Are vegans generous?
An exploration of the success factors of vegan crowdfunding projects

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Abstract
Purpose – Crowdfunding is a relatively new alternative method of raising capital for new ventures. In recent years, crowdfunding has also gained prominence within the food industry. On the basis of signaling theory, this study aims to analyze the success factors of vegan crowdfunding campaigns, which remains unexplored in academia.

Design/methodology/approach – This study employs a logistic regression analysis on a sample of 200 vegan crowdfunding campaigns launched in Europe between 2014 and 2021 on the popular crowdfunding platform Kickstarter.

Findings – The results show that the number of images, comments and updates as well as the readability of project descriptions positively impact the success rate of vegan crowdfunding campaigns. Furthermore, the length of the project description has a negative effect, whereas the number of videos has no bearing on the success of vegan crowdfunding campaigns.

Originality/value – To the best of the authors’ knowledge, this study pioneers examining the success factors of vegan crowdfunding campaigns. This study enriches the literature in several ways. First, this study contributes to an open debate on the success factors of crowdfunding. Second, this study provides knowledge about the factors that can favor the success of vegan initiatives. Third, this study confirms the usefulness of signaling theory as a theoretical framework for understanding vegan crowdfunding.

Keywords Vegans, Crowdfunding success, Crowdfunding, Entrepreneurship, Kickstarter

Paper type Research paper

1. Introduction
Obtaining financial resources for a new and innovative project or business idea is crucial. However, funding from venture capitalists and banks is only available in subsequent phases relative to the start-up phase (Robb and Robinson, 2014). In the early stages of the business life cycle, entrepreneurs can only rely on personal savings and financial support from their family, friends, or business angels (Moritz and Block, 2016). However, this funding is often insufficient to cover the financial needs of the entrepreneur, resulting in a funding gap (Collins and Pierrakis, 2012). Alternatively, entrepreneurs can bridge this funding gap and obtain financial resources to finance a project or idea through crowdfunding (Agrawal et al., 2015; Cordova et al., 2015). Crowdfunding is based on microfinance and crowdsourcing, allowing
entrepreneurs to raise capital from a large pool of small-scale investors as opposed to a small number of professional investors (Riedl, 2013). This process is accomplished through specific web-based platforms called crowdfunding platforms (Mollick, 2014). Already in 2015, the number of active crowdfunding platforms worldwide exceeded 450 units (Cordova et al., 2015), which is expected to further increase. Although reward-based platforms, such as Kickstarter, Indiegogo, Eppela, Starteed and Ulul, are still the most widespread, equity-based platforms are expected to grow in popularity (Espositi, 2012). Crowdfunding platforms were primarily used by musicians and artists in their early years (Moritz and Block, 2016). Subsequently, the characteristics of crowdfunding platforms have encouraged entrepreneurs in various industries to exploit their potential to obtain funding for their ideas and projects.

In recent years, crowdfunding has gained increasing importance in the food industry, where it is viewed not only as a viable method for raising funds but also as an open innovation tool (Cillo et al., 2019; Troise et al., 2021) and can also enhance the sustainability of culture (Misso et al., 2017). Despite the relevance of crowdfunding in the food sector, only a few academic studies have examined this line of research (Pronti and Pagliarino, 2019; Troise et al., 2021). Some have investigated the determinants of crowdfunding campaign performance (Li et al., 2020; Ljumović et al., 2021; Kocollari et al., 2022), whereas others have examined the potential of crowdfunding in the food sector (Yoo and Choe, 2014; Misso et al., 2017; Cillo et al., 2019; Pronti and Pagliarino, 2019; Troise et al., 2021). However, although numerous studies exist on crowdfunding in the food sector, studies on vegan crowdfunding is nonexistent despite its significance in the vegan community. A critical aspect of crowdfunding is represented by its orientation toward the community (Josefy et al., 2017; de Larrea et al., 2019). According to Shneor and Munim (2019), crowdfunding can be viewed as community-enabled financing, drawing on the principles of crowdsourcing, while adapting to the context of fundraising. In this regard, crowdfunding projects that target a specific community and are in line with the community’s values will have a greater likelihood of receiving consensus and support (Josefy et al., 2017). Community members tend to choose entities and groups (and therefore, projects) that pursue objectives and are based on values similar to their own (Josefy et al., 2017). In this regard, veganism encompasses much more than just one’s diet (Greenebaum, 2012). Veganism is the moral stance of those who oppose animal exploitation and other forms of animal abuse. It represents a genuine cultural movement (Cherry, 2006) that is deeply rooted in shared values (Greenebaum, 2012). Vegans are a growing community worldwide. The number of vegans worldwide varies by source. However, Saget et al. (2021) unveiled that the share of vegans in European countries is approximately 1% of their total population. Particularly, vegans quadrupled in the UK between 2014 and 2018. Vegan community members who pursue the same goals and share a commitment to ethical values and the protection of animal rights associate and support one another. These circumstances underline crowdfunding success (CS) (Josefy et al., 2017). Consequently, new crowdfunding platforms, such as the Global Vegan Crowd Funder, which is guided by ethical principles and encourages all types of vegan projects, have been developed in recent years.

Therefore, given the relevance of vegan crowdfunding, this study aims to investigate the factors capable of determining vegan CS on the basis of signaling theory. In this regard, it provides an analysis of European vegan crowdfunding projects launched on the international platform Kickstarter. Europe is emphasized for two distinct reasons: the first relates to the importance of crowdfunding in this region, whereas the second relates to the increase in the number of vegans registered in Europe over the past few years. The analysis of the success factors of these projects is crucial, as it allows for an in-depth understanding of the factors that can facilitate the collection of funding and provides entrepreneurs interested in launching vegan crowdfunding campaigns with valuable information. This study focuses on the most important campaign-related factors, such as those that are directly associated with the description of crowdfunding projects.
This study enriches the academic literature in different ways. First, it contributes to the open discussion on the factors that can contribute to crowdfunding campaign success. This study also contributes to the literature on crowdfunding in the food industry. In addition, it indicates the factors that contribute to the success of business ideas within the vegan community. Finally, it expands the application of signaling theory by adapting this theoretical perspective to the vegan crowdfunding phenomenon.

The remainder of this study is organized as follows: Section 2 presents the literature review and Section 3 introduces the theoretical background and hypotheses development. Section 4 describes the research methodology and Section 5 presents and discusses the results. Finally, Section 6 entails the conclusions.

2. Literature review

2.1 Crowdfunding in the food sector

In recent years, crowdfunding has become a viable funding solution in the food sector (Bolzani et al., 2015; Cillo et al., 2019), as an alternative to traditional tools represented by banks, business angels and venture capitalists (Estrin et al., 2018; Troise et al., 2020, 2021). The relevance of crowdfunding in the food sector relates to the significant financial constraints that distinguish this sector, highlighting the need to identify new funding options (Bolzani et al., 2015; Li et al., 2020). In recent years, a growing number of organizations and individuals in the food industry have begun to raise funds through crowdfunding (Cillo et al., 2019; Pronti and Pagliarino, 2019; Li et al., 2020). Food crowdfunding campaigns can now be found on all of the world’s major platforms, as well as crowdfunding platforms dedicated specifically to the food sector (Troise et al., 2021).

Despite the relevance of crowdfunding in the food sector, few academic studies have examined this line of research (Pronti and Pagliarino, 2019; Troise et al., 2021). Among them, Li et al. (2020), on the basis of prospect theory, investigated the factors influencing quick cash by crowd in agri-food crowdfunding campaigns in the Chinese context. They discovered that enhancing publicity, reducing the investment threshold and increasing the benefits of a crowdfunding campaign can increase the decision weight assigned to a campaign and favor rapid investment decisions. Ljumović et al. (2021) examined the success factors of agri-food crowdfunding campaigns launched on the Kickstarter platform. They demonstrated that campaigns classified as sustainable were more likely to be successful. They also underlined that the realistic definition of the objective, complexity and quality of the project positively influences the success probabilities of agri-food crowdfunding campaigns. Kocollari et al. (2022) have instead examined the role of social capital dimensions—bridging, bonding, and linking—in crowdfunding campaigns by comparing the agri-food, technological and cultural sectors. By analyzing campaigns launched on an Italian platform between 2014 and 2020, the authors discovered that the combination of the three dimensions of social capital has a greater effect on the number of backers for agri-food projects than for technological and cultural projects. Yoo and Choe (2014) examined agri-food crowdfunding campaigns launched in Korea and revealed the potential of this tool to strengthen the relationship between agri-food producers and consumers. Pronti and Pagliarino (2019) employed a qualitative approach to examine crowdfunding in the food sector as a new form of open innovation for small- and medium-sized enterprises and family businesses. They conducted nine in-depth interviews with key informants of the sector to investigate the business models, regulations and evolution of agri-food crowdfunding in Italy, demonstrating the ability of this tool to improve the profitability and development of the sector. They also uncovered that crowdfunding is particularly suitable for small- and medium-sized enterprises, which represent most of the agri-food market in Italy. Cillo et al. (2019) and Troise et al. (2021) underlined the potential of crowdfunding as an open innovation tool in the agri-food sector. Finally, Misso et al. (2017) underlined the capacity of crowdfunding to enhance the sustainability culture in the food sector.
2.2 Measurement and determinants of crowdfunding campaign success

According to literature, the success of crowdfunding projects can be measured through various ways. CS can be defined as fundraising success for a specific campaign on a particular crowdfunding platform, which is strictly linked to the financing model chosen by the platform (“keep-it-all” or “all-or-nothing”) (Yuan et al., 2016). According to Deng et al. (2022), eight main methods can be used to measure CS: (1) the dichotomous variable funding success (a variable that assumes a value equal to one if the target is reached within the given time and zero otherwise) and the continuous variables; (2) funds raised; (3) success ratio; (4) number of backers; (5) time to funding; (6) pledge/backer ratio; (7) decision to invest and (8) overfunding. Among the variables, the dichotomous variable is the most commonly used. Furthermore, Shneor and Vik (2020) highlighted that past studies used several unique labels of dependent variables, but the dichotomous variable (success or failure) was the most used.

The choice of CS measurement is crucial for determining the research method. The most employed research methods in crowdfunding studies are linear, logit, probit and binomial regressions. Thus, when the measurement of CS is a dichotomous variable, the most applied research method is logit regression, followed by probit regression, owing to the dichotomous nature of the dependent variable (Deng et al., 2022). Moreover, according to Shneor and Vik (2020), most researchers have employed quantitative methods to analyze crowdfunding performance.

Concerning the determinants of CS, Kaartemo (2017) and Deng et al. (2022) provided a systematic literature review of crowdfunding performance, identifying four main determinants of success: (1) campaign, (2) crowdfunder, (3) crowdfunding platform and (4) fundseeker-related factors. In addition, following Shneor and Vik (2020), many unique labels of the independent and control variables were used in previous studies. According to the authors, project- and fundseeker-related factors are the most studied determinants of CS with respect to platform- and crowdfunder-related factors. To analyze the variables that influence the success of a crowdfunding campaign, we followed the categories developed by Kaartemo (2017) and Deng et al. (2022).

Campaign-related factors refer to the content of a crowdfunding campaign and project-related information. The most studied project characteristics are pricing and targets, campaign duration, project category, rewards and team size (Deng et al., 2022). Kaartemo (2017) claimed that pricing and targets are crucial elements that fundseekers must carefully consider when establishing a crowdfunding campaign. Despite this, a lack of consensus exists among researchers regarding the impact of the minimum investment amount on campaign success (Lukkarinen et al., 2016). Hu et al. (2015) highlighted that, although a low price can be particularly attractive for numerous investors, the needs of so-called high buyers must be considered. The project target should not be overly high because a lower and realistic target is positively related to the success of reward- and donation-based crowdfunding campaigns (Liao et al., 2015; Kim et al., 2016). Contrastingly, Lukkarinen et al. (2016) unveiled that equity-based crowdfunding investors seem to prefer high-target projects. The duration of a crowdfunding campaign is another crucial factor that must be considered. According to the literature in the field, a negative relationship exists between campaign duration and success rate (Kaartemo, 2017): shorter campaigns can create a sense of urgency among crowdfunders. Greenberg and Mollick (2017) stated that project categories can influence campaign success. They found that publishing- and fashion-related projects are likely to be financed by crowdfunding. The rewards promised for a project (Vismara, 2016) and the number of project creators (Zhao et al., 2022) are two other characteristics that can positively influence crowdfunding campaign success. Testa et al. (2020) conducted a qualitative study on the basis of food crowdfunding campaigns launched on Kickstarter from 2011 to 2015 to determine whether crowdfunding can support sustainability-oriented projects. The results highlighted that crowdfunding “is not suitable for sustainability-oriented projects targeting disadvantaged individuals/groups” (Testa et al., 2020, p. 530).
The quality of communication has been extensively analyzed by researchers. They revealed that the quality of communication in crowdfunding projects positively affects campaign success (de Larrea et al., 2019; Troise et al., 2020; Ullah and Zhou, 2020; Salvi et al., 2022). Particularly, the number of images and videos, clarity and readability of the project and number of comments and updates posted by entrepreneurs can improve the likelihood of campaign success. These results were further confirmed by Shneor and Vik (2020), who highlighted the existence of a positive relationship between the use of precise language in crowdfunding projects, the number of videos, the quality of the campaign text, the number of updates provided by the project creators and the campaign success rate. Liang et al. (2020) analyzed the impact of project information quantity (number of words, pictures and videos), attitude (number of comments) and quality (project readability and number of updates) on CS. They provided evidence that information quantity, quality and attitude positively affect CS, except for readability. Therefore, the overall quality of project communication can be considered a useful tool to reduce the uncertainty of potential investors and increasing the chances of success (Hobbs et al., 2016).

Crowdfunder-related factors refer to the characteristics of the potential backers. The success of a crowdfunding campaign is closely linked to how potential investors perceive and evaluate a project (Zheng et al., 2014). Several reasons exist why people may decide to join a crowdfunding project and the latter can range from non-financial to purely financial reasons. Ryu and Kim (2016) identified six different reasons: (1) relationship, (2) philanthropy, (3) reward, (4) interest, (5) recognition and (6) playfulness. According to Choy and Schlagwein (2016), crowdfunders can be classified into different categories on the basis of the intrinsic or extrinsic motivations that drive them to join a crowdfunding project and the orientation of the project (community and non-community oriented). Consequently, crowdfunders tend to finance projects created by fundseekers with similar cultural and geographical characteristics (Burtch et al., 2014). These findings were further corroborated by Lin and Viswanathan (2016), who introduced the concept of “home bias,” and by Mollick (2014) and Agrawal et al. (2015).

Platform-related factors are related to the characteristics of the platform and its impact on campaign success. According to the literature in the field, the most important features of the platform are its design, which allows crowdfunders to fully understand the specific characteristics of the project, platform rules and policies, which can significantly vary by platform, the number of competing projects on the platform and platform age (Kaartemo, 2017; Deng et al., 2022).

Last, fundseeker-related factors are the characteristics of the project creator and its impact on project success. The impact of fundseekers’ experience on campaign success is an open debate among scholars and practitioners (Jian and Usher, 2014; Zheng et al., 2014). Previous fundseekers’ experiences are closely related to the concept of social capital (Saxton and Wang, 2014). Most researchers agree that entrepreneurs’ social capital (internal or external) positively affects campaign success (Liao et al., 2015; Vismara, 2016). Troise et al. (2020) corroborated these findings by highlighting that fundseekers’ network ties positively impact crowdfunding performance by reducing information asymmetry and enriching investors’ decision-making processes. In addition, Deng et al. (2020, p. 22) demonstrated that language, culture, sexual orientation, credibility, patent ownership and logo images provided by the creators can affect crowdfunding campaign success. Anglin et al. (2018) used social role theory to examine the impact of narcissism in crowdfunding campaigns by analyzing 1863 crowdfunding campaigns from the Kickstarter platform. They uncovered an inverted-U relationship between narcissistic rhetoric and CS. The literature review shows that the absence of contributions directly focused on the success factors of vegan crowdfunding campaigns, which is the object of this study.
3. Theoretical background and hypotheses development

Signaling theory (Spence, 1973; Ross, 1977) represents the theoretical perspective most commonly used to frame the success factors of crowdfunding campaigns (Shneor and Vik, 2020). According to this theory, “entrepreneurial activities are related to the extent to which different parties have access to information and how they communicate and interpret the data” (Lagazio and Querci, 2018, p. 320). The fundamental concept of this theory is represented by the signal, which represents an action aimed at making explicit intentions, motivations, objectives, or company situation (Porter, 1980). Only signals that are costly to imitate and observable are considered to be good signals capable of reducing information asymmetry between parties. Moreover, for these signals to be effective, signalers of high quality must transmit them (Connelly et al., 2011). From this theoretical perspective, the characteristics of the campaign represent a signal that the entrepreneur sends to potential investors (Salvi et al., 2022; Coakley et al., 2022). Particularly, entrepreneurs may be interested in disseminating information relating to the campaigns launched to show the project goodness, reduce information asymmetry with potential investors and thus attract greater interest and facilitate their decision-making process (Baeck et al., 2014; Salvi et al., 2022). To enhance CS, signals sent by campaign creators must be credible and valuable (Liang et al., 2020).

Information asymmetry “means that one party lacks information about the quality of another party or one party is concerned about another party’s behavior tendency” (Liang et al., 2020, p. 4) and characterized the credit markets. Particularly, information asymmetry is one of the main problems of crowdfunding because, unlike what happens for professional investors, investors who finance crowdfunding campaigns do not carry out traditional due diligence and are typically more inexperienced (Ahlers et al., 2015; Liang et al., 2020). One way to mitigate information asymmetry and increase the propensity of the crowd to invest in a project is represented by an accurate and in-depth presentation of the business idea and strategy (Salvi et al., 2022), which should not be limited to mere textual descriptions, but should also include visual tools, such as images and videos (Colombo et al., 2015; de Larrea et al., 2019). The completeness of the text increases the chances of crowdfunding campaign success (Koch and Siering, 2015), with some scholars who have shown that, contrarily, an ambiguous and inaccurate text reduces the propensity of investors to provide funding (Ahlers et al., 2015). Even visual tools, such as images and videos, which support the narrative flow, allow for a better understanding of the text and direct investors (Koch and Siering, 2015). Therefore, they have been identified as elements capable of determining the success of crowdfunding projects (Mollick, 2014; Salvi et al., 2022). The extensive use of visual tools and the completeness and detail of the text of the project description assume particular relevance in the vegan crowdfunding context. In this context, users must understand their own vision of veganism (Wrenn, 2017) and how the project supports the food choices, identity and attitudes of vegans. Therefore, the following hypothesis can be introduced.

**H1.** The number of images positively impacts the success of vegan crowdfunding campaigns.

**H2.** The number of videos positively impacts the success of vegan crowdfunding campaigns.

**H3.** The length of the project description positively impacts the success of vegan crowdfunding campaigns.

Another potentially relevant feature of a crowdfunding campaign description is its readability. Several scholars have examined the relationship between text readability and investors’ decision-making processes, highlighting the need for simple communication to correct resource allocation (Adamska-Mieruszewska et al., 2021). Thus, Soper and Dolphin (1964) and Poshalian
and Crissy (1952) have highlighted the negative effects of the disclosure of unreadable documents, wordiness and lengthy sentences, on investors’ decision-making processes. The issue of text readability is relevant in the crowdfunding context, as investors in such campaigns usually do not have a technical background and therefore may have greater difficulties in understanding (Ahlers et al., 2015). The readability of the project description is closely related to users’ ability to understand what the entrepreneur wants to communicate and, therefore, can determine the success or failure of crowdfunding campaigns (Zhou et al., 2018; Adamska-Mieruszewska et al., 2021; Salvi et al., 2022). Based on signaling theory (Spence, 1973; Ross, 1977), the readability of the project description can signal to potential investors that the entrepreneur’s professionalism, ideas and strategies are easily understood. In the vegan crowdfunding context, a readable and understandable description of the project may be even more relevant to the success of the proposed campaigns. Almost none of the recipients of these campaigns are professional investors, whereas it is much simpler to find non-expert users within the vegan community. Therefore, the success of vegan crowdfunding may be contingent on the capacity of these individuals to comprehend the business concept and unique characteristics of the project. Thus, the fourth hypothesis is proposed.

\[H_4.\] The readability of the project description positively impacts the success of vegan crowdfunding campaigns.

The comments in support of potential investors and updates of the crowdfunding project represent other elements potentially relevant to campaign success. In line with signaling theory (Spence, 1973; Ross, 1977), these elements make it possible to keep potential investors abreast of the development of crowdfunding campaigns, thereby reducing information asymmetry and directing decision-making processes. Particularly, updates make it possible for potential investors to provide information about the trust that the entrepreneur places in the crowdfunding campaign and offer the possibility of informing users about the progress of the project and the monetary resources collected (Colombo et al., 2015; de Larrea et al., 2019; Salvi et al., 2022). Meanwhile, the comments allow the entrepreneur to provide answers to potential investors and establish relationships with users interested in the project, thus guaranteeing credibility to the project (de Larrea et al., 2019; Liang et al., 2020; Salvi et al., 2022). In the vegan crowdfunding context, comments and updates can be of particular relevance, considering the importance of building a climate of trust with members of the vegan community and the continuous impetus required by the vegan philosophy. Therefore, the following hypothesis is introduced.

\[H_5.\] The number of comments positively impacts the success of vegan crowdfunding campaigns.

\[H_6.\] The number of updates positively impacts the success of vegan crowdfunding campaigns.

4. Research methodology
4.1 Sample
The sample comprises vegan crowdfunding projects launched in Europe and listed on the Kickstarter platform from 2014 to 2021. Following the literature in the field (Mollick, 2014; Hu et al., 2015; Kim et al., 2016; Zhou et al., 2018), the Kickstarter crowdfunding platform was used for data collection given that it represents a very popular reward-based crowdfunding platform and a data source most commonly used by researchers on crowdfunding (Karteeemo, 2017). Kickstarter is a United States-based platform founded in 2009 that is quickly becoming one of the leading non-equity crowdfunding sites worldwide. Furthermore, the extensive use of Kickstarter as a data source of scholars worldwide facilitates comparison of the results
obtained in different studies (Zhou et al., 2018). Finally, Kickstarter allows access to all projects, including those that have not met the target, and consequently, have not been funded. This allowed us to examine the differences in the evaluation of funded and unfunded projects. Kickstarter uses an “all-or-nothing” funding model, which implies that projects are funded only if they meet (or exceed) the initial goal. Otherwise, the projects are not funded and all pledges are voided (even if they partially reach the set goal). Despite the existence of crowdfunding platforms specializing in vegan projects, we used Kickstarter for the data collection process due to the immense popularity of this platform and for the possibility of comparing the results with those obtained in previous studies (Zhou et al., 2018).

We selected our projects on a specific Kickstarter category: “food,” applied the “vegan” filter and restricted the sample to projects launched in the European context only. Data collection was manually performed in April 2021 using an Excel spreadsheet. We performed a double check to verify the accuracy of the extrapolated data. A total of 243 projects were initially identified. Subsequently, 22 projects were eliminated, as they were not written in English, with a consequent objective lack of homogeneity with respect to the other projects in terms of readability analysis, reducing the sample to 221 projects. Finally, 21 projects were removed as they were canceled or purged by Kickstarter according to their policy or terms of use, or canceled by owners for different reasons. The final sample comprises 200 vegan projects in the “food” category launched in Europe between 2014 and 2021 on Kickstarter platforms. The timeframe of our study is the largest available on Kickstarter for vegan projects in Europe.

4.2 Dependent variable
The dependent variable of this study is CS, which has been measured by researchers using different proxies. The most commonly used measure of CS is funding success, which means achieving the funding target (Deng et al., 2022). Following the prevalent literature in the field (Shneor and Vik, 2020; Deng et al., 2022) we used a dichotomous variable to measure the success rate. CS is a dummy variable coded 1 if the project funds the predetermined goal within the given time and 0 for otherwise. The choice to use a dichotomous variable as a dependent variable is consistent with the literature in the field but is also linked to the business model employed by the Kickstarter platform, the source used to collect the data in this study. Kickstarter adopts an “all-or-nothing” funding model, and therefore, projects are financed only if they reach (or exceed) the set goal. Consequently, partial financing was not allowed.

4.3 Independent and control variables
The number of images (NI) and videos (NV) represent the number of images and videos in the description of the crowdfunding project developed by the entrepreneur. These variables were manually collected by analyzing the project description uploaded on the crowdfunding platform (Zhou et al., 2018; de Larrea et al., 2019). Number of sentences (NS) is a proxy of the length of the text description (de Larrea et al., 2019) and has been calculated by counting, using the “readable.com” software, the sentences that compose the project description.

We employed the readability score (RS) to determine the ease of understanding the project description. Thus, we employed the Flesch Reading Ease Score developed by Flesch (1948), one of the oldest and most widely used for measuring text readability among researchers (Raimo et al., 2022). The Flesch Reading Ease Score was computed using the following formula: “206.835 – (1.015 × average sentence length) – (84.6 * average syllables per word).” This readability index assesses the approximate reading grade level of a text and varies from 0 to 100, where 0 represents the lowest reading ease. The index was calculated using the “readable.com” software (Raimo et al., 2022).
The number of comments (NC) and updates (NU) represent the number of comments and updates entered directly by the fundseeker in the project description. These variables were manually counted by the authors by analyzing each project description uploaded on the platform. NC and NU represent proxies for the frequency of project communication, a crucial aspect in determining campaign success (de Larrea et al., 2019; Salvi et al., 2022). Increasing the comments and updates during the crowdfunding campaign is a marketing activity capable of strengthening the relationship between entrepreneurs and backers, reducing information asymmetry and increasing project chances of success.

A set of control variables was used to improve the quality of econometric analysis. Community orientation (CO) was employed to measure the degree of connection between fundseekers and the environment in which they operate. It was measured by manually counting the number of times the word “community” appears in the project description. According to the literature in the field (Hobbs et al., 2016; de Larrea et al., 2019) the connection with the community is a crucial aspect that can increase the chances of success of a crowdfunding campaign. The project goal measures the amount of money the funder intends to raise using crowdfunding. We use the natural logarithm of the amount of money (LNPG) as a proxy for this variable (Thapa, 2020). Following the literature in the field (Colombo et al., 2015), project goals can influence campaign success rates. Number of days (ND) is a proxy of campaign duration and was measured as the number of days for which a campaign accepts funding (Thapa, 2020). Kickstarter has a default duration of 30 days, with a maximum of 60 days (Zhou et al., 2018). Project We Love (PL) is a dummy variable that equals 1 if the project receives this badge from the platform and 0 for otherwise (de Larrea et al., 2019; Song et al., 2019). Finally, we controlled for the geographical variable (UK). UK is a variable that assumes a value equal to 1 if the project is based in the UK and 0 for otherwise. We use the UK variable because the United Kingdom is a pioneering crowdfunding country (Coakley et al., 2022) and which can impact the success of campaigns launched in this area (Salvi et al., 2022).

4.4 Model specification
The choice and measurement of CS influence the research methodology. Logistic regression is a type of analysis that is used when the dependent variable is binary. Due to the dichotomous nature of our dependent variable (CS), we applied this methodology to test the research hypotheses (Song et al., 2019). According to the literature in the field (Zhou et al., 2018; Deng et al., 2022), logit regression is one of the most commonly applied research methodologies to test the success factors of a crowdfunding campaign and has competitive performance results with other models (Zhou et al., 2018). Equation (1) describes the model used in this study:

$$\text{Logit} \ (CS) = B_0 + B_1 \text{NI} + B_2 \text{NV} + B_3 \text{NS} + B_4 \text{RS} + B_5 \text{NC} + B_6 \text{NU} + B_7 \text{CO} + B_8 \ln(\text{LNPG})$$
$$+ B_9 \text{ND} + B_{10} \text{PL} + B_{11} \text{UK} + \epsilon.$$  

(1)

The values from a logit regression represent the log odds of the event occurring (CS) for every unit change in the predictor, with a positive value indicating an increase (a negative value indicates a decrease) in the log odds of the event occurring (Thapa, 2020).

5. Results and discussion
5.1 Descriptive statistics and correlation analysis
Table 1 displays the descriptive statistics of the variables used in this study. On average, in our sample, the rate of success (CS) is 0.335, which is in line with previous studies in the field.
The average NI and NV for the analyzed projects were 7.325 and 0.82, respectively, with a maximum of 44 images and 8 videos. Furthermore, the average NS for each project was 52.79. The RS, measured using the Flesch Reading Ease Score, has an average value of 61.545, highlighting that the projects in our sample are characterized by a good level of readability: the higher the index value, the better the readability of the document. NC and NU are on average equal to 7.815 and 3.697, respectively, indicating the importance of online comments, a crucial “marketing tool,” as defined by Liang et al. (2020). The control variables used in this study, CO, LNPG, ND, PL and UK, have average values of 1.09, 8.508, 32.345, 0.155 and 0.59, respectively.

Table 2 presents the results of the correlation analysis of the variables. As Table 2 shows, the correlation coefficients are quite low (the highest coefficient is between NI and NS and is equal to 0.608 with \( p < 0.000 \)) and below the threshold identified in the literature (Kennedy, 1999), highlighting the absence of multicollinearity issues.

### 5.2 Regression analysis

The results of the logistic regression analysis are presented in Table 3. These results partially confirm our research hypotheses. More specifically, Hypothesis 1 (H1) was supported by the results. They demonstrate a statistically significant (\( p = 0.061 \)) and positive (0.0894) effect of NI on the success probability of vegan crowdfunding campaigns. This result shows that the NI positively influences the probability of a vegan crowdfunding campaign reaching the desired monetary amount. In line with signaling theory, the images, supporting the narrative flow of the project description, favor investors’ understanding of the entrepreneur’s ideas and their vegan culture and philosophy, and, therefore, can direct financing decisions. The results obtained in this study confirm the findings of Koch and Siering (2015), Zhou et al. (2018), de Larrea et al. (2019), Liang et al. (2020) and Salvi et al. (2022).

Hypothesis 2 (H2) was not supported. NV has a non-significant effect on the probability of the success of vegan crowdfunding campaigns. This result indicates that no relationship exists between the number of videos included in a project description and the success of vegan crowdfunding campaigns. Although unexpected, this result can be justified by the presence of numerous lengthy videos, which is time consuming for investors to view, who therefore prefer to rely solely on images as visual tools to understand entrepreneurs’ ideas and their vegan culture and philosophy. The results obtained, albeit unexpected, confirm the findings of de Larrea et al. (2019) and Troise et al. (2020).

Hypothesis 3 (H3) was also not supported by the results. They show a significant (\( p = 0.062 \)) but negative (−0.0204) impact of NS on the probability of success of vegan
<table>
<thead>
<tr>
<th></th>
<th>CS</th>
<th>NI</th>
<th>NV</th>
<th>NS</th>
<th>RS</th>
<th>NC</th>
<th>NU</th>
<th>CO</th>
<th>LNPG</th>
<th>ND</th>
<th>PL</th>
<th>UK</th>
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<tr>
<td>CS</td>
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<tr>
<td>NV</td>
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<td>0.221***</td>
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<td>NS</td>
<td>0.244***</td>
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<tr>
<td>RS</td>
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<td>0.010</td>
<td>0.023</td>
<td>-0.137*</td>
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<td></td>
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<tr>
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<td>0.538***</td>
<td>0.140**</td>
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<tr>
<td>NU</td>
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<td>-0.005</td>
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<td>LNPG</td>
<td>-0.438***</td>
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<td>0.081</td>
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<tr>
<td>UK</td>
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<td>-0.091</td>
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<td>-0.311***</td>
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<td>-0.121*</td>
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</tbody>
</table>

**Note(s):** ***Significant at the 1% level; **Significant at the 5% level; *Significant at the 10% level**
crowdfunding campaigns. This result indicates that a lengthy project description decreases the likelihood that an entrepreneur’s vegan crowdfunding campaign will raise the requested amount. Possible explanations for this unexpected result include the confusion that a lengthy text may cause in potential investors, as well as the time required for an in-depth reading. Thus, a lengthy text may discourage potential investors from reading, with a consequent reduction in the likelihood that they will decide to provide monetary resources. The results obtained, albeit unexpected, confirm the findings of de Larrea et al. (2019), Liang et al. (2020) and Salvi et al. (2022).

Regarding the readability level, the results obtained confirm initial expectations, thus supporting Hypothesis 4 (H4). RS, has a significant ($p = 0.061$) and positive ($0.0761$) impact on the probability of success of vegan crowdfunding campaigns. This result demonstrates that a readable and understandable description of the project increases the likelihood that a vegan crowdfunding campaign will reach the entrepreneur’s monetary goal. Based on signaling theory, a highly readable description of the project facilitates investors’ comprehension of the entrepreneur’s ideas and vegan culture and philosophy, thereby increasing the likelihood of success. In the vegan crowdfunding context, the presence of investors with no technical background makes the readability of the project description crucial to the success of the campaigns. The results obtained confirm the findings of Zhou et al. (2018) and Salvi et al. (2022).

Hypothesis 5 (H5) is also supported by the results. They reveal a significant ($p = 0.004$) and positive ($0.4153$) effect of NC on the probability of success of vegan crowdfunding campaigns. This result indicates that a greater NC included in the project description favors the achievement of entrepreneurs’ monetary goal set for their vegan crowdfunding campaign. In line with signaling theory, the comments allow the entrepreneur to provide answers to investors and encourage the creation of close relationships that are the basis for the success of crowdfunding campaigns, especially within the vegan community. The results obtained in this study confirm the findings of de Larrea et al. (2019), Liang et al. (2020), Ullah and Zhou (2020) and Salvi et al. (2022).

Hypothesis 6 (H6) was also supported by the results. The results show a significant ($p = 0.057$) and positive ($0.1061$) influence of NU on the probability of the success of vegan crowdfunding campaigns. This result indicates that a greater number of updates provided by the entrepreneur increase the likelihood that a vegan crowdfunding campaign will reach its financial goal. In accordance with signaling theory, the updates provide information about the progress of the vegan crowdfunding campaign and the entrepreneur’s confidence in it, and...
thereby influencing the behavior of investors and promoting the attainment of the monetary target. The results obtained in this study confirm the findings of de Larrea et al. (2019), Liang et al. (2020), Ullah and Zhou (2020) and Salvi et al. (2022).

Finally, in terms of the control variables, the results highlight the positive impact of CO and the negative impact of LNPG. They demonstrate that a broader community focus increases the likelihood of a vegan CS, whereas an excessively high monetary goal decreases it.

6. Conclusions
6.1 Objectives and summary of results
This study investigates the success factors of vegan crowdfunding campaigns. Particularly, this study focused on campaign-related factors by examining the impact of the number of images and videos, length of the project description, readability of the project description, comments and updates. The results unveiled that the number of images, comments and updates and the readability of the project description positively impact the success rate of vegan crowdfunding campaigns. In addition, the length of the project description has a negative impact, whereas the number of videos has no bearing on the likelihood of success of vegan crowdfunding campaigns.

6.2 Theoretical and practical implications
This study enriches the academic literature in different ways. First, it contributes to the debate on the success factors of crowdfunding campaigns. The study has demonstrated the role played by campaign-related factors, particularly the specificities relating to the description of the project, thus extending academic literature. Second, this study extends the literature on crowdfunding in the food sector, which currently includes a limited number of contributions, mainly focused on agri-food crowdfunding. From this perspective, this study examines a particular area of food crowdfunding, represented by vegan food. Third, this study identifies the factors that can contribute to the success of business ideas within the vegan community by outlining the characteristics of a successful vegan crowdfunding campaign. This study contributes to the scant literature on entrepreneurship in a niche such as veganism, which represents a cultural movement worthy of in-depth examination. This study concludes by demonstrating the usefulness of signaling theory as a theoretical framework for understanding vegan crowdfunding and its capacity to explain the impact of campaign-related factors on the success of vegan crowdfunding campaigns.

The findings also have important practical implications for entrepreneurs interested in launching vegan crowdfunding campaigns. They must pay attention to different elements in creating campaigns on crowdfunding platforms. First, based on the findings of this study, entrepreneurs must include numerous images in the project description to ensure that potential investors fully comprehend the business concept behind the campaign and their vegan ethos. In this regard, entrepreneurs should favor images over videos among visual tools. The inclusion of images guarantees a clear and immediate representation of the vegan business idea. Furthermore, they should avoid including lengthy project descriptions that discourage potential investors from reading. Therefore, they prefer concise, precise and accurate descriptions of the project. In addition, entrepreneurs should provide readable and understandable project descriptions, even for non-technical audiences, to increase the likelihood of success. In this regard, they should choose clear and simple language that can make the vegan business idea easily understandable. Finally, entrepreneurs should carefully monitor the progress of vegan crowdfunding campaigns by providing numerous comments, especially in response to those of potential investors, and by including continuous updates to
inform users about the current and future prospects of the campaign. During a crowdfunding campaign, entrepreneurs interact with potential investors most effectively through comments and updates.

6.3 Limitations and future research direction
This study has some limitations. The primary limitation is the selection of a single crowdfunding platform for the examination of vegan crowdfunding campaigns. To mitigate the effects of this limitation, one of the world’s most prominent crowdfunding platforms, which is also widely utilized in academic literature, was selected as the source for identifying campaigns. Therefore, this limitation does not reduce the quality of this study and offers important insights for future research. Future studies should investigate the success factors of vegan crowdfunding using different platforms, such as those dedicated to the vegan sector. In addition, future research should extend the number of determinants examined by investigating the effects of other factors, such as the type of language used and communication tone. Particularly, investigating the impact of an entrepreneur’s characteristics on crowdfunding campaign success may be interesting, given that the latter is an aspect that remains unexplored by researchers. Future research should evaluate the success of vegan crowdfunding campaigns using a different metric, such as the ratio between the funds raised and the amount needed by the entrepreneur.

References


Success factors of vegan crowdfunding projects


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