

Crowdfunding for Social Impact: Examining University-Led Initiatives

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Abstract

This study highlights the key role of crowdfunding in promoting social impact at Universities (Salem State University, Boston University and Babson College). Through analysis of funded campaigns, we identify key factors influencing their success, including the importance of storytelling, institutional legitimacy, and community network activation. Sentiment analysis using TextBlob revealed that campaigns with a positive, and engaging narrative tended to perform better, although some projects compensated for weak storytelling with other levers, such as mobilizing university communities. These results confirm that universities can play a vital role in social entrepreneurship by using crowdfunding to fund impact initiatives while offering students a hands-on learning opportunity on the dynamics of participatory funding. However, the uneven distribution of funding observed highlights the need for university platforms to better adapt their evaluation criteria, to different types of projects, and to offer specific support to project leaders from under-represented backgrounds. In conclusion, this study contributes to a better understanding of university crowdfunding and its potential to generate sustainable social impact, paving the way for future research into the mechanisms of institutional differentiation and the optimization of crowdfunding strategies in higher education.

Keywords

University Crowdfunding, Crowdfunding Campaigns, Sentiment Analysis, Case Study Analysis, Community Engagement

1. Introduction

In recent years, crowdfunding has emerged as a prominent alternative funding mechanism, enabling individuals and organizations with the opportunity to raise capital for various projects through online platforms. Persuasive communication,

particularly through project descriptions (Zhou et al., 2018), is crucial for attracting potential backers (Palmieri et al., 2022).

Crowdfunding addresses a wide range of societal issues, from entrepreneurial projects to social causes. In higher education, American universities increasingly use crowdfunding to promote social justice, inclusion, and community development.

The U.S. experience is relevant to our case study as university crowdfunding sites are rapidly expanding within the American crowdfunding industry, contrasting with Europe, Asia, and Africa. For example, Ibáñez-Hernández et al. (2022) note that Spanish universities have yet to establish crowdfunding as a tool for academic social responsibility, despite its use in supporting societal-beneficial research.

Horta et al. (2022) underline that less prestigious UK universities use crowdfunding for learning activities but raise concerns about burdening academics and students, especially lower socioeconomic backgrounds. Despite this they suggest crowdfunding may democratize higher education funding.

This study investigates how crowdfunding has evolved beyond a financial tool (Troise, 2020) to mobilize collective action and strengthen university-community connections (Verhoeven & Palmer, 2015). It examines the effectiveness of these campaigns in addressing marginalized groups' needs and driving meaningful changes, highlighting crowdfunding's transformative role in higher education.

Ultimately, this study analyzes crowdfunding's potential as a catalyst for sustainable social change and its role in promoting justice, inclusion and community development.

Cho et al. (2019) emphasize that higher education institutions are experimenting with crowdfunding to build financial and social capital by leveraging alumni, students, community members, and project organizers.

University ecosystem, including entrepreneurship centers and co-working spaces, provides access to projects and student teams needing support for R&D, prototyping, and intellectual property filings (Ainamo et al., 2021). Universities are evolving into entrepreneurial institutions (Curley & Formica, 2013). Kobylińska & Lavios (2020) note that university entrepreneurial ecosystems facilitate research commercialization and promote academic entrepreneurship. Alumni engagement fosters innovation, with graduates contributing to technology transfer and knowledge-intensive ventures through (El-Awad et al., 2024).

Universities play a key role in regional entrepreneurial ecosystems through infrastructure, technology, talent, and a culture of innovation (Huang-Saad et al., 2018). For example, MIT's entrepreneurial ecosystem supports startups and provides a benchmark for alumni entrepreneurs' economic impact (Roberts et al., 2019). Similarly, Stanford's ecosystem has fostered 39,900 active companies, generating \$2.7 trillion in annual revenue and 5.4 million jobs worldwide (Eesley & Miller, 2018).

Few studies address the social justice and educational aspects of university

crowdfunding. However, universities can leverage their ecosystems to support under-represented communities and promote social entrepreneurship (Crawford, 2023; O'Brien et al., 2019; Thomsen et al., 2018).

This study examines the role of crowdfunding and university entrepreneurial ecosystems in engaging stakeholders, driving campaign success, promoting social change, and strengthening university-community relationships.

The research question is: *What factors contribute to the success of crowdfunding campaigns at universities, particularly focusing on the role of visibility, alignment with community needs, and stakeholder involvement?*

Our paper analyzes how crowdfunding initiatives at universities (Salem States University, Boston University, and Babson College) engage students, alumni, faculty, and the community in supporting social and community development projects. It examines the relationship between sentiment analysis and successful crowdfunding, focusing on project descriptions.

By integrating theories such as resource mobilization, impact, social capital, signaling, network effects, and stakeholder theory, we explain how crowdfunding drives long-term institutional and social change (Cai et al., 2021; van Teunenbroek et al., 2023).

Our findings contribute to academic literature and practical applications, providing insights for universities, nonprofits, and policymakers seeking to leverage crowdfunding for societal impact. We suggest integrating crowdfunding education into university curricula to equip students with practical fundraising skills the digital age.

The next section reviews previous work on key factors and crowdfunding success. Section 3 presents the methodology, Section 4 discusses the results, and Section 5 provides the discussion. The final section concludes the study.

2. Literature Review

Crowdfunding is a novel financing method allowing individuals to solicit funding from many people (the public crowd) in exchange for rewards, donation, or equity. It leverages social networking and the power of the Internet to spread the word about products or projects (Lau et al., 2016; Belleflamme, 2025). Ruget (2019), based on Best and Neiss (2015), defines crowdfunding as pooling financial resources from many individuals to turn an idea into a project or business. Chu (2017) notes a consensus among researchers that crowdfunding is an innovative funding practice soliciting money from many individuals through an internet-based platform for a shared purpose.

Crowdfunding typologies are classified into donation-based and investment crowdfunding, reward-based, donation-based, and equity-based crowdfunding, and equity-based, peer-to-peer lending, reward-based, and donation-based crowdfunding. Crowdfunding has emerged as a potential alternative source of funding for universities, especially those with fewer resources. While it can democratize funding, it can also disadvantage financially precarious institutions. Some

universities have created their own crowdfunding platforms, benefiting from institutional resources but being less flexible (Horta et al., 2022; Ingram et al., 2016).

As noted by Baskerville & Cordery (2014), crowdfunding was first introduced in 2001. By 2013, there were 452 crowd-funding platforms in the U.S., collectively channeling \$1.47 billion. Globally, crowdfunding platforms raised an estimated €2.2 billion in 2012, an 80% increase from €1.2 billion in 2011 and €400 million in 2009. This rapid growth underscores the increasing importance of crowdfunding as a financial mechanism. Universities have had a variable rate of adoption, with some institutions potentially slow to recognize its importance.

In 2012, the University of Utah and the University of Virginia conducted the first university crowdfunding experiments. The University of Utah partnered with The University of Virginia launched its own crowdfunding site to better understand donor interests and allow donors to support projects they are passionate about (Marlett, 2015). These experiences show us that university donations, rewards, and crowdfunding sites bridge the gap between students needing money for their projects and alumni looking for opportunities to donate or invest.

To explore the role of crowdfunding and the university entrepreneurial ecosystem in successful campaigns and promoting social change, projects were categorized according to thematic analysis (Clarke & Braun, 2017) and resource mobilization theories (McCarthy & Zald, 1977; Jenkins, 1983). Based on social capital theory, Cai et al. (2019) show that social capital, including structural, relational, and cognitive dimensions, significantly influences crowdfunding outcomes. The influence of social capital on crowdfunding is dynamic and affects various stages of the campaign process (Cai et al., 2021).

In educational campaigns, the structural and relational dimensions of social capital are particularly important for fundraising success, suggesting that leveraging social networks and community connections can enhance fundraising potential, especially for higher education students (Sabarudin et al., 2021). Robiady et al. (2021) find that storytelling techniques positively affect customer engagement and donation performance, particularly direct storytelling. Ikhsan et al. (2022) emphasize that digital storytelling significantly affects the UTAUT construct (performance expectancy, social influence, effort expectancy, and facilitating conditions) and ultimately the intention of potential donors to give money through social crowdfunding.

Considerable attention has been paid to the characteristics of crowdfunding campaigns, including the type of information presented, the manner of presentation, and the interaction between creators and the crowd (Mollick, 2014; Colombo et al., 2015; Sauermann et al., 2018). The amount of information provided about a project is positively correlated with funding success, especially when the information makes the project more understandable and relatable to the crowd. Visual information, such as videos, is particularly effective, and project updates during

the campaign can further increase the likelihood of success. This aligns with theories of storytelling and realistic goal setting in crowdfunding. Effective storytelling suggests that successful university crowdfunding campaigns use compelling narratives with emotional appeal, clear messaging, and visual elements to engage donors. Realistic goal setting theory emphasizes the importance of setting achievable fundraising goals within the campaign timeline to increase success (Anglin et al., 2023).

The crowdfunding ecosystem consists of project creators, funders, and platforms, with outcomes influenced by project design, participant characteristics, and platform architecture (Tan & Reddy, 2020). In the university context, crowdfunding can complement traditional funding sources but may prioritize marketable projects over essential research (Baskerville & Cordero, 2014). Engagement theory emphasizes active participation and collaboration, particularly in educational settings. It argues that when individuals feel emotionally and intellectually invested in a cause, they are more likely to contribute, both financially and in other supportive ways (Delaforce et al., 2007).

Horta et al. (2022) argued that the crowdfunding initiatives may prove to be promising tools through which students can access resources that give them agency in furthering their learning experiences at their current university. Crowdfunding is becoming an increasingly popular way to fund projects in a variety of social and economic sectors. In the U.S., there are more than 50 university crowdfunding platforms. Educators have found that these platforms can serve as powerful educational tools. By requiring students to turn their ideas into live crowdfunding campaigns, students not only can secure funding for their projects, but also to develop essential entrepreneurial skills such as business planning, product development, pitching, marketing, and sales. They also receive valuable feedback from the marketplace (Moreira et al., 2024).

Lau et al. (2016) highlight three key roles in crowdfunding: the intermediary (crowdfunding platform), fundraisers, and investors (the crowd). The platform acts as a matchmaker between fundraisers and investors, who support projects, share risks, and anticipate returns.

Li et al. (2018) highlight three key success factors for crowdfunding: the rigor of the crowdfunding site in selecting and vetting projects, and the establishment of communication channels between project sponsors and backers.

Frydrych et al. (2014) found that project characteristics and quality are critical to successful crowdfunding. Important factors include the industry, nature of the project and information provided by the project sponsor, such as product ideas, videos, pictures, and business plans. Timely updates by the sponsor can also increase investor confidence (Li et al., 2018).

According to the Social Network and Personal Connections Theory, building personal connections with potential donors can effectively increase giving. This can be done by leveraging existing networks, such as alumni or faculty, and using social media to connect with donors. Ruget (2019) confirms that campaigns with

a strong social media presence are more likely to succeed.

Müllerleile et al. (2015) identified the number of updates, the set funding goal, and the number of comments as the most important success factors for crowdfunding campaigns. Aleksina et al. (2019) found that establishing and maintaining professional contacts through social media is crucial for successful crowdfunding campaigns; one additional tweet or retweet can increase the success rate by one percentage point.

3. Research Methodology

This section describes the methodology used to assess the drivers of student, alumni, and faculty engagement in social impact and community development initiatives. Using a quantitative approach, we studied university-led crowdfunding projects across Salem State University, Boston University, and Babson College.

This case study methodology allowed for in-depth analysis of a small, focused sample of universities, enabling us to understand the specific contexts and unique characteristics of each institution's crowdfunding initiatives while identifying patterns across cases through statistical analysis. Van Wynsberghe and Khan (2007) emphasize that a case study is an empirical investigation examining a contemporary phenomenon in its real-life context, especially when the boundaries between phenomenon and context are not clear.

The methodology includes:

3.1. Data Collection

Aggregation of crowdfunding website links from Salem State University, Boston University and Babson College. Python was used to extract content from these campaign web pages, including project title, progress (amount funded), funded percentage and project status.

Python script used the requests, BeautifulSoup, and pandas libraries to extract information about crowdfunding projects from a web page. It begins by retrieving the target page via a proxy API (scraperapi.com). Next, the HTML content of the page was analyzed with BeautifulSoup, and the script searches for blocks containing project information (div with the project-title__info class). For each project, it extracted key details such as title, description, percentage of funding reached, number of donors and number of days remaining before the end of the campaign. The collected data was stored as a dictionary list and converted into a panda.

DataFrame array, which was displayed at the end of the script. This code was useful for automating the collection of information on crowdfunding campaigns without the need for manual intervention.

3.2. Natural Language Processing (NLP) and Sentiment Analysis

TextBlob, a Python library was used to evaluate project descriptions. Sentiment

analysis assessed the emotional tone of project titles and descriptions, with scores ranging from -1 (very negative) to $+1$ (very positive). Data pre-processing was used, starting with project titles and descriptions, sentiment evaluation was carried out using the TextBlob library, a natural language processing tool for analyzing the overall tone of a text. Sentiment polarity is measured on a continuous scale from -1 to 1 , where: -1 corresponds to a very negative sentiment, 0 indicates neutrality, and 1 represents a very positive sentiment. Each project description was analyzed to extract its polarity score, which was added under the Score_Sentiment column of the dataset. Data from 54 projects were collected, including funding goals, amounts raised, donor count, project description, and social media (YouTube, LinkedIn, WhatsApp, Facebook), as shown in **Table 1**.

Table 1. Key variables.

Variables	Type	Description
Funding Success (%)	Dependent	% of funding goal achieved
Number of Donors	Independent	Total number of unique donors
Average Donation (\$)	Independent	Total funds raised/number of donors
Project Category	Categorical	Education, Health, Development, Humanitarian Aid
Sentiment Score	Independent	Sentiment polarity of project description (TextBlob)
Storytelling Elements	Categorical	Presence of personal stories, emotional appeal
Social Media Shares	Independent	Total shares, retweets, and likes on social platforms

Projects were categorized using an algorithm-based classification system analyzing keywords associated with different topics. Categories include: Health & Wellness for projects focused on nursing; medicine; mental health, Education & Training for projects focused on scholarships; conferences; internships, Humanitarian Aid, Development & Social Justice, Sports & Culture, and Other.

Project Scoring methodology was used, once projects have been ranked, we analyze their performance using two indicators: percentage of funding measures a project's ability to reach its initial funding target, and number of donors reflects the project's appeal to the public.

We use the average of these indicators by category to determine whether certain types of projects perform better than others.

3.3. Statistical Analysis

Evaluated the impact of various factors, the Pearson correlation was used, and following by Analysis of Variance (ANOVA), and Tukey's Post-hoc Test (HSD). Statistical analysis of multiple project categories often requires a two-step approach: first determining whether significant differences exist between groups, and then identifying which specific groups differ from each other.

Two complementary statistical methods are commonly employed for this purpose ANOVA, and Tukey’s HSD (Honest Significant Difference) Post-hoc Test.

ANOVA evaluates whether statistically significant differences exist between the means of multiple independent project categories (Education and Training, Humanitarian Aid, Development and Social Justice, Sports and Culture, and Health and Wellness). In one-way ANOVA, the test compares variability between these categories to variability within each category to generate an F-statistic.

Hypotheses:

H_0 (null hypothesis): Mean values across all project categories are equal.

H_1 (alternative hypothesis): At least one project category’s mean differs.

The F-statistic is calculated as the ratio of between-category variance to within-category variance:

$$F = \frac{(\text{Between – category variance})}{(\text{Within – category variance})}$$

A larger F-value suggests a greater likelihood of genuine differences between project categories (**Figure 1**).

When $p < 0.05$, the null hypothesis is rejected, indicating at least one significant difference among the categories.

Following a significant ANOVA result, Tukey’s HSD test identifies which specific project category pairs differ significantly from each other.

This test performs pairwise comparisons between all project categories (Education and Training vs Health and Wellness) while controlling for Type I errors (False positives) by adjusting p-values appropriately.

For each pairwise comparison, Tukey’s HSD provides mean difference, confidence interval, adjusted p-value, and significance indication (True/False).

ANOVA first establishes whether significant differences exist among project categories (Education and Training, Humanitarian Aid, Development and Social Justice, Sports and Culture, and Health and Wellness), and Tukey’s HSD then determines precisely which categories differ significantly from each other (Education and Training vs. Sports and Culture) (**Table 2**).

```
def categorize_project(title):
    title = title.lower()
    if any(keyword in title for keyword in ["nursing", "medical", "health", "mental"]):
        return "Santé & Bien-être"
    elif any(keyword in title for keyword in ["scholarship", "education", "conference", "internship"]):
        return "Éducation & Formation"
    elif any(keyword in title for keyword in ["fundraiser", "donation", "charity", "help"]):
        return "Aide Humanitaire"
    elif any(keyword in title for keyword in ["festival", "sports", "competition", "game", "rugby", "soccer", "basketball"]):
        return "Sport & Culture"
    elif any(keyword in title for keyword in ["peace", "community", "justice"]):
        return "Développement & Justice Sociale"
    else:
        return "Autres"
```

Figure 1. Categorization.

Table 2. Projects.

Project	Funded_Percent	Donors_Count	Facebook	Score_Project_category	Score_sentiment	Average_Donation_\$	Project_Category_label	Project_Category
0	182%	17	1	90.81	0	10.71	Very high	Education and training
1	296%	34	1	90.81	0	8.71	Very high	Education and training
2	54%	21	1	90.81	0	2.57	Very high	Education and training
3	102%	15	1	90.81	0	6.8	Very high	Education and training
4	20%	10	1	90.81	0	2	Very high	Education and training
5	29%	19	1	90.81	0	1.56	Very high	Education and training
6	83%	6	1	90.81	0	13.83	Very high	Education and training
7	59%	92	1	90.81	0	0.64	Very high	Education and training
8	44%	23	1	90.81	0	1.91	Very high	Education and training
9	202%	41	1	90.81	0.375	1.94	Very high	Education and training
10	56%	16	1	90.81	0	3.5	Very high	Education and training
11	35%	11	1	90.81	0	3.18	Very high	Education and training
12	31%	25	1	90.81	0	1.24	Very high	Education and training
13	100%	13	1	90.81	0	7.69	Very high	Education and training
14	100%	43	1	70.62	0	2.33	Very high	Humanitarian aid
15	79%	10	1	70.62	0	7.9	High	Humanitarian aid
16	63%	17	1	70.62	0	3.71	High	Humanitarian aid
17	31%	14	1	70.62	0	2.21	High	Humanitarian aid
18	40%	14	1	70.62	0	2.86	High	Humanitarian aid
19	97%	127	1	70.62	0	0.76	High	Humanitarian aid
20	52%	42	1	70.62	0	1.24	High	Humanitarian aid
21	75%	18	1	70.62	0	4.17	High	Humanitarian aid
22	108%	58	1	70.62	0	1.86	High	Humanitarian aid
23	66%	38	1	70.62	0	1.74	High	Humanitarian aid

Continued

24	11%	5	1	68.32	0	2.2	High	Other
25	200%	44	1	65.35	0	4.55	High	Humanitarian aid
26	105%	32	1	65.35	0	3.28	Medium	Humanitarian aid
27	54%	125	1	65.35	0	0.432	Medium	Development and social justice
28	1%	1	1	65.35	-0,1	1	Medium	Development and social justice
29	25%	4	1	65.35	0	6.25	Medium	Development and social justice
30	100%	333	1	65.35	0	0.3	Medium	Development and social justice
31	7%	7	1	65.35	0	1	Medium	Development and social justice
32	99%	10	1	65.35	0,5	9.9	Medium	Development and social justice
33	16%	10	1	65.35	0	1.6	Medium	Development and social justice
34	29%	17	1	65.35	0	1.71	Medium	Development and social justice
35	17%	21	1	65.35	0	0.81	Medium	Development and social justice
36	55%	33	1	65.35	0	1.67	Medium	Development and social justice
37	36%	19	1	65.35	0	1.89	Medium	Development and social justice
38	84%	10	1	65.35	0,1	8.4	Medium	Development and social justice
39	94%	45	1	65.35	0	2.09	Medium	Development and social justice
40	173%	27	1	54.31	0.25	6.41	Medium	Development and social justice
41	36%	20	1	54.31	0	1.8	Low	Sports and culture
42	116%	49	1	54.31	0.5	2.37	Low	Sports and culture

Continued

43	89%	152	1	54.31	0	0.59	Low	Sports and culture
44	4%	1	1	54.31	0	4	Low	Sports and culture
45	103%	16	1	54.31	0.1	6.44	Low	Sports and culture
46	71%	237	1	54.31	0	0.3	Low	Sports and culture
47	121%	107	1	46.92	0	1.14	Low	Health and wellness
48	83%	158	1	46.92	0	0.53	Low	Health and wellness
49	66%	72	1	46.92	-0.2917	0.92	Low	Health and wellness
50	137%	140	1	46.92	0	0.98	Low	Health and wellness
51	82%	13	1	46.92	0.1	6.31	Low	Health and wellness
52	133%	26	1	46.92	0	5.12	Low	Health and wellness
53	117%	36	1	46.92	0	3.25	Low	Health and wellness
54	36%	30	1	46.92	0	1.2	Low	Health and wellness

4. Findings and Discussions

As **Table 3** (Distribution of projects) shows, the average project value is 27, with a large standard deviation of 16.02, indicating considerable variability in project size. The average funding rate is 78.25%, but the high standard deviation (56.42%) suggests significant variability - some projects are very well-funded, while others struggle.

Table 3. Distribution of projects.

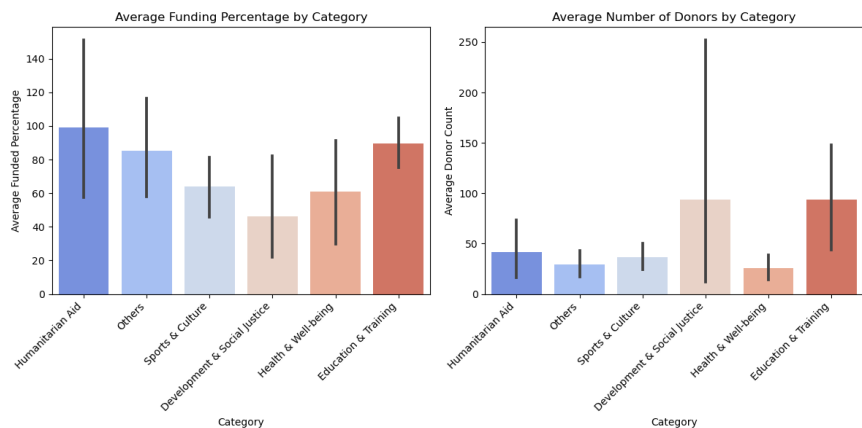
Statistics	Project	Financing rate (%)	Number of donors	Score Storytelling	Average donation (\$)
Average	27.00	78.25	45.89	68.76	3.39
Standard deviation	16.02	56.42	61.71	15.08	3.02
Min	0.00	1.00	1.00	46.92	0.30
1st Quartile	13.50	36.00	13.50	54.31	1.22
Median	27.00	71.00	21.00	65.35	2.20
3rd Quartile	40.50	101.00	43.50	80.72	4.74
Max	54.00	296.00	333.00	90.81	13.83

The number of donors varies widely, with a mean of 45.89 and a high standard deviation of 61.71, indicating that some projects attract many donors while others attract few. The narrative score averages 68.76, with a range from 46.92 to 90.81, indicating room for improvement. The average donation of \$3.39 varies from

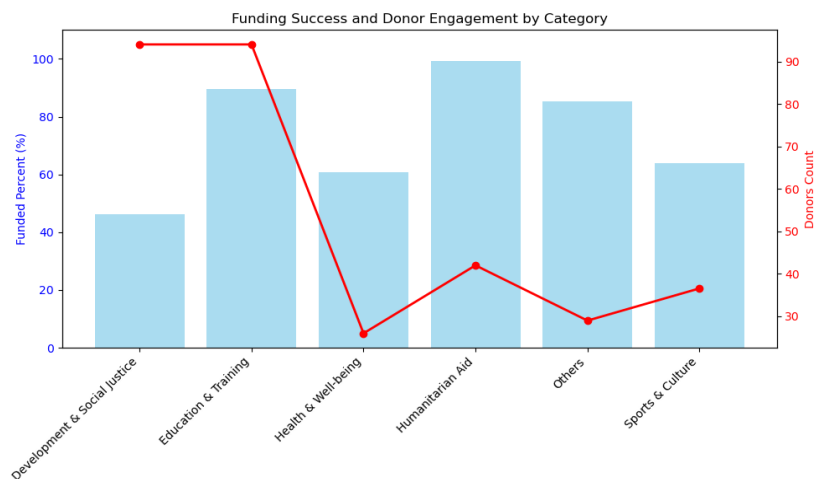
\$0.30 to \$13.83, showing differences in donor engagement.

Peaks of 296% funding and 333 donors suggest outliers or exceptionally successful projects. The large differences between quartiles (36% funding in the first quartile vs. 101% in the third quartile) indicate significant disparities between projects. The median funding rate of 71% is below the average of 78.25%, suggesting that highly funded projects pull the average up. The median number of donors (21) is well below the average (45.89), indicating that a few projects attract a disproportionate number of donors.

As shown in **Figure 2** and **Figure 3** in the appendices, Development and Social Justice represents 46.25% of funded projects. Despite a high number of donors (94), these projects struggle to meet funding targets, possibly due to lower donor commitment or perceived urgency. Education and Training is 89.44% funded, with strong community support and a high number of donors (94). Health and Well-being has a funding percentage of 60.86 and the lowest number of donors (26), indicating a need targeted donor awareness.



(a)



(b)

Figure 2. (a) Average funding percentage and numbers of donors. (b) Funding success and donor engagement.

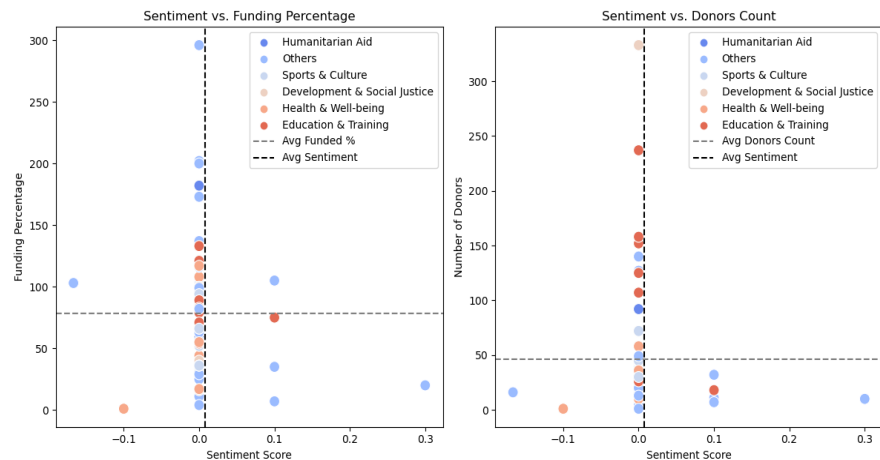


Figure 3. Sentiment analysis.

Humanitarian Aid is 99.25% funded, with moderate number of donors (42), likely due to its urgency and emotional appeal. Others projects have 85.17% funding, but low donor commitment (29). Sport and Culture has 63.86% funding, and a higher number of donors (36.57) than Health, but lower than Education and Development.

Sentiment analysis shows slightly positive scores for Education & Training (0.011) and Other (0.018), while Health & Welfare (0.014) has a negative sentiment, suggesting urgent or worrisome language. Neutral sentiment in Humanitarian Aid indicates a mix of emergencies and hopeful language.

The moderate correlation takes on a new meaning when broken down by category: Pearson correlation (0.68), shows a moderate to strong positive correlation between funding percentage and number of donors (p -value < 0.001) **Figure 4**. The scatter plot indicates that more donors tend to result in better funding, but other factors may influence this relationship.

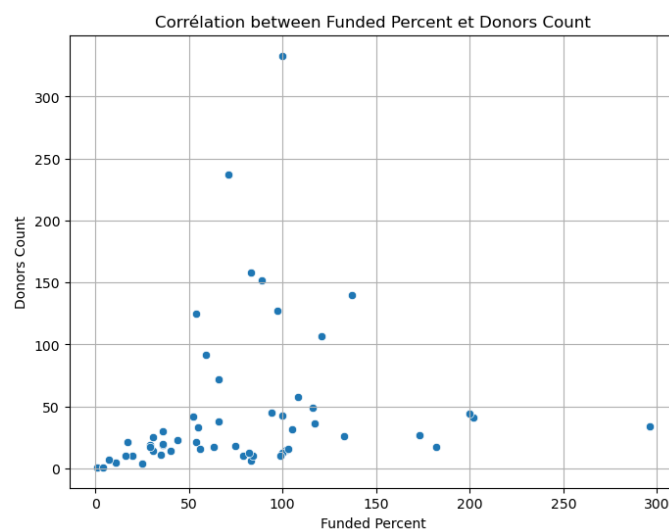


Figure 4. Correlation between Funded percent and donors count.

As shown in **Table 5 & 6**, Variables Donors_Count, Score_Project_Category, and AverageDonation\$ show statistically significant differences across different Project_Category_Label groups.

Table 5. ANOVA test.

Variable	P value (p < 0.05)	Significant	Conclusion
Funded_Percent	0.226	No	No difference
Donors_Count	0.0009	Yes	Strong difference
Score_Project_Category	0.0001	Yes	Extreme difference
Score_Sentiment	0.319	No	No difference
Average Donation\$	0.036	Yes	Moderate difference

Table 6. POST-HOC TUKET HSD test.

Tukey HSD Results ($\alpha = 0.05$)					
Donors_Count					
Group 1	Group 2	Mean Difference	P-value	Cohen's d	Significant
Education & Training	Humanitarian Aid	8.21	0.901	0.18	No
Education & Training	Development & social Justice	42.35	0.003	0.91	Yes
Education & Training	Sports & Culture	53.72	<0.001	1.24	Yes
Education & Training	Health & Well being	51.89	<0.001	1.17	Yes
Humanitarian Aid	Development & social Justice	34.14	0.012	0.73	Yes
Humanitarian Aid	Sports & Culture	45.51	<0.001	1.06	Yes
Humanitarian Aid	Health & Well being	43.68	<0.001	0.99	Yes
Development & social Justice	Sports & Culture	11.37	0.682	0.33	No
Development & social Justice	Health & Well being	9.54	0.781	0.26	No
Sports & Culture	Health & Well being	-1.83	0.994	-0.07	No
Average Donation\$					
Group 1	Group 2	Mean Difference	P-value	Cohen's d	Significant
Education & Training	Humanitarian Aid	1.87	0.587	0.41	No
Education & Training	Development & social Justice	2.65	0.042	0.63	Yes
Education & Training	Sports & Culture	3.12	0.058	0.71	Yes
Education & Training	Health & Well being	2.98	0.078	0.68	Yes
Humanitarian Aid	Development & social Justice	0.78	0.912	0.22	No
Humanitarian Aid	Sports & Culture	1.25	0.724	0.30	No
Humanitarian Aid	Health & Well being	1.11	0.801	0.27	No
Development & social Justice	Sports	0.47	0.982	0.08	No
Development & social Justice	Health & Well being	0.33	0.996	0.05	No
Sports & Culture	Health & Well being	-0.14	1.000	-0.03	No
Score_Project_Category					
Group 1	Group 2	Mean Difference	P-value	Cohen's d	Significant
Education & Training	Humanitarian Aid	19.83	<0.001	2.97	Yes
Education & Training	Development & social Justice	24.17	<0.001	3.89	Yes
Education & Training	Sports & Culture	41.59	<0.001	6.21	Yes

Continued

Education & Training	Health & Well being	40.72	<0.001	5.98	Yes
Humanitarian Aid	Development & social Justice	4.34	0.208	0.92	No
Humanitarian Aid	Sports & Culture	21.76	<0.001	3.24	Yes
Humanitarian Aid	Health & Well being	20.89	<0.001	3.01	Yes
Development & social Justice	Sports & Culture	17.42	<0.001	2.32	Yes
Development & social Justice	Health & Well being	16.55	<0.001	2.09	Yes
Sports & Culture	Health & Well being	-0.87	0.991	-0.23	No

The Score_Project_Category variable, with the lowest p-value (0.0001), suggests the differentiation among categories, funded_Percent and Score_Sentiment do not vary significantly across project categories, suggesting these metrics are more uniform regardless of project type.

The ANOVA and The post-hoc Tukey HSD Test results for each quantitative variable, firstly the Donors_Count: Education & Training against Development & Social Justice ($d = 0.91$), Sports & Culture ($d = 1.24$), and Health & Wellbeing ($d = 1.17$), and Humanitarian Aid against Development & Social Justice ($d = 0.73$), Sports & Culture ($d = 1.06$), and Health & Wellbeing ($d = 0.99$).

Strong differences exist, particularly between Education & Training/Humanitarian Aid and other categories like Sports & Culture or Health & Wellbeing, indicating major variations in donor engagement.

Secondly, on the Average Donation\$, Education & Training against Development & Social Justice ($d = 0.63$), borderline cases (just over 0.05 but with medium effect sizes) against vs. Sports & Culture ($p = 0.058$, $d = 0.71$), and Health & Wellbeing ($p = 0.078$, $d = 0.68$).

Differences in average donations are less extreme than for donor count but still suggest moderate differentiation, especially for Education & Training.

Finally, Score_Project_Category, Education & Training differs significantly from all other groups with very large effect sizes ($d > 2.9$ to 6.2).

Other notable significant pairs: Humanitarian Aid vs Sports & Culture ($d = 3.24$), Development & Social Justice vs Sports & Culture ($d = 2.32$), and Development & Social Justice vs Health & Wellbeing ($d = 2.09$).

These are very strong and consistent differences, indicating that the Score_Project_Category metric clearly separates project categories, with particularly extreme differences involving Education & Training and Sports & Culture.

If we segment or target according to donor behavior or performance scores, the education and training and sports and culture sectors stand out.

Score-based measures offer discriminating power, while the number of donors follows closely behind, differences in average donations are less marked, but the education and training sector shows a trend towards increased donations as shown in **Figure 5**.

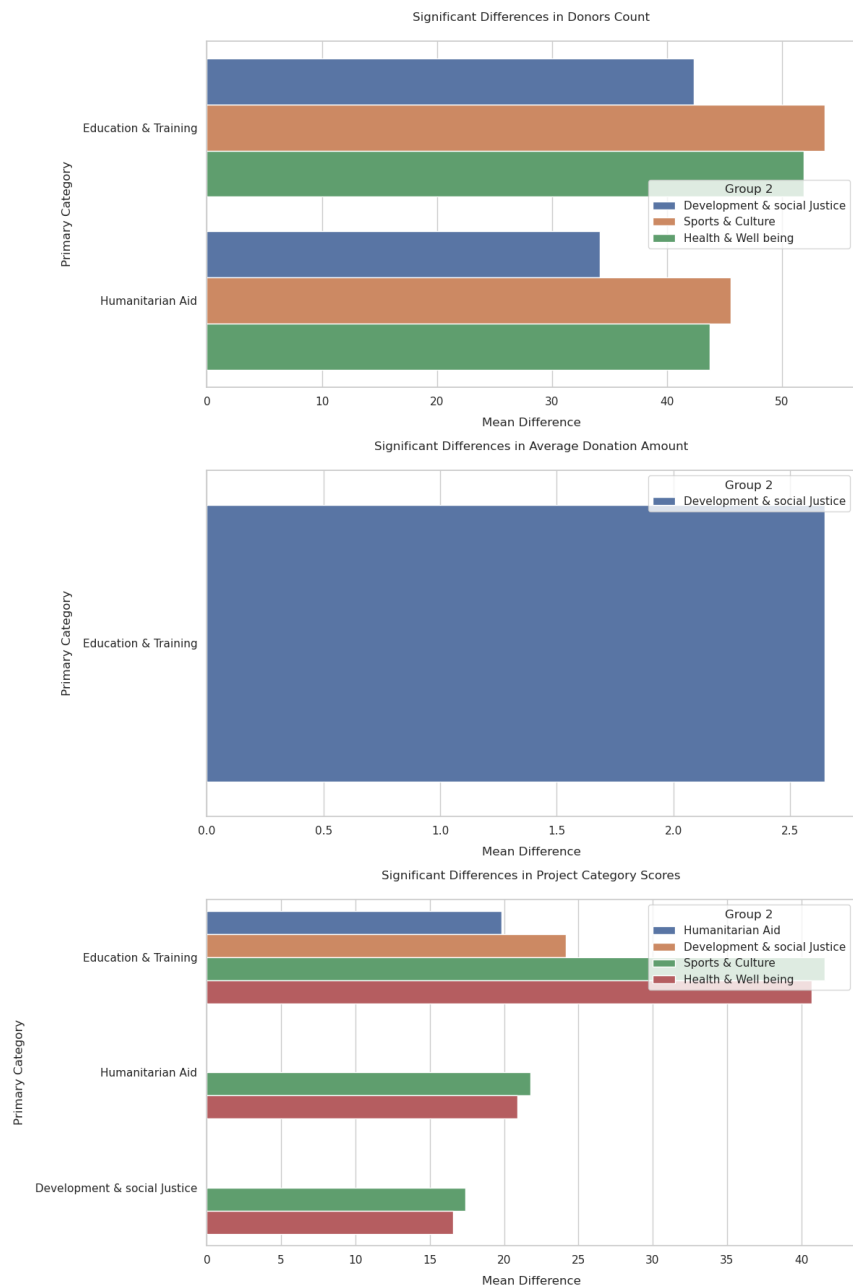


Figure 5. Mean difference by group.

Education and Training has a storytelling score (90.81) and funding rate (92.36%), an almost perfect correlation between narrative quality and success, confirms the combined effect of institutional legitimacy and storytelling, confirms Mollick's (2014) work on the importance of preparation and presentation quality, Colombo et al. (2015) findings on the amplifying effect of internal social capital, and validates Frydrych et al. (2014) theory of institutional legitimacy.

Humanitarian aid has a storytelling score of 70.41 and a funding rate of 65.64% highlighting the importance of effective storytelling.

Development and social justice projects have a storytelling score of 65.35 and a

funding rate of 61.47%, showing the strongest correlation among the four categories. This suggests that these projects heavily rely on their narrative capacity. This finding supports work on social crowdfunding and aligns with research on social entrepreneurship and crowdfunding.

Sports and culture projects have a storytelling score of 50.37 and a funding rate of 91.13%, presenting an apparent paradox: a low storytelling score but an excellent funding rate. This suggests the presence of other success factors, such as pre-existing communities and fan passion. The observed paradox (50.37/91.13%) can be explained by communities of passion theory and research on the importance of pre-existing social networks.

The high funding rates (91.13% and 92.36%) confirm social capital theory, and the success rates (46.67% and 35.71%) confirm [Colombo et al. \(2015\)](#) work on the importance of pre-existing networks. These findings reinforce [Frydrych et al. \(2014\)](#) theory of institutional legitimacy. The high funding rates (91.13% and 92.36%) can now be explained by two factors: The priority given to projects in Education and Training category, and the academic network effect. This combination creates a double advantage for education and training projects.

The role of crowdfunding platforms is crucial in promoting student, alumni, and faculty engagement, strengthening participation in initiatives aimed at social impact and community development. The total number of donors (2524) confirms theory of emerging communities, the median funding rate (71%) aligns with observations on platform effectiveness, and the overall success rate (30.91%) matches the averages observed by [Mollick \(2014\)](#).

The overall success rate (30.91%) masks significant disparities. Projects in the Education and Training / Humanitarian aid categories are likely well above average, while Development and social justice/Health & well being, Sports and culture Projects: probably below. This hierarchy helps understand the polarization observed earlier. Education and Training projects benefit from institutional networks and academic legitimacy. Other projects face increasing challenges depending on their category: Humanitarian aid can compensate with urgency/emotion, Development and social justice needs to invest more in communication, and Health & well being requires special efforts to justify and mobilize.

The success of a crowdfunding campaign depends on the interaction between the project's priority category, the networks that can be mobilized and the ability to develop a narrative adapted to its category. This polarization reveals important dynamics in university crowdfunding. Projects in the Education category achieve exceptional funding rates (>90%) due to several mechanisms:

1. The institutional legitimacy effect: Universities bring immediate credibility to the project, reducing the perception of risk among potential donors ([Colombo et al., 2015](#)).
2. Network density: Universities have several pre-existing networks: Alumni, Current students, Academic and administrative staff, and Institutional partners that can be activated quickly and efficiently.

3. Organizational capabilities: Universities often have professional communications services, project management expertise, dissemination infrastructures (newsletters, institutional social networks).

In contrast, projects in the other categories face significant challenges, even with an overall success rate of 30.91%:

- Lack of pre-existing networks
- Credibility to be built from scratch
- Limited resources for promotion
- Lack of institutional leverage.

This polarization raises questions about equity in access to educational crowdfunding. Crowdfunding, sometimes presented as a tool to democratize funding, could paradoxically reinforce the advantages of already established players. Future research could explore how crowdfunding platforms could develop specific support mechanisms for other projects, build bridges between ecosystems, and value forms of legitimacy other than institutional affiliation.

5. Conclusion

This study highlights that the relationship between storytelling and success in university crowdfunding varies by project category and institutional legitimacy, analysis of the campaigns revealed that educational projects generally combine storytelling and institutional credibility to maximize their chances of success, while cultural and sports initiatives tend to mobilize their communities to a greater extent.

Our TextBlob sentiment analysis showed that campaigns with a strong emotional tone generally achieved higher engagement rates, although this effect was less pronounced for projects with strong institutional support. This finding underscores the role of university social capital in enabling rapid and effective mobilization through alumni, faculty, and staff networks.

However, this dynamic presents a paradox: while crowdfunding is perceived as a democratic tool, it tends to reproduce and even exacerbate inequalities between projects, illustrating the phenomenon of the “Matthew Effect”. To reduce these disparities, several recommendations emerge:

Adapt strategies according to project category: in education and training, strong storytelling remains essential despite institutional legitimacy; in humanitarian aid, emotion is a key lever; in sport and culture, community activation is primordial.

This study opens several avenues for research. It would be interesting to examine the interaction between storytelling and other success factors more closely and to better assess the actual social impact of funded projects. Similarly, developing more holistic performance indicators and studying trade-off mechanisms between institutional legitimacy and community involvement would provide a better understanding of the dynamics of university crowdfunding.

While universities demonstrate how crowdfunding can be a powerful lever for

financing social impact initiatives, the challenges of unequal visibility and access to funding remain significant. The challenge for the future will be to identify strategies that strengthen equity among project sponsors while leveraging the strengths of academic institutions to maximize social innovation.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Ainamo, A., Pikas, E., & Mikkilä, K. (2021). University Ecosystem for Student Startups: A 'Platform of Trust' Perspective. In M. E. Auer, & T. Rüütman (Eds.), *Educating Engineers for Future Industrial Revolutions* (pp. 269-276). Springer.
https://doi.org/10.1007/978-3-030-68201-9_28
- Aleksina, A., Akulenko, S., & Lublóy, Á. (2019). Success Factors of Crowdfunding Campaigns in Medical Research: Perceptions and Reality. *Drug Discovery Today*, 24, 1413-1420. <https://doi.org/10.1016/j.drudis.2019.05.012>
- Anglin, A. H., Reid, S. W., & Short, J. C. (2023). More than One Way to Tell a Story: A Configurational Approach to Storytelling in Crowdfunding. *Entrepreneurship Theory and Practice*, 47, 461-494. <https://doi.org/10.1177/10422587221082679>
- Baskerville, R. F., & Cordery, C. J. (2014). Crowdfunding: A Threat or Opportunity for University Research Funding? *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.2458638>
- Belleflamme, P. (2025). Concentration in the French Crowdfunding Market: The Role of Positive Spillovers across Projects [Substack Newsletter]. *Platform Strategies*.
https://pure.eur.nl/ws/portalfiles/portal/180888482/Economics_Manag_Strategy_-_2025_-_Belleflamme_-_Spillovers_in_Crowdfunding.pdf
- Cai, W., Polzin, F., & Stam, E. (2019). Crowdfunding and Social Capital: A Systematic Literature Review. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3361748>
- Cai, W., Polzin, F., & Stam, E. (2021). Crowdfunding and Social Capital: A Systematic Review Using a Dynamic Perspective. *Technological Forecasting and Social Change*, 162, Article 120412. <https://doi.org/10.1016/j.techfore.2020.120412>
- Cho, M., Lemon, L. L., Levenshush, A. B., & Childers, C. C. (2019). Current Students as University Donors: Determinants in College Students' Intentions to Donate and Share Information about University Crowdfunding Efforts. *International Review on Public and Nonprofit Marketing*, 16, 23-41. <https://doi.org/10.1007/s12208-018-00217-9>
- Chu, D. D. (2017). A Comparative Study on Crowdfunding in the United States and the United Kingdom. *Emporium*, 1, Article 1. <https://doi.org/10.25506/LEMP11201729>
- Clarke, V., & Braun, V. (2017). Thematic Analysis. *The Journal of Positive Psychology*, 12, 297-298. <https://doi.org/10.1080/17439760.2016.1262613>
- Colombo, M. G., Franzoni, C., & Rossi-Lamastra, C. (2015). Internal Social Capital and the Attraction of Early Contributions in Crowdfunding. *Entrepreneurship Theory and Practice*, 39, 75-100. <https://doi.org/10.1111/etap.12118>
- Crawford, G. P. (2023). Keys to Building an Innovative and Entrepreneurial Campus Ecosystem: Practices to Policies. *Technology & Innovation*, 22, 459-475.
<https://www.ingentaconnect.com/content/nai/ti/2023/00000022/00000004/art00006>
- Curley, M., & Formica, P. (2013). Designing Creative Spaces for Idea Generation and Start-Up Experiments: The Role of University Ecosystems. *Industry and Higher Education*,

- 27, 9-14. <https://doi.org/10.5367/ihe.2013.0135>
- Delaforce, W. H., Buckley, J. A., Adkins, B. A., & Rich, B. R. (2007). Grassroots Engagement within a Regional Education Environment—A Program Theory Approach. In *6th International Service-Learning Research Conference: From Passion to Objectivity: International and Cross-Disciplinary Perspectives on Service-Learning Research* (pp. 1-22). <https://eprints.qut.edu.au/13038/1/13038.pdf>
- Eesley, C. E., & Miller, W. F. (2018). Impact: Stanford University's Economic Impact via Innovation and Entrepreneurship. *Foundations and Trends in Entrepreneurship*, 14, 130-278. <https://doi.org/10.1561/03000000074>
- El-Awad, Z., Gabrielsson, J., Pocek, J., & Politis, D. (2024). Unpacking the Early Alumni Engagement of Entrepreneurship Graduates. *Journal of Small Business Management*, 62, 1219-1252. <https://doi.org/10.1080/00472778.2022.2125979>
- Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. (2014). Exploring Entrepreneurial Legitimacy in Reward-Based Crowdfunding. *Venture Capital*, 16, 247-269. <https://doi.org/10.1080/13691066.2014.916512>
- Horta, H., Meoli, M., & Vismara, S. (2022). Crowdfunding in Higher Education: Evidence from UK Universities. *Higher Education*, 83, 547-575. <https://doi.org/10.1007/s10734-021-00678-8>
- Huang-Saad, A., Duval-Couetil, N., & Park, J. (2018). Technology and Talent: Capturing the Role of Universities in Regional Entrepreneurial Ecosystems. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12, 92-116. <https://doi.org/10.1108/jec-08-2017-0070>
- Ibáñez-Hernández, A., Carreton-Ballester, C., Esclapés, J., & Rodríguez-Jaume, M. J. (2022). The Scope of Crowdfunding in Responsible University Relations. *Análisi*, 67, 105-124. <https://doi.org/10.5565/rev/analisi.3557>
- Ikhsan, R. B., Muhammad, N. G., Faishal, M. R., Sutanto, W., Fernando, Y., & Susilo, A. (2022). Digital Storytelling and Intention to Donate through Crowdfunding Platform. In *2022 7th International Conference on Business and Industrial Research (ICBIR)* (pp. 116-121). IEEE. <https://doi.org/10.1109/icbir54589.2022.9786491>
- Ingram, C., Vaast, E., & Teigland, R. (2016). *Corporate Crowdfunding: Does Being Part of a University Affect a Platform's Operations?* https://ieeexplore.ieee.org/abstract/document/7427758?casa_token=5V2N-MDs7II-AAAAA:YSQU_BEWmDAU8nD7CREUUNnDF9EhStBDWey-wpKPF9aEgmLve9AOBVyZX3njWns-Jan7RIw_usw
- Jenkins, J. C. (1983). Resource Mobilization Theory and the Study of Social Movements. *Annual Review of Sociology*, 9, 527-553. <https://doi.org/10.1146/annurev.so.09.080183.002523>
- Kobylińska, U., & Lavios, J. J. (2020). Development of Research on the University Entrepreneurship Ecosystem: Trends and Areas of Interest of Researchers Based on a Systematic Review of Literature. *Oeconomia Copernicana*, 11, 117-133. <https://doi.org/10.24136/oc.2020.005>
- Lau, K. L., Chew, B. C., Maliki, A., & Hafizuddin, H. (2016). Crowdfunding for Academic Projects: A Case in Public Universities of Malaysia. *Journal of Advanced Manufacturing Technology*, 12, 273-284.
- Li, Y., Cao, H., & Zhao, T. (2018). Factors Affecting Successful Equity Crowdfunding. *Journal of Mathematical Finance*, 8, 446-456. <https://doi.org/10.4236/jmf.2018.82028>
- Marlett, D. (2015). Crowdfunding Art, Science and Technology: A Quick Survey of the Burgeoning New Landscape. *Leonardo*, 48, 104-105.

https://doi.org/10.1162/leon_a_00813

- McCarthy, J. D., & Zald, M. N. (1977). Resource Mobilization and Social Movements: A Partial Theory. *American Journal of Sociology*, 82, 1212-1241.
<https://doi.org/10.1086/226464>
- Mollick, E. (2014). The Dynamics of Crowdfunding: An Exploratory Study. *Journal of Business Venturing*, 29, 1-16. <https://doi.org/10.1016/j.jbusvent.2013.06.005>
- Moreira, M., Panis, A., & Alves, D. (2024). *Crowdfunding for Entrepreneurial Education: A Classroom Exercise in a Business School*. <https://doi.org/10.4018/IJICTE.315762>
- Müllerleile, T., & Joenssen, D. W. (2015). Key Success-Determinants of Crowdfunded Projects: An Exploratory Analysis. In B. Lausen, S. Krolak-Schwerdt, & M. Böhmer (Eds.), *Data Science, Learning by Latent Structures, and Knowledge Discovery* (pp. 271-281). Springer. https://doi.org/10.1007/978-3-662-44983-7_24
- O'Brien, E., Cooney, T. M., & Blenker, P. (2019). Expanding University Entrepreneurial Ecosystems to Under-Represented Communities. *Journal of Entrepreneurship and Public Policy*, 8, 384-407. <https://doi.org/10.1108/jep-03-2019-0025>
- Palmieri, R., Mercuri, C., & Mazzali-Lurati, S. (2022). Persuasive Reasons in Crowdfunding Campaigns: Comparing Argumentative Strategies in Successful and Unsuccessful Projects on Kickstarter. *International Journal of Strategic Communication*, 16, 332-355. <https://doi.org/10.1080/1553118x.2021.2008942>
- Roberts, E. B., Murray, F., & Kim, J. D. (2019). Entrepreneurship and Innovation at MIT: Continuing Global Growth and Impact—An Updated Report. *Foundations and Trends in Entrepreneurship*, 15, 1-55. <https://doi.org/10.1561/03000000093>
- Robiady, N. D., Windasari, N. A., & Nita, A. (2021). Customer Engagement in Online Social Crowdfunding: The Influence of Storytelling Technique on Donation Performance. *International Journal of Research in Marketing*, 38, 492-500. <https://doi.org/10.1016/j.ijresmar.2020.03.001>
- Ruget, V. (2019). Crowdfunding in the Classroom. *Currents in Teaching and Learning*, 11, 54-66.
- Sabarudin, N. A. B., Alma'amun, S. B., & Ahmad, R. (2021). Analysing Educational Campaign's Outcome in Donation-Based Crowdfunding: Social Capital as a Determinant Factor. *International Journal of Business and Society*, 22, 862-880. <https://doi.org/10.33736/ijbs.3764.2021>
- Sauermann, H., Franzoni, C., & Shafi, K. (2018). *Crowdfunding Scientific Research (Working Paper No. 24402; Working Paper Series)*. National Bureau of Economic Research. <https://doi.org/10.3386/w24402>
- Tan, Y. H., & Reddy, S. K. (2020). Crowdfunding Platforms: Ecosystem and Evolution. *Foundations and Trends in Marketing*, 14, 53-172. <https://doi.org/10.1561/17000000061>
- Thomsen, B., Muurlink, O., & Best, T. (2018). The Political Ecology of University-Based Social Entrepreneurship Ecosystems. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12, 199-219. <https://doi.org/10.1108/jec-08-2017-0068>
- Troise, C. (2020). Discovering the Underlying Dynamics of Crowdfunding Networks: Entrepreneurs' Ties, Crowdfunders' Connections and Community Spin-Offs. *Journal of Enterprising Communities: People and Places in the Global Economy*, 14, 277-298. <https://doi.org/10.1108/jec-03-2020-0018>
- van Teunenbroek, C., Dalla Chiesa, C., & Hesse, L. (2023). The Contribution of Crowdfunding for Philanthropy: A Systematic Review and Framework of Donation and Reward Crowdfunding. *Journal of Philanthropy and Marketing*, 28, e1791. <https://doi.org/10.1002/nvsm.1791>

- VanWynsberghe, R., & Khan, S. (2007). Redefining Case Study. *International Journal of Qualitative Methods*, 6, 80-94. <https://doi.org/10.1177/160940690700600208>
- Verhoeven, D., & Palmer, S. (2015). *Because It Takes a Village to Fund the Answers: Crowdfunding University Research*. Deakin University. [https://dro.deakin.edu.au/articles/chapter/Because it takes a village to fund the answers Crowdfunding University Research/20906014/1](https://dro.deakin.edu.au/articles/chapter/Because_it_takes_a_village_to_fund_the_answers_Crowdfunding_University_Research/20906014/1)
- Zhou, M., Lu, B., Fan, W., & Wang, G. A. (2018). Project Description and Crowdfunding Success: An Exploratory Study. *Information Systems Frontiers*, 20, 259-274. <https://doi.org/10.1007/s10796-016-9723-1>