 2016). Studies suggest that the funding target's influence on campaigns' success differs with the form of crowdfunding. In the case of equity crowdfunding, Ahlers et al. (2015) found no significant relationship between the funding target and number of investors, while Belleflamme et al. (2014) showed that larger targets are preferable. Vulkan et al. (2016) confirmed that increasing the goal size is negatively related with success probability. Hakenes and Schlegel (2014) argue that high funding targets may provide a sense of security to funders in equity- and debt-based crowdfunding, as their investment plans will only go through if enough other people also view investing in the project as sufficiently worthwhile. Belleflamme et al. (2014), Cordova et al. (2015), Cumming et al. (2014), Kuppuswamy and Bayus (2013), Mollick (2014) and Zheng et al. (2014) indicate that higher funding goals are negatively associated with success in reward-based crowdfunding.

#### **2.3.2 Type of funding**

Funding targets are normally set according to two models: fixed and 'all-or-nothing' funding or flexible and 'keep-it-all' funding. In the first model, a goal is set as the minimum target, and the project receives the money only if the declared investment goal is achieved within the campaign period. In this case, no money pledged by any backer is transferred to unsuccessful campaigns, and the backers are refunded. This means that an over-ambitious funding goal may result in the fundraising effort falling short and, consequently, that the crowdfunder raises no funds (Kuppuswamy and Bayus, 2013). From the backers' point of view, their security is reinforced because money is not debited if the project does not hit its goal. In the second model, the crowdfunder keeps any funds collected regardless of whether the funding target is reached (Cumming et al., 2014).

### 2.3.3 Campaign duration

The duration of crowdfunding campaigns is typically determined in advance. Zheng et al. (2014) found that campaign duration is positively related to success in reward-based campaigns in China, whereas no significant relationship was confirmed for the United States (US). Cordova et al. (2015), in turn, found that project duration increases the chances of success in reward-based campaigns. Burtch et al. (2013) established that longer campaign durations are associated with higher project visibility and, therefore, better performance in donation-based crowdfunding. Other studies, however, have shown that campaign duration is negatively related to success (Cumming et al., 2014; Kuppuswamy and Bayus, 2013; Mollick, 2014), suggesting that longer campaign duration may be perceived by investors as indicating a lack of confidence.

### 2.3.4 Provision of financials

Some campaigns portrayed on crowdfunding platforms include financial information, such as historical or forecasted revenue and profit figures. The literature indicates that the mere provision of financials, regardless of their quality, is a positive indicator of campaign success in equity- and reward-based crowdfunding (Ahlers et al., 2015; Mollick, 2014).

### 2.3.5 Understandability

Even in the case of non-profit ventures or markets in which crowdfunding is driven by altruism, crowdfunders base their decisions on expectations of success and projects' overall appeal and quality (Agrawal et al., 2010; Burtch et al., 2011). This suggests that funders respond primarily to signals about projects' quality, regardless of these funders' expectations of financial return (Mollick, 2014).

The existing research suggests that the understandability of companies' concept or product offering may be a significant factor in campaign success (Belleflamme et al., 2013). Vulkan et al. (2016) also suggest that the type and quality of the information that investors can gather from the campaign and other backers' actions is central to campaigns' success. Yuan et al. (2016) similarly found that topical features (e.g. the latent semantics embedded in project or reward descriptions) that reflect the intrinsic nature of crowdfunding projects are important determinants of crowdfunding success. Parhankangas and Renko (2017) further found that linguistic style matters more for social entrepreneurs, helping backers better understand and feel connected to campaigns.

### 2.3.6 Founders' traits and skills

Agrawal et al. (2010) suggest that understanding both the mechanisms of crowdfunding and ways to connect to networks are key to crowdfunding success. Crowdfunding may mistakenly be perceived as 'free' (De Buysere et al., 2012) and may be part of a broader 'utopian' view of the power of crowds. However, crowdfunding campaigns often requires more effort (i.e. time and commitment) and a greater variety of skills (e.g. marketing, accounting, project managing and engineering) than new crowd-founders expect.

Funding decisions are positively impacted by entrepreneurs' preparedness (Chen et al., 2009) and passion, helping to reduce uncertainty and risk by strengthening perceptions of quality (Chen et al., 2009). Campaigns that provide more updates may also raise greater sums of money (Kuppuswamy and Bayus, 2013; Moutinho and Leite, 2013), so updates are seen as an important part of campaign management (Kuppuswamy and Bayus, 2013). Project founders' social orientation, communications

tactics and professionalism further impact their campaigns' propensity to reach their funding goal (Calic and Mosakowski, 2016; Müllerleile and Joenssen, 2015).

### 2.3.7 *Number of backers*

Studies have shown that successful campaigns appear to attract a larger number of investors than campaigns that fail to reach their funding target (Hoobs et al., 2016; Moutinho and Leite, 2013; Vulkan et al., 2016). In addition, Hobbs et al. (2016) suggest that the number of backers should be equal to 1–2% of the target goal, and Vulkan et al. (2016) found that successful campaigns have more than five times the average number of investors for typical crowdfunding projects.

A growing segment of the literature on crowdfunding agrees on the importance of networks (i.e. personal social networks and social media followers) to collecting funds in all types of crowdfunding models (Agrawal et al., 2010, 2013; Kuppuswamy and Bayus, 2013; Lin et al., 2013). This suggests that project founders need to build their networks before committing to campaigns.

In contrast, Kuppuswamy and Bayus (2013) found that backer support is negatively related to a project's past backer support. One explanation for this is that, due to a diffusion of responsibility, many potential backers may not contribute to a project that has already received plentiful support because they assume that others will provide the necessary funding.

### 2.3.8 *Amounts pledged*

Vulkan et al. (2016) observed that the largest amount pledged by a single backer is a key success driver for crowdfunding campaigns. The presence of a few large investments appear to

have a major role in driving projects' success, as other funders may reason that these large sums contribute to campaigns' accumulated capital stock. This also has an indirect effect of incentivising other backers to invest in these projects. Having backers willing to invest large sums in a campaign can send a positive signal to undecided investors about projects' potential quality. Overall, the typical contribution made by each backer is larger for successful campaigns.

### 2.3.9 *Early funding*

Many studies have provided support for the conclusion that funding contributions made early on in campaigns strongly predict success in all types of crowdfunding models (Kim and Viswanathan, 2013; Vulkan et al., 2016). Colombo et al. (2015), for example, showed that the success of reward-based crowdfunding campaigns is closely related to the number and total amount of early contributions. The reasoning behind this may be that early support – sometimes equated to the percentage of the funding target accumulated in the first week of the campaign – offers an indication of project quality and likely campaign success (Kim and Viswanathan, 2013). In addition, a large number of early backers provide more opportunities for spreading the word about a campaign (Lukkarinen et al., 2016). Other studies have also found evidence of investor herding, suggesting that less experienced investors are strongly influenced by experts' investment decisions (Agrawal et al., 2013; Kim and Viswanathan, 2013; Lee and Lee, 2012).

### 2.3.10 *Geography*

Backers tend to support campaigns that are geographically close to them (Lin and Viswanathan, 2015). Thus, geography is a determinant of successful crowdfunding activities (Burtch et

al., 2014) since early contributions by local investors (e.g. family and friends) can determine the pattern of subsequent contributions by more distant funders (Mollick, 2014). However, Agrawal et al. (2010) and Vulkan et al. (2016) suggest that the easy accessibility of online platforms tends to eliminate most distance-related economic frictions.

Table 1 below provides a summary of selected papers on crowdfunding success. The following variables are presented for each study: research context, sample size, crowdfunding platform used for data collection, crowdfunding type, success measures, statistical methods and drivers of success, including both dependent and control variables.



Table 1. Description of selected crowdfunding studies

Reference	Research context	Sample	Platforms	Crowdfunding type	Success measures	Drivers of success	Statistical methods
Mollick (2014)	Art, design, fashion, film, music, publishing, technology	N = 48,500 (2009–2012)	Kickstarter	Reward-based	Success (the campaign goal was met) over failure (1/0)	Project goal, funding level, backers, Facebook friends of founders, project category, updates, comments, fundraising duration, featured by Kickstarter in their home page	Logistic regression
Cordova et al. (2015)	Technology start-ups	N = 1,127 (2012–2013)	Kickstarter, Ulule, Eppela, Indiegogo	Reward-based	Success over failure (1/0); over-funding of successful projects	Request amount of investment, number of funders, mean amount contributed by each funder, mean amount contributed to the project on each day, country, updates on the project by the crowdfunder, number of comments written by investors, existence of a video, type of campaign (all-or-nothing vs. keep-it-all)	Probit regression
Vulkan et al. (2016)	All campaigns	N = 636 (2012–2015)	Seedrs	Equity-based	Success over failure (1/0); over-funding of successful projects	Covered in week one, shared public pledges, campaign goal, pre-money evaluation, number of entrepreneurs, Enterprise Investment Scheme tax relief, backers	Linear probability model, ordinary least squares, quantile regression
Hobbs et al. (2016)	Filmmaking	N = 100 (2012–2013)	Kickstarter	Reward-based	Success over failure (1/0)	Number of updates, search results, Facebook shares, total amount raised, number of backers, reward quality, pitch quality, number of rewards, campaign length, number of campaigners, Facebook friends, size of direct network, campaign goal	Exploratory factor analysis, discriminant function analysis
Lukkarinen et al. (2016)	Software, fashion and lifestyle, restaurants	N = 60 (2012–2014)	Investor Oy	Equity-based	Amount raised	Funding target, minimum investment, campaign duration, provision of financials, private and social media networks, understandability, key decision criteria for venture capitalists, key decision criteria for angel investors	Multiple linear regression, correlation coefficients
Moutinho and Leite (2013)	All campaigns	N = 18,430 (2009–2012)	Kickstarter	Reward-based	Over-funding of successful projects	Number of project, name of project, date, short description, funding goal, capital pledged, financing rate, number of backers, average contribution, category of project, sub-category of project, number of comments, number of updates, number of levels of reward, city state, country, name of entrepreneur, number of other projects backed by entrepreneur, project uniform resource locator	Quantitative analysis using econometric models; multi-cases, qualitative study
Parhankangas and Renko (2017)	Hardware, software and technology, computer (video) games, product design	N = 656 (2013–2014)	Kickstarter	Reward-based	Success over failure (1/0)	Linguistic style used in videos containing verbal communication (i.e. concrete language, precise language, interactive style and psychological distancing), campaign country, funding goal, Facebook friends, entrepreneurs' previous successful crowdfunding campaigns, length of pitch (i.e. number of words) and the use of numerical terms	Binary logistic regression, DICTION and Linguistic Inquiry and Word Count software

Note: N = number



**Table 2. Profile of sports crowdfunding campaigns**

<b>Variables</b>	<b>Category</b>	<b>N</b>	<b>%</b>
Types	Donation	359	7.25%
	Rewards	4,593	92.75%
Platform	Crowdfunder.co.uk	606	12.24%
	Fundrazr.com	433	8.74%
	Indiegogo.com	3,913	79.02%
Africa	North Africa	21	0.42%
	Sub-Saharan Africa	92	1.86%
Asia	East Asia	27	0.55%
	North Asia	36	0.73%
	West & Central Asia	65	1.31%
	South & Southeast Asia	102	2.06%
Europe		1,753	35.40%
Oceania		163	3.29%
North & Central America	Caribbean Islands	32	0.65%
	Central America	62	1.25%
	North America	2,500	50.48%
	South America	99	2.00%
Flexible funding	Yes	4,078	82.35%
	No	874	17.65%
Amount raised	USD > 0	3,632	73.34%
	USD = 0	132	26.66%
% Funded	=> 100%	658	13.29%
	< 100%	4,294	86.71%

Note: N = number; USD = US dollars

The average amount founders sought to raise using crowdfunding was 12,981 USDs. The average number of backers for all projects that received support from at least one backer was 29, while projects that at least met their funding goal had 80 backers. Although the individual

pledges of backers are unknown, the average ratio between the amount asked and the amount obtained could be calculated. The mean pledge per backers was 40%. Around 50% of the project campaigns were open for less than 45 days, and 25% continued for 60 days or more (see Table 3).

**Table 3. Sport crowdfunding campaigns' duration and funding**

	<b>Average</b>	<b>Percentile 25</b>	<b>Median</b>	<b>Percentile 75</b>
<b>Duration</b>	45	30	45	60
<b>Target (USD)<sup>a</sup></b>	12,981	1,500	5,000	15,000
<b>Amount raised (USD)</b>	2,409	139	545	1,635
<b>% Funded<sup>b</sup></b>	40%	2%	15%	60%
<b>Backers<sup>b</sup></b>	29	3	10	26
<b>Average pledge<sup>b</sup></b>	75	25	49	81

Note: USD = US dollars; <sup>a</sup>trimmed mean = 5%; <sup>b</sup> supported by at least one backer

### 3.3 Data treatment

This study estimated two models. In the first model, the dependent variable was the projects' success status (i.e. yes/no), with success defined as when the campaign received an amount equal to or higher than the target sum. In the second model, for those projects that met their initial goal, a second indicator was calculated for the surplus money obtained over the funds requested.

A logistic regression model was first estimated for all projects in the sample, and then a regression model was estimated for those successfully funded. The first model was estimated based on 4,952 projects, and the second model was based on 658 projects.

The explanatory variables were the same for both models: the money requested (i.e. the funding target), total number of backers who supported the project and type of crowdfunding (i.e. donation vs. reward). Dummy variables

were also included to account for possible country effects.

## 4. RESULTS

Table 4 below shows the results for the two models estimated. The first model allowed us to test Hypotheses H1a, H2a and H3a and Propositions P1a and P2a, while the second model addressed Hypotheses H1b, H2b and H3b and Propositions P1b and P2b. As can be seen from the results for model one, small projects are more likely to be funded successfully than larger projects are. A higher number of backers also increases the likelihood of success. The duration of the campaign is, however, not statistically significant. In addition, flexible funding and donations increase the likelihood of projects' success. Model two's results reveal that, for successfully funded projects, higher funding targets for campaigns are negatively associated with over financing. Moreover, the number of backers is positively associated with a higher ratio of money obtained above the funding target. These results provide empirical support for Hypotheses H1a, H1b, H2a, H2b and Propositions P1a and P2a.

**Table 4. Model estimates**

Variable	Dependent variable: Y = 1 if % funded => 100%; 0 otherwise				Dependent variable: Y = % funded		
	B	Exp (B)	S.E.		B	S.E.	
Constant	-1.92	0.15	0.23	***	0.98	0.48	*
Target (1,000 USD)	-0.27	1.00	0.00	***	-0.01	0.00	**
Backers	0.04	1.04	0.00	***	0.00	0.00	*
Duration (days)	0.00	1.00	0.00		0.00	0.00	
Crowdfunding type = Reward <sup>a</sup>	-0.16	0.85	0.02	***	0.13	0.24	
Platform <sup>b</sup>							
Platform = Indiegogo <sup>b</sup>	0.23	1.26	0.36		0.31	0.23	
Platform = Crowdfunder <sup>b</sup>	0.33	1.39	0.41		0.18	0.26	
Funding = Fixed <sup>c</sup>	0.63	1.87	0.16	***	-0.01	0.09	
Region				***			
Region = Africa <sup>d</sup>	0.03	1.03	0.55		0.11	0.34	
Region = Asia <sup>d</sup>	-0.08	0.93	0.42		-0.18	0.26	
Region = South America <sup>d</sup>	-0.90	0.41	0.76		0.03	0.08	
Region = North & Central America	0.69	2.00	0.15	***	0.20	0.19	
Region = Oceania <sup>d</sup>	0.38	1.46	0.32		-0.22	0.43	
Cox & Snell = 0.243; Nagelkerke = 0.397; X <sup>2</sup> = 4392.48***; % corrected classified: 86.4%					R <sup>2</sup> = 27%; F = 16.14***		

Note: <sup>a</sup> base category: donation; <sup>b</sup> base category: Fundrazr; <sup>c</sup> base category: Flexible; <sup>d</sup> base category: Europe

## CONCLUSIONS

This study answered the defined research question (i.e. What are the main campaign characteristics associated with successful sports crowdfunding campaigns?) by analysing data from a sample of campaigns collected from three crowdfunding platforms. These kinds of platforms are a significant data source in research on nascent entrepreneurial ventures as both successful and failed projects are represented, overcoming the left-censoring problem frequently encountered by entrepreneurial studies.

This research first analysed campaign characteristics to determine which affect the likelihood of projects' success, comparing projects that succeeded in reaching their funding goal with those that failed to do this. Next, for those projects that reached their funding target, the model estimated served to identify the main determinants of overfunding.


Campaign success is associated with several characteristics such as lower funding targets. This finding agrees with the results reported by Belleflamme et al. (2014), Kuppuswamy and Bayus (2013), Mollick (2014) and Zheng et al.

(2014) for reward-based crowdfunding. The present findings also confirm that success is associated with a higher number of backers (Hoobs et al., 2016; Moutinho and Leite, 2013; Vulkan et al., 2016). Regarding the duration of crowdfunding campaigns, the current results reveal that this factor is not statistically significant in either model. Previous studies have reported divergent findings: positive (Zheng et al., 2014), negative (Mollick, 2014) and non-significant (Zheng et al., 2014). Thus, a longer campaign duration could be linked with both higher project visibility and a lack of confidence.

The model estimated also indicated that donation-based sports campaigns are more likely to succeed than reward-based projects. Crowdfunding projects with fixed funding are more likely to be successful than projects with flexi-

ble funding. From the backers' perspective, their sense of security is strengthened because their money is not kept by the crowdfunder if this kind of project fails to meet its goal (Cumming et al., 2014).

The present study's findings offer managerial implications for crowdfunding entrepreneurs by shedding light on the drivers that might affect their projects' ability to attract financing. Overfunding is quite rare, and campaigns with higher targets are less likely to achieve success. Therefore, entrepreneurs need to plan and set their goals carefully. As projects with a higher number of backers are more likely to get financed, entrepreneurs' existing social networks are of utmost importance. This study focused solely on campaign characteristics, so future studies could include other variables such as entrepreneurs' profiles and networks and projects' concepts and offerings.



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