



# Crowdfunding for sustainability: Key elements driving crowdfunding success across economic, social, and environmental goals

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## ABSTRACT

This paper explores how key elements of crowdfunding campaigns contribute to the success of sustainable initiatives in terms of economic, social, and environmental dimensions, synthesizing existing literature on the intersection of crowdfunding and sustainability and identifying elements associated with successful outcomes. Our findings reveal that notable differences emerge in project types, platform roles, and the motivations of backers and initiators across sustainable goals. This research provides practical guidance for enhancing the effectiveness of crowdfunding initiatives aiming to foster sustainable innovation, aligning them with sustainable objectives. It also offers insights to support the development of alternative, sustainability-focused financing strategies.

## 1. Introduction

In light of the growing economic and social importance of initiatives to achieve sustainable development aims (Confraria et al., 2024), companies have prioritized participating in the global transition towards sustainable models that address “grand challenges” (George, et al., 2016) and contributing to the achievement of sustainable development goals (SDGs). This underscores the need to find new funding sources to drive innovation and help organizations create sustainable value (Testa et al., 2019). Crowdfunding has become a key alternative for resource-constrained entrepreneurs by leveraging collective support to mobilize funds and connect sustainable ventures with potential investors (Wehnert and Beckmann, 2023); this is particularly important in the field of sustainability (Messeni Petruzzelli et al., 2019). The crowdfunding market was predicted to be worth \$1.2 billion by the end 2024 (Statista, 2024). While only 14 % of donors worldwide have created an online peer-to-peer fundraising campaign, 41 % have donated to crowdfunding campaigns that benefit individuals (Nonprofits Source, 2024). The number of climate tech equity crowdfunding deals surged by nearly 2,000 % between 2013 and 2023 (RMI, 2024).

In academia, the connection between crowdfunding and sustainable development has sparked considerable interest in the distinctive features of sustainability crowdfunding along social, environmental and economic dimensions (Böckel et al., 2021; Messeni Petruzzelli et al., 2019; Siebeneicher and Bock, 2022; Wehnert and Beckmann, 2023). While existing literature reviews on crowdfunding predominantly focus on quantitative analyses of published research (e.g., Böckel et al., 2021) or specific forms of crowdfunding (e.g., Salido-Andres et al., 2021), holistic understanding of theoretical integration in sustainability-oriented crowdfunding remains limited. The lack of theoretical integration across different crowdfunding types and research disciplines risks fragmenting the

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field, thereby hindering further theoretical advancements ((Böckel et al., 2021). Prior reviews have classified studies based on different perspectives, such as key actors (Moritz and Block, 2016), broader market and institutional viewpoints (Mochkabadi and Volkmann, 2020). However, there is still a paucity of conceptual development in crowdfunding research. Therefore, a novel literature review should not only categorize existing studies but also contribute to theory development (Webster and Watson, 2002) and facilitate conceptualization in this field (Torraco, 2005). To address this gap, the present review adopts an integrated approach, examining crowdfunding along three key dimensions – economic, social, and environmental – to provide a more comprehensive perspective and further advance scholarly discussion of the topic. We argue that it is important to provide a comprehensive view of the potential that crowdfunding has to drive sustainable development by framing the peculiarities of crowdfunding according to social, economic and environmental objectives and fostering the success of crowdfunding for sustainable development.

Given the above considerations, our study answers the following research question: *How do the various types of crowdfunding campaigns contribute to sustainable development in terms of economic, social, and environmental dimensions?* Using a systematic literature review, our work highlights the main elements of success for sustainability crowdfunding campaigns in terms of the actors involved, the characteristics of the campaigns, and the role of the platforms themselves and external factors. Our results show that reward-based models and online communication play an essential role in promoting sustainable practices in all sustainability dimensions, whereas significant differences exist between funders' and initiators' motivations, platform activity and projects types. Our analysis bridges the existing fragmentation in the literature by providing a holistic view of the factors that are conducive to the success of sustainability crowdfunding, framing the peculiarities of crowdfunding campaigns depending on the specific sustainability objective being pursued. A comparative analysis of the characteristics of crowdfunding campaigns contingent on each sustainability goal to be achieved shows that a specific sustainability aim significantly influences the configuration of a crowdfunding campaign and the behavior of its actors. Specific features are revealed in the motivations of initiators and backers, the products and services featured in each campaign, and the role of each platform. Our findings provide crowdfunding platform providers with directions on how to optimize activities that foster sustainable innovation and set sustainability-focused alternative financing strategies in accordance with the desired development outcome.

## 2. Literature background

### 2.1. Crowdfunding and sustainability dimensions

Crowdfunding is a form of fundraising that supports new ventures by enabling direct contributions from backers, bypassing the intermediaries typically found in traditional financing models like venture capital (Mollick, 2014). Due to these characteristics, crowdfunding is particularly suited to financing non-commercial projects (Messeni Petruzzelli et al., 2019) and facilitating the advancement of initiatives that have sustainability goals (Böckel et al., 2021). Given the increasing urgency of climate and social issues, investments in sustainable projects have become a priority for businesses (Menguc and Ozanne, 2005). Crowdfunding has emerged as an effective tool, facilitating connections between sustainability-oriented investors and founders of sustainable business ventures (Testa et al., 2019; Troise et al., 2021; Vismara, 2019).

Beyond its financial role (Mancuso et al., 2023; Vismara, 2019), crowdfunding also serves to raise awareness of sustainability issues, encouraging the adoption of sustainable practices (Messeni Petruzzelli et al., 2019), which accelerates the funding of ideas that have an impact on society (Maiolini and Nasta, 2024; Vismara, 2019) in order to achieve sustainability goals (Bade and Reichenbach, 2025). Numerous works have attempted to offer a systemic view of the interaction between crowdfunding and sustainability, highlighting the role of crowdfunding as an effective means to accelerate the transition towards sustainable models. Recent studies have acknowledged the positive impact that the governance structure and sustainability orientation of corporate initiators' can have on investor behavior (Capolupo et al., 2025). Other works have shown the positive relationship between communicating the alignment of crowdfunding initiatives with SDGs linked to environmental and social objectives, on the one hand, and the success of crowdfunding campaigns on the other (Bade and Reichenbach, 2025). Studies have also looked at the influence played by a platform's orientation towards environmental, social, and governance (ESG) features and by initiatives that address critical societal challenges when it comes to the amount of funds raised (Cumming et al., 2024; Testa et al., 2019). Other studies have shown that disclosing the social or economic sustainability aims of projects increases the willingness of investors to participate in crowdfunding, while environment activism can act as moderator of the intention to commit (Maiolini and Nasta, 2024).

Despite this recent focus on crowdfunding and sustainability, there is still a need to investigate the mechanisms behind the success of sustainability crowdfunding (Messeni Petruzzelli et al., 2019), particularly in relation to the unique traits of different sustainability dimensions: the environmental, the social, and the economic (Wehnert and Beckmann, 2023).

### 2.2. Main components of sustainability crowdfunding

Scholars have examined multiple factors affecting the success of sustainability-oriented crowdfunding campaigns. Many studies highlight the relevance of certain characteristics of crowdfunding campaign proposals driven by sustainability motivations (Allison et al., 2015; Vismara, 2019; Wehnert et al., 2019). Other studies have focused on the actors participating in crowdfunding, especially the founders and potential investors (Allison et al., 2015; Calic and Mosakowski, 2016; Parhankangas and Renko, 2017).

Messeni Petruzzelli et al. (2019) built on the core elements and actors depicted in the extant literature and adopted a framework to investigate the crowdfunding phenomenon. In particular, their model refers to five key components related to the essential elements of crowdfunding processes, actors, and outcomes: the characteristics of the project creator, the motivations of backers, the sustainability features of the campaign, the sustainability positioning of the crowdfunding platform, and the outcomes. By examining each

component in the context of sustainability, this framework provides a systematic approach to understanding how crowdfunding can contribute to sustainable development. Furthermore, [Wehenert and Beckman \(2023\)](#) underscore the importance of considering external factors, such as the regulatory environment and communication activities. However, these works consider sustainability as an overall phenomenon or address individual sustainability goals and thus do not provide a systematic view of campaign differences with respect to individual sustainability goals, especially regarding the triple bottom line perspective, which takes economic, environmental, and social factors into consideration ([Elkington and Rowlands, 1994](#)), since these have been identified as relevant dimensions in sustainability crowdfunding ([Siebeneicher and Bock, 2022](#)).

### 3. Methodology

#### 3.1. Data extraction and selection

We conducted a systematic search and review of the relevant literature. As [Fig. 1](#) shows, to identify the appropriate keywords we followed the example of extant reviews linking crowdfunding and sustainability ([Wehnert and Beckmann, 2023](#)), as well as

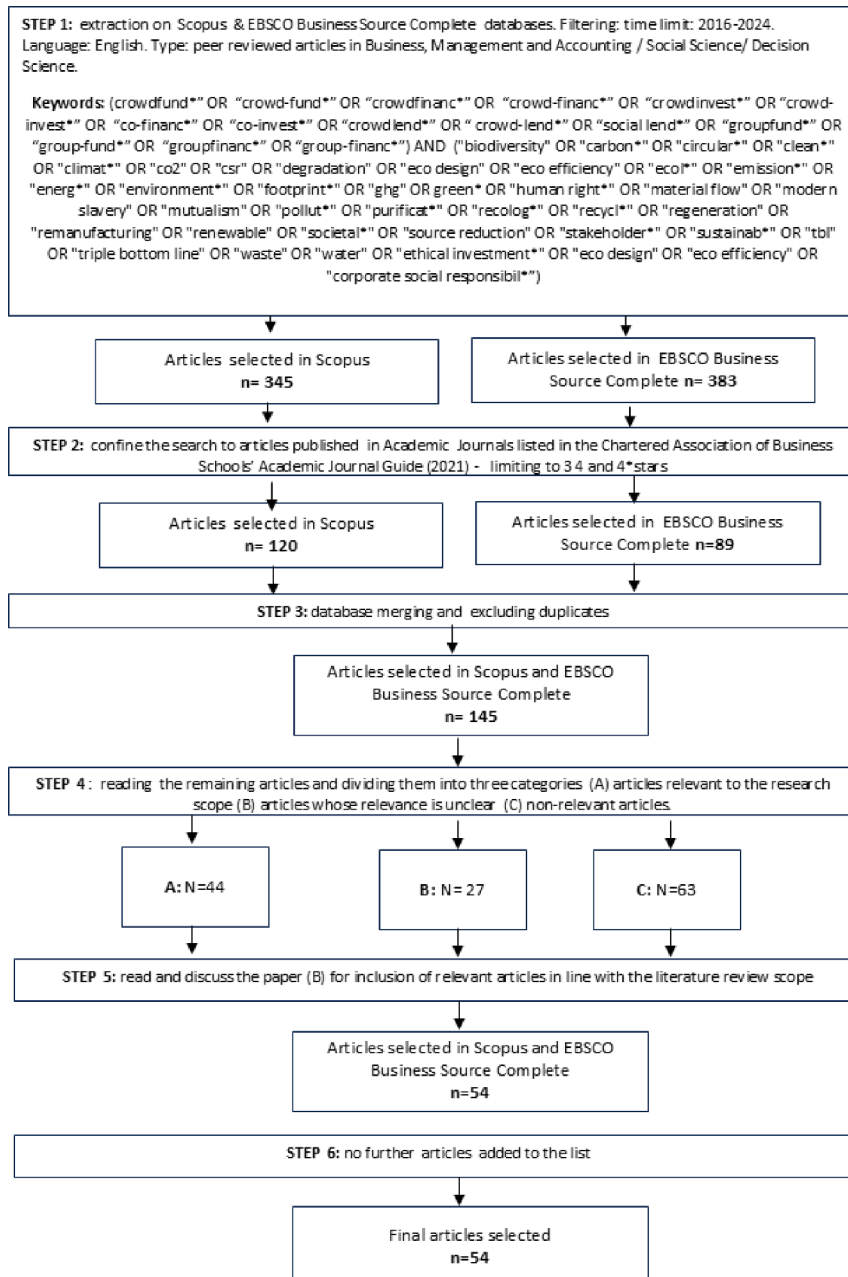


Fig. 1. Search procedure for selecting articles on sustainability in crowdfunding.

methodological articles (see [Gaur and Kumar, 2018](#)). Keywords for extraction were identified on the basis of [Wehnert and Beckmann's \(2023\)](#) review of crowdfunding and sustainability and complemented with the keywords suggested by [Vurro et al. \(2024\)](#). The extraction was made using Scopus and EBSCO databases, limiting results to journal articles in English from 2006 to 2024.<sup>1</sup> After duplicates were removed, only ABS journals rated with 3, 4, and 4\* stars were considered, using the five crowdfunding models of [Belleflamme et al. \(2014\)](#) (lending-based, donation-based, equity-based, reward-based, and royalty-based) and all sustainability goals based on the triple bottom line approach (social, environmental, and economic) ([Elkington and Rowlands, 1994](#)). Only articles relevant to the scope of our research were retained, leading to the identification of a final set of 54 resources from ABS journals rated with 3, 4, and 4\* stars.

### 3.2. Data analysis

We employed qualitative content analysis to interpret texts comprehensively, focusing on relevant content to extract essential information and facilitate engagement with existing knowledge. Multiple coding cycles were iterated ([Schreier, 2012](#)). Our coding process was theory-driven yet open to inductive insights, allowing categories and concepts to emerge from the data ([Schreier, 2012](#)). We piloted an initial coding phase to refine the framework.

Coding was performed with regard to the objectives, results, and discussion and conclusion sections of the articles selected. Coding was carried out by means of MAXQDA software, in line with [Wehnert and Beckmann's \(2023\)](#) previous work. In the final phase, two authors independently reviewed each article, resolving disagreements through discussion and input from three experienced scholars. Excerpts on crowdfunding were categorized by sustainability dimension, distinguishing social, environmental, and economic aims. When articles addressed more than one dimension simultaneously, they were included in all relevant dimensions.

Following [Gioia et al. \(2013\)](#) the data structure was built using a two-stage coding process. For each sustainability dimension (economic, environmental, and social), first-order concepts were generated through open coding to identify emerging sustainability crowdfunding practices. These were aggregated depending on patterns of meaning ([Radaelli and Sitton-Kent, 2016](#)), from which significant theoretical categories were drawn up in relation to the framework on crowdfunding and sustainability of [Messeni Petruzzelli et al. \(2019\)](#) and [Wehnert and Beckmann \(2023\)](#). These were grouped at a higher level of abstraction, identifying themes. The categories and themes converged across all dimensions of sustainability (social, economic, and environmental) and are presented in [Tables 1, 2, and 3](#), making it possible to compare the results of crowdfunding campaigns across different sustainability dimensions.

## 4. Results

Our analysis reveals that a significant number of studies have focused on the social dimension ( $N = 23$  articles) and the environmental ( $N = 22$  articles) dimension of crowdfunding, particularly on aspects pertaining to campaign content, and backers/initiators' motivations, whereas there is less of a focus on the economic dimension ( $N = 18$  articles). The following sections present results by sustainability dimension and by theme within each dimension.

### 4.1. The social dimension

In the social dimension, for which coding results are presented in [Table 1](#), one peculiarity is the characteristics of campaigns that are value-led, with actors motivated by communal purposes.

#### 4.1.1. Actors

Backers are less commercially focused and driven by community logic ([Vismara, 2019](#)). They are willing to accept financial risk for investments in projects that are aligned with their personal values ([Vismara, 2019](#); [Nielsen and Binder, 2020](#)) and that address societal challenges ([Hornuf et al., 2022](#); [Siebeneicher and Bock, 2022](#); [Simpson et al., 2020](#); [Vismara, 2019](#)). Initiators are guided by social commitment ([Messeni Petruzzelli et al., 2019](#)) and the need to acquire new knowledge to increase the innovativeness of their projects ([Troise et al. 2021](#)) and their legitimacy as entrepreneurs ([Kaminski and Hopp, 2020](#)). Their social focus was reflected in their emphatic linguistic style ([Kaminski and Hopp, 2020](#)) and engagement in co-creation activities ([Mastrangelo et al., 2020](#)).

#### 4.1.2. Campaigns

Projects regarding the social dimension are for protecting human rights, promoting social well-being, and increasing consumer rights ([Logue and Grimes, 2022](#); [Mastrangelo et al., 2020](#)). They use reward-based, equity-based, and donation-based crowdfunding (e. g. [Mastrangelo et al., 2020](#)). In terms of communication, the most effective elements are product-focused contents ([Kaminski and Hopp, 2020](#); [Siebeneicher and Bock, 2022](#)) and engaging formats such as video ([Kaminski and Hopp, 2020](#)), with websites and social media being effective online communication channels ([Andrikopoulos, 2020](#); [Laurell et al., 2019](#); [Messeni Petruzzelli et al., 2019](#)).

#### 4.1.3. The role of platforms

Platforms act as facilitators in matching and managing exchanges between initiators and backers ([Li et al., 2020](#)), attracting

<sup>1</sup> 2006 is the year when the term CF first appeared.

**Table 1**  
Coding scheme for the social dimension.

Resource	Concepts	Category	Theme
Vismara, 2019; Sibeneicher and Bock, 2022 Vismara, 2019; Nielsen and Binder, 2021 Hornuf et al., 2022	Attention to community advancement and solving societal issues. Willing to invest in projects that reflect personal values. More resistant to financial risk and willing to invest in more campaigns and larger amounts.	Investors' mindset and motivations	Backers
Simpson et al., 2021 Chan et al., 2021; Sibeneicher and Bock, 2022	Stronger demand for social good (vs. self-benefit) Driven by the social motivations of the campaigns (help others) in searching for creative projects that solve societal issues.		
Li et al., 2020 Messeni Petruzzellis et al., 2019 Kaminski and Hopp, 2019	Access to resources to achieve philanthropic goals. Sensitize audience to social issues. Gain legitimacy as entrepreneurs using an emphatic linguistic style, increasing the attention of backers.	Creators' motivations and communication style	Initiators
Sibeneicher and Bock, 2022 Chan et al., 2021	Signal the social value of the project in communications. Communicating the success of a campaign influences trust among investors.		
Troise et al., 2021 Mastrangelo et al., 2020 Dai and Zhang, 2019	Increase the social and innovation trajectories of their projects. Convey personal satisfaction as entrepreneurs. Show transparency in fund usage.		
Kaminski and Hopp, 2019 Andrikopoulos, 2020 Laurell et al., 2019; Messeni Petruzzelli et al., 2019 Borello and Muri, 2024 Kaminski and Hopp, 2019; Sibeneicher and Bock, 2022.	Videos to show the objective of a campaign. Online channels to establish social ties with investors. Social media usage for campaign dissemination via eWOM. Website to increase the reliability of a campaign. Short textual information signaling the value proposition of campaigns.	Content	Campaign
Vismara, 2019 Mastrangelo et al., 2020; Logue and Grimes, 2019 Sibeneicher and Bock, 2022	Cooperative crowdfunding (following a community logic). Social mission-based crowdfunding (promoting social well-being). Charitable crowdfunding (beneficial for the community).	Type	Campaign
Hörisch and Tenner, 2020; Calic and Masakowsky, 2016 Sibeneicher and Bock, 2022 Mastrangelo et al., 2020	Socially-oriented venture projects showing sustainability through creativity and innovativeness. Health-oriented projects. Social well-being, labor and consumer rights protection.	Product/service	Campaign
Presenza et al., 2019	Help creating lasting trust-based relationships among participants. Facilitate co-operation among actors involved. Stimulate a common culture and shared interests and values. Co-develop social values.	Platform activity	Platform
Logue and Grimes, 2019; Li et al., 2020	Attract multiple stakeholders with shared values. Match social fundraisers with donors.		
Hörisch and Tenner, 2020; Gama et al., 2023 Kromidha and Robson, 2016	Existing institutional backing for the campaign (e.g. governance of multinational financial institutions). Existence of a large social network for the entrepreneur.	Socio-cultural factors	External factors
Li et al., 2020 Hornuf et al., 2021 Andrikopoulos, 2020; Presenza et al., 2019	Increase effectiveness of the system matching backers and funders. Establish an institutional setting to protect investors in relation to their social motivations. Reduce levels of informational asymmetries between backers and funders to avoid adverse selection and moral hazard. Involve local institutional actors in social crowdfunding.	Institutional setting	External factors

Source: authors' elaboration.

investors who share the same values as backers (Logue and Grimes, 2022) and promoting trust-based relationships between participants to stimulate a common culture of shared interests and values (Presenza et al., 2019).

#### 4.1.4. External factors

The presence of institutional support strengthens the cause (Borello and Muri, 2024; Gama et al., 2023; Hörisch and Tenner, 2020; Presenza et al., 2019), while a social network of entrepreneurs increases commitment (Kromidha and Robson, 2016; Laurell et al., 2019). Researchers also have acknowledged that there is a need to create policy frameworks that protect investors who decide to invest in social projects (Hornuf et al., 2022) and to reduce the level of information asymmetry between funders and fund recipients, in order to avoid adverse selection and moral hazard (Andrikopoulos, 2020).

#### 4.2. The environmental dimension

In the environmental dimension, pivotal aspects are certain features of campaigns that focus on projects that use new green

**Table 2**  
Coding scheme for the environmental dimension.

Resource	Concept	Category	Theme
Bento et al., 2019 Siemroth and Hornuf, 2023 Penz et al., 2022; Siemroth and Hornuf, 2023 Hornuf et al., 2022 Bourcet, Bovari, 2020	Willing to accept more risk in crowdfunding for renewable projects. Consider green and clean tech projects to be more profitable. Importance given to the environmental benefit that the investment brings.  More resistant to financial risk. Renewable projects attract investors who are older, educated, and of higher socio-professional categories.	Investors' mindset	Backers
Siemroth and Hornuf, 2023 Bento et al., 2019; Siemroth and Hornuf, 2023 Roma et al. 2023  Bourcet and Bovari, 2020 Siebeneicher and Bock, 2022	Green investment is more profitable. Altruistic motivations (environmental impact).  Professional investors are more willing to invest in environmental projects. Egoistic motivations: willing to diversify risk. Willing to invest in projects that fit with their personal values.	Investors' motivations	Backers
Leone et al., 2023  Cumming et al., 2017	Connect with prospective clients to validate innovative green ideas. Set value co-creation process for circular economy projects. Find effective financing tools for alternative energy projects.	Creators' motivations	Initiators
Bourcet and Bovari, 2020	Communicating protection from risk increases investment in renewable energy projects.	Creators' communication style	Initiators
Corsini et al., 2024  Guillochon, 2022  Vásquez-Ordóñez et al., 2023 Laurell et al., 2019  Wehnert et al., 2019 Testa et al., 2023 Cumming et al., 2017  Bourcet and Bovari, 2020	Focusing on the environmental legitimacy of the campaign does not increase the success of the campaign. Media coverage increases participation in renewable energy crowdfunding campaigns. Social media usage reduces the time needed to finance a green crowdfunding campaign. Adding images and video explaining the campaign increases investor engagement. Detailed content to increase the credibility of the environmental claim. Convey personal benefits to consumers. Adding detailed information about the campaign reduces information asymmetry in markets. Show transparency of the investment offering.	Content	Campaign
Corsini et al., 2024; Prędkiewicz and Kalinowska-Beszczyńska, 2021 O'Reilly et al., 2021; Bento et al., 2019	Reward-based eco-crowdfunding. Equity clean tech crowdfunding.	Type	Campaign
Testa et al., 2019 Corsini et al., 2024 Yoshino et al., 2021 Testa et al., 2023	Products with altruistic and society-centered attributes. Green product with eco-design. Cleantech and renewable project. E- waste projects.	Product/service	Campaign
Bento et al., 2019 Yoshino et al., 2021 Cumming et al., 2024	Help display the risk attached to projects. Help manage risk to build trust and foster engagement and inclusion. Make information regarding crowdfunding project clear and available. Show the environmental orientation and the relationship with the ESG criteria.	Platform activity	Platform
Guillochon, 2022  Butticè et al., 2019  Corsini et al., 2024	Broad access to the internet in the area where the campaign is launched, geographical restrictions and disposable income of the region where crowdfunding is launched to increase the success of renewable energy campaigns. Crowdfunding effectiveness in countries with less focus on sustainability. Interest toward crowdfunding is lower in countries with higher environmental sustainability. Ability to acquire insights on the investment market.	Socio-cultural factors	External factors
Bourcet and Bovari, 2020  Bergmann et al., 2021  Borello and Muri, 2024	Foster accrued communication transparency and reduce informational asymmetries between backers and funders. Increase regulation of renewable energy crowdfunding. Support environment crowdfunding via tax policies. Existence of institutional provisions to recover from external shocks increases the willingness of donors to contribute.	Institutional setting	External factors

Source: authors' elaboration.



business models, as well as the platform's role in managing perceived risk. These aspects are summarized in Table 2.

#### 4.2.1. Actors

Environmentally-oriented investors invest more and simultaneously in many campaigns (Siemroth and Hornuf, 2023). They accept higher risk on projects with high environmental impact (Bento et al., 2019; Siemroth and Hornuf, 2023) and are willing to invest in projects that are in sync with their personal values (Siebeneicher and Bock, 2022) and this leads to diversification of investment (Bourcet and Bovari, 2020).

Initiators are guided by a willingness to validate green projects and access to alternative sources of funding to improve business models (Cumming et al., 2017; Leone et al., 2023). Communicative styles should convey reassurances that investors are protected from risk (Bourcet and Bovari, 2020).

#### 4.2.2. Campaigns

Projects in the environmental dimension are co-design projects, with clean tech innovation and renewable energy projects (e.g. Corsini et al., 2024; Yoshino et al., 2021). As far as communications are concerned, social media channels, video and images drive the success of green crowdfunding campaigns (René Vásquez-Ordóñez et al., 2023) and attract a less experienced audience (Laurell et al., 2019). The importance of providing detailed information on risk reduction in contents is highlighted (Cumming et al., 2017), along with investor protection (Bourcet and Bovari, 2020), to increase the credibility of the environmental claim (Wehnert et al., 2019).

#### 4.2.3. The role of platforms

The role of platforms is to convey the green philosophy of campaigns (Cumming et al., 2024), thereby reducing the perception of risk (Bento et al., 2019) and providing transparent information (Cumming et al., 2017).

#### 4.2.4. External factors

Emphasis is placed on the characteristics of the area where the campaign is launched (e.g. digitalization, disposable income, geographical restrictions) (Butticè et al., 2019; Guillochon, 2022). Crowdfunding for green products is more diffused in countries less oriented to environmental sustainability (Butticè et al., 2019). Regulatory uncertainties can hamper the success of crowdfunding (Bergmann et al., 2021).

### 4.3. The economic dimension

In campaigns geared toward economic sustainability goals, whose results are presented in Table 3, the concept of economic stability, inclusion and risk management prevail.

**Table 3**

Coding scheme for the economic dimension.

Resource	Concepts	Category	Theme
Gangi et al., 2023 Caputo et al., 2022 Chung et al., 2023	Willing to experiment with new products and services. Consider the values of the enterprise they invest in. Act as tech-savvy and creditworthy investors.	Investors' mindset	Backers
Gangi et al., 2023	Willing to acquire new knowledge and expertise and to participate in co-creating activities services.	Investors' motivations	Backers
Caputo et al., 2022 Manning et al., 2022 Luo et al., 2022 Yacoub et al., 2022	Aiming to diversify revenue streams and reach financial independence. Willing to increase partnerships and create local community. Have access to low-cost funding. Willing to acquire legitimization as entrepreneurs.	Creators' motivations	Initiators
Gangi et al., 2023	Socialize and create a dialogue with the online community.	Creators' communication style	Initiators
Gangi et al., 2023 Tan and Reddy, 2024  Gama et al., 2023 Vealey and Gerding, 2016 Mastrangelo et al., 2020	Access to rewards and prizes increases the success of the campaign. Create outer links to the platform. Enhance the readability of the project page. Inclusion of exclusive contents for backers. Coherent milestone goals. Include short descriptions of campaigns. Construct stories to maintain ethical relationship with investors. Include interactive content to promote investor engagement.	Content	Campaign
Yacoub et al., 2022	Crowdfunding to overcome difficulty in financing long-term projects. Finance production activities.	Type	Campaign
Gama et al., 2023; Caputo et al., 2022 Gama et al., 2023 Caputo et al., 2022	Projects demonstrate a high level of financial soundness.  Projects sponsored by a multinational financial institution. Projects demonstrate strong link to sustainability issues.	Product/service features	Campaign

(continued on next page)

Table 3 (continued)

Resource	Concepts	Category	Theme
Gangi et al., 2023; Chung et al., 2023 Luo et al., 2022	Help establish confidence with the digital interface.		
Chung et al., 2023	Show operational and risk management efficiency and facilitate the economic sustainability of the overall crowdfunding ecosystem.	Platform activity	Platform
Caputo et al., 2022	Create equal opportunities for access at affordable cost. Pay attention to the credit score of promoters.		
Gangi et al. 2023; Nucciarelli et al., 2017	Provide the opportunity to invest small sums to decrease risk perception. Make the campaign attractive and create engagement among backers.		
Bort et al., 2024 Gama et al., 2023 Caputo et al., 2022 Gangi et al., 2023	Country of provenance of the founder. International coverage of the campaign. Existing third-party affiliation in the campaign. Digital literacy of backers.	Socio-cultural factors	External factors
Luo et al., 2022	Providing support for the spread of crowdfunding among institutional actors and companies.		
Gangi et al., 2023	Create a normative environment for crowdfunding co-creation and financing models.	Institutional setting	External factors
Chung et al., 2023 Luo et al., 2022	Grant equal access to financing opportunities. Enforce and disseminate best practices for sustainability crowdfunding.		

Source: authors' elaboration.

#### 4.3.1. Actors

Backers are guided not only by the achievement of financial equilibrium through low-cost financial resources (Caputo et al., 2022; Luo et al., 2022), but also by their aim to commit with socially responsible investments (San Martín et al., 2020). Initiators seek personal legitimization as entrepreneurs (Yacoub et al., 2022), opportunities to optimize the financial sustainability of business ideas (Caputo et al., 2022), and an increase in innovation capacity (Troise et al., 2021).

#### 4.3.2. Campaigns

In terms of types of crowdfunding, the focus is on lending-based crowdfunding (microlending) to finance long-term projects. The economic sustainability of projects is linked to the ability of projects to show a strong link with sustainability issues (Caputo et al., 2022), a high level of financial soundness (Gama et al., 2023; Caputo et al., 2022), and a focus on CSR or ESG objectives (Cumming et al., 2024). Regarding communication strategies, importance is attributed to engagement through rewards and prizes (Gangi et al., 2023), exclusive contents, clarity of campaign information (Tan and Reddy, 2024), and the commitment of investors (Mastrangelo et al., 2020).

#### 4.3.3. The role of platforms

In the economic dimension, platforms are seen as facilitators (Luo et al., 2022), helping manage risk, building trust and fostering engagement and inclusion (Chung et al., 2023; Gangi et al., 2023; Yoshino et al., 2021). Showing operational and risk management efficiency (Luo et al., 2022) and information transparency makes campaigns attractive and creates engagement among backers (Chung et al., 2023; Gangi et al., 2023; Nucciarelli et al., 2017), as well as increasing campaign inclusiveness (Caputo et al., 2022).

#### 4.3.4. External factors

Emphasis is placed on third-party campaign affiliations (eg. Gama et al., 2023; Hörisch and Tenner, 2020) and the existence of a crisis setting (Borello and Muri, 2024). Other aspects concern the characteristics of actors in relation to the country of origin of the founder (Bort et al., 2024), the digital literacy of backers (Gangi et al., 2023), and the positive influence that the international relevance of campaigns can have on success (Gama et al., 2023).

## 5. Conclusions

This article provides an in-depth analysis of the different characteristics of crowdfunding campaigns and how they contribute to sustainable development goals by looking at the three dimensions of sustainability: environmental, economic, and social. Significant differences emerge when it comes to the motivations of initiators and backers and regarding the characteristics of projects and platforms. Altruistic motivations predominate in the social dimension, while selfish motivations dominate in the economic and environmental dimensions. Their role in the social dimension is to inspire common values around campaigns, which are focused on projects seeking to promote individual rights and wellbeing, whereas in the environmental dimension the role is to emphasize the green aspects of campaigns that are mainly focused on green-oriented projects. Instead, regarding the economic dimension, platforms are seen as key to building trust among stakeholders. Our work shows that online communication, especially via social media, is a key driver in the success of crowdfunding campaigns for sustainable development. Furthermore, our analysis highlights the finding that reward-based crowdfunding is a dominant model in financing sustainable initiatives in all dimensions. When it comes to external



factors, the role of institutions in the economic dimension stands out as a driver for encouraging participation in alternative financing models. Moreover, in both the social and economic dimensions, emphasis is placed on the existence of third-party campaign affiliations. In the environmental dimension, the social characteristics of the local area where the campaign is being launched are highlighted.

This study makes important theoretical contributions. Our analysis offers a holistic perspective on crowdfunding and sustainability by looking at crowdfunding using the lens of three dimensions – economic, environmental, and social – which highlights converging and diverging elements in successful crowdfunding campaigns with sustainability goals. This work bridges the existing fragmentation in the crowdfunding literature, and it highlights how sustainability goals influence the configuration of crowdfunding campaign components and the behavior of its actors.

Our work has implications for crowdfunding platform providers and developers, as it provides a deeper understanding of the success factors in crowdfunding campaigns regarding sustainability goals, enabling them to better tailor platform features in line with the expectations of investors and campaign promoters. This analysis has implications for policymakers, as it provides guidance for formulating crowdfunding policies and incentives that keep in mind the specificities of crowdfunding in relation to sustainability goals, fostering the alignment of regulatory frameworks. Finally, this work identifies fields requiring further investigation, particularly in the areas of content and the communicative style of the initiator. There should be a comparison of the effectiveness of online vs. offline channels and the efficacy mechanisms of social channels and how the communication style of the initiator can change in the sustainability dimension. It is also important to clarify the role of emerging technologies and their impact on sustainable crowdfunding. An assessment is needed of how artificial intelligence, blockchain – with NFTs, cryptocurrencies and smart contracts – and the metaverse can influence the configuration of crowdfunding campaigns within the sustainability dimensions, especially by looking at how disruptive technologies can influence actors' behavior and characteristics of the campaigns, and whether other crowdfunding types might emerge.

This study is not exempt from limitations, as this systematic review considered works extracted from two databases and published in high-impact journals during a limited period of time (2016–2024), so it is possible that some aspects were overlooked. Moreover, the triple bottom line approach that has been adopted for coding resources has its limitations, as it does not sufficiently assess the interdependence and complementarity of the different dimensions of sustainability (Sridhar and Jones, 2013). Further studies should consider other approaches to sustainability, such as ESG (economic, social and governance). In addition, as pointed out by Correia et al. (2024), due to the evolving nature of crowdfunding research, a literature review may call for future insights to assess emerging trends in sustainability crowdfunding.

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## CRedit authorship contribution statement

**Chiara Bartoli:** Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Maria Carmela Annosi:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation, Conceptualization. **Levi Orero:** Writing – review & editing, Writing – original draft, Visualization. **Federica Brunetta:** Writing – review & editing, Writing – original draft, Supervision, Conceptualization.

## Declarations of competing interest

None

## Data availability

Data will be made available on request.

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