



RESEARCH ARTICLE

Utilising Crowdfunding for Infrastructural Development in Nigeria

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| ARTICLE INFO | ABSTRACT |
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| Received: Apr 20, 2024 | <p>Financial theory conceives that underinvestment in economic and social externalities is purely incentivised by risk and return motives. Recent development in information technologies, involving fintech platforms, communication media, blockchain, cryptocurrencies, have enabled technology-based community to provide capital support for fundraisers' projects through crowdfunding. As an alternative finance option, crowdfunding supports engagement in collective behaviors. The nature, processes and consequences of crowdfunding for project development is attracting increased interest. This paper examines the concept, theory and review recent developments on crowdfunding, and demonstrates its implications for infrastructural development. The evidence concentrates on sound inquiries by addressing and analysis promising questions involving crowdfunding how crowdfunding can facilitate and be considered as a channel for funding infrastructural developments in Nigeria. The paper engaged and surveyed key thought individuals, including researchers, private enterprises and government agencies, linked to the entrepreneurship field, regarding required inquiry believe to associate the crowdfunding projects. We asked these individuals to identify valuable information on crowdfunding including the nature, sectoral difference, regulatory constraints of crowdfunding as well as its importance for project development. We unveil issues on the distinctiveness and challenges anticipated for crowdfunding for private and public projects. We received a full response from 85 (43%) of the 200 questionnaires administered, and a 43% partial response. The responses offer critical implications for infrastructural developments and can inform future research on crowdfunding. The review informs practitioners, investors, and entrepreneurs leading crowdfunding campaigns, and stakeholders that aid them – policy makers, regulators, and consultants.</p> |
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INTRODUCTION

Financial theory conceives that underinvestment in economic and social externalities is purely incentivised by a risk and return motives (Hong & Kacperczyk, 2009). Investors such as venture opportunists view entrepreneurial ventures unattractive, if they are not exclusively focused on returns. Recent advancements, including the development in information technologies, growth communication media, emergence of fintech platforms, innovations in the blockchain technologies and cryptocurrencies, have enabled technology-based community to funders to provide potential capital support for fundraisers through crowdfunding, mostly using the Internet. More than providing capital to support creative ideas, crowdfunding enables business founders to test the market for a business idea (Helmer, 2014), gain validation for the idea, and build relationships and collaborations with backers (Gerber, Hui, & Kuo, 2012).

The emergence of crowdfunding as an alternative finance means involves engagement in collective behaviors (Stosic et al., 2018; Li et al., 2016). It originates from the combination of the efficiencies afforded via internet technologies (Rowan, 2019), the needs of segments underserved such as female-led businesses (Haddad & Hornuf, 2019; “Brush, et al., 2018), and fairer resource reallocation (Shneor et al., 2020; Bruntje & Gajda, 2016). The first online crowdfunding platform, ArtistShare, was launched in 2001, and since then, several platforms have evolved. The number of crowdfunding platforms has grown from 1,250 worldwide in 2015 to 1,478 platforms in the United States alone in 2021 (Massolution, 2015; Dabbous et al., 2024). During 2022, the crowdfunding platforms registered a year-over-year growth rate of 34% (Shepherd 2023), and it is estimated to continue growing by over 16% during 2021–2026, drastically shaping the landscape for entrepreneurs funding (Research & Markets, 2021). The number of crowdfunding deals has catapulted in the past couple of years. In 2020, \$100.8 billion was raised worldwide in debt crowdfunding, \$8.4 billion in reward and donation crowdfunding, and \$4.4 billion in equity crowdfunding (Statista, 2022; Beauhurst, 2022). The crowdfunding platforms successfully raised more than \$17 billion in 2022 and is expected to reach a market size of US\$28.2 billion by 2028 (Bloomberg 2023; Fundera.com, 2024).

Because some crowdfunding projects offers insured and secured fundraising opportunities, more professional venture capitalist is now shifting attentions to investing their resources (Afsaneh et al., 2020; Kim & Hall, 2020). This paper examines recent developments on crowdfunding and demonstrates its implications for infrastructural development. The evidence concentrates on sound inquiries by addressing and analysis promising questions involving crowdfunding how crowdfunding can facilitate and be considered as a channel for funding infrastructural developments in Nigeria. The paper engaged and surveyed key thought individuals, including researchers, private companies and government agencies, linked to the entrepreneurship field, regarding required inquiry believe to associate the crowdfunding projects. For the first time, we introduce a survey approach not applied to previous study to examine the distinctiveness of crowdfunding, the extent usefulness of crowdfunding in different sectors and how the ownership structure of crowdfunding can influence utilising it for infrastructural development.

The findings show that crowdfunding is a quite distinct concept from other entrepreneurship financing such as sales, loan procurement, initial public offering, and venture capital, but on the average like crowdsourcing. Moreso, crowdfunding is potentially more useful for infrastructural development in sectors as Tech. & Telecom, Agriculture, Health Care, Financial Service, and Real Estates, but least useful in sectors as Education, Transportation, Energy, Oil & Gas and General Industry. Lastly, crowdfunding is more useful for infrastructural development especially when the project is owned by domestic private enterprises, individual, international, but may prove unsuccessful for government owned. The outcome offers critical implications for infrastructural developments and can inform future research on crowdfunding.

The study has implications for regulations, practitioners and academics thus enlarges literature regarding crowdfunding. The results educate the relevance of industry for crowd investors, especially pinpointing infrastructural developments (Le Pendeven & Schwienbacher, 2023; Jung et al., 2022; Johan & Zhang, 2021; Chan & Parhankangas, 2017;). First, this evidence yields new insights into detecting how the sectors the project is may influence the projects in equity crowdfunding. Secondly, it provides evidence of investment matching only for certain combinations, i.e., when specific types of investors invest in specific types of segment. We demonstrate that because some crowdfunded platforms are interested in targeting only specific investors, hence, crowdfunded channelled that are sensitive to certain investment selection specifics – education, age, etc, hence, such investment selection cannot be considered the outcome of an individual random process. The study’s remainder is structured as follows. Section 2 presents conceptual, theory and empirical background. Section 3 discusses the deployed dataset and methods. Section 4 presents the results, discussion and implications, and lastly, Section 5 concludes.

Research Problem

When writing the relevance of the research topic, it is important to answer the following questions:

1. Why is it necessary to analyze this problem now?
2. What benefits will it bring to society?
3. How will it help the scientific field?
4. Is this problem sufficiently developed?
5. What new things can be learned about the problem?

Research Focus

It is necessary to describe the main purpose of the study, what the authors' scientific opinion is focused on.

Research Aim and Research Questions

The purpose is formulated concisely, it should accurately express the main thing that the researcher is trying to do. The goal is specified and developed in the research objectives.

The introduction needs to relate to the problems or issues being recognised and eventually leading the research questions.

2. CROWDFUNDING LITERATURE

2.1. Conceptual Review

Crowdfunding includes the efforts exerted by entrepreneurial individuals and groups to fund their ventures by relying on fairly small contributions made from a large number of individuals gathered through the internet (Mollick, 2014). It covers numerous approaches such as equity crowdfunding, reward-based crowdfunding, donation crowdfunding, and crowdlending (Ribeiro-Navarrete et al., 2021). In recent years, it has been used as an alternative mode of financing for a variety of for-profit and non-profit projects (Testa et al., 2019). Crowdfunding holds great potential for successfully addressing sustainability problems that require large financial means (Bockel et al., 2021), and appears to be a catalyst for encouraging innovation and sustainable development (Siebeneicher & Bock, 2022). Crowdfunding provides financial support to ventures that focus on sustainability issues, such as projects that create environmentally friendly solutions and pursue environmental goals (Petruzzelli et al., 2019), and contributes to the financing of renewable energies (Lam & Law, 2016). Furthermore, crowdfunding increases the availability of funding for social projects and sustainability-oriented initiatives that face obstacles in raising funds from conventional channels (Calic & Mosakowski, 2016). Crowdfunding also enables the democratization of investments and, leads to an increase in social justice and a fairer distribution of financial prosperity (Siebeneicher & Bock, 2022).

More than providing capital to support creative ideas, crowdfunding enables business founders to test the market for a business idea (Helmer, 2014), gain validation for the idea, and build relationships and collaborations with backers (Gerber, Hui, & Kuo, 2012). The information gained from this process enables firms to test the market at an early stage of product development and make considerations about consumer preferences and market demand (Bi et al., 2019; Chemla & Tinn, 2020). Specifically, Chemla and Tinn (2020) used crowdfunding campaigns as a demand learning tool of the real market, where the crowdfunding demand is viewed as a random sample of the unknown market demand whose distribution is common knowledge, the former helping to update the market demand distribution parameters for retail-stage decisions, thus deriving an option value of crowdfunding. Investors' dynamic backing behavior has been seen as the core component of the crowdfunding process (Afsaneh et al., 2020; Choy & Schlagwein, 2016). For example, Chul, Kannan, Michael, and Andrea (2020) investigated various dynamics characterizing the crowdfunding process: stagnation after friend-funding, gradual increase.

As a finance mechanism, it originates from the combination of the efficiencies afforded via internet technologies (Rowan, 2019), the needs of segments underserved such as female-led businesses (Haddad & Hornuf, 2019; Brush, et al., 2018), and the request of ideologies signalling broader democratization of financing and fairer resource reallocation (Shneor et al., 2020; Bruntje & Gajda, 2016). The 'democratization' effect, ensured through the facilitation of free enterprise and capital accumulation by the public (Greenberg, 2019), is offers prospects for overcoming discrimination patterns and reduction of

social inequalities (Keppler et al., 2022). Thus, it remains one of the manifestations of democratized finance solutions, which include the employment of various financial tools and products in finance as in the issuance of crypto currencies and assets (Buttic`e & Vismara, 2021; Fisch et al., 2022). Malmstrom et al. (2023) note that irrespective of the technology used, the fundraising channels are concentrated to serve high-risk early-stage companies (Audretsch, et al., 2016) and underserved segments by traditional alternatives (Becker-Blease & Sohl, 2016).

Additionally, crowdfunding can potentially increase the public's awareness regarding sustainability issues and thus contribute to the dissemination of more sustainable behaviors among individuals (Petruzzelli et al., 2019). Although crowdfunding appears to support sustainability, a study conducted by Motylska-Kuzma (2018) concludes that alternative financing is unlikely to promote the aims of sustainability even though it appears at first glance that these finance methods are directed toward responsible businesses, can reduce inequalities and represent one of the major concepts related to sustainable development. Further, most existing works have presented case studies (Lam & Law, 2016), investigated success factors (Bonzanini et al., 2016), used surveys on crowdfunding renewable energy ideas (Lu et al., 2018), or explored its impact on one aspect such as renewable energy (AppiahOtoo et al., 2022) or entrepreneurship (Cervantes-Zacares et al., 2023) but none quantified the global influence of crowdfunding on sustainability transitions and sustainable competitiveness. It becomes therefore necessary to conduct an empirical investigation on whether crowdfunding explains sustainability transitions and sustainable competitiveness in general and not only explore its impact on one aspect such as renewable energy or inequality.

Like venture capitalists, crowdfunding platforms provides a vital way to mobilize financial resources for new products but through a different approach from traditional finance. With crowdfunding, small sums are collected from many backers via online intermediaries (Belleflamme et al., 2014) and often without or with limited involvement of traditional financial intermediaries (Mollic, 2014). As a financing mechanism, crowdfunding allows idea creators to raise capital to sponsor creative projects by issuing an open internet-based channels to funders whose seeks risk and return motives (Liu et al., 2021; Ferdinand et al., 2019). Unlike when it was first introduced, Crowdfunding is now a commonplace investment channel amongst investors (Barber et al., 2021; Afsaneh et al., 2020; Kim & Hall, 2020). Although the first online crowdfunding platform, ArtistShare, was launched in 2001, users began to create crowdfunded projects in 2003. Since then, several other active platforms have been launched over a single decade, including the two famous platforms, Kickstarter and IndieGoGo, launched in 2009 and 2008, respectively (Colombo et al". 2015). Figure 1 shows the arts-related kickstarter campaign success rates, 2009-2020.

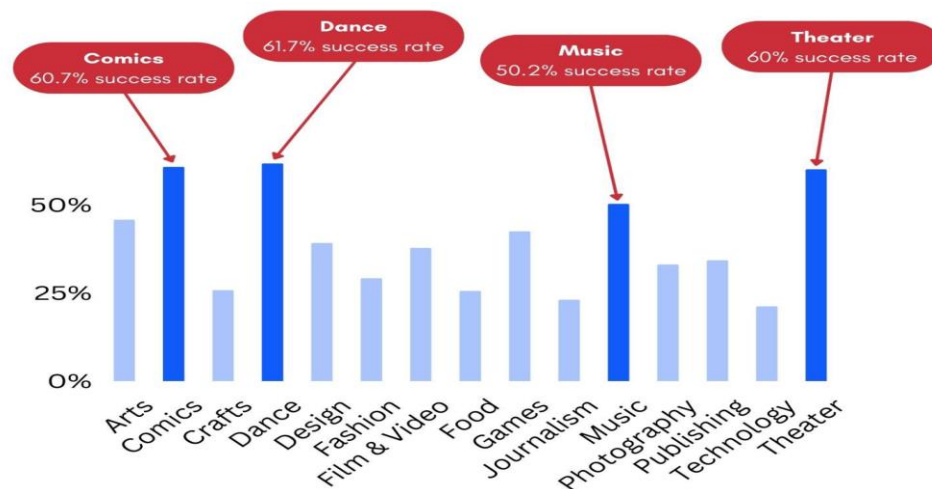


Figure 1: Arts-related Kickstarter Campaign Success Rates, 2009-2020.

Note: Dance, comics, theater, and music Kickstarter projects have the highest percentage of successful campaigns. With 79% of canceled, failed, or suspended projects, technology has been one of the most challenging types of projects to launch with crowdfunding.

2.2. THEORETICAL REVIEW

Signaling theory Signaling theory suggests that there is high information asymmetry in trading markets, with large differences in the information held by the two parties to a transaction regarding the commodity being traded. Studies have found that crowdfunding embodies information misalignment and uncertainty in financing processes “(Courtney et al., 2017; Davies and Giovannetti, 2018; Chen et al., 2022). It is difficult for investors to objectively assess projects because they lack comprehensive information about the founder and the project. Moreover, the all-or-nothing mechanism of crowdfunding platforms further increases uncertainty in crowdfunding projects. Crowdfunding is a high-noise environment that requires a specific bundle or set of signals to attract the attention of potential investors (Drover et al., 2018; Steigenberger and Wilhelm, 2018). As a result, founders must invest effort in explaining the legitimacy and potential of their proposed projects, as funders attempt to assess the real potential of the projects. Given information asymmetry, it is a challenge for founders to effectively deliver relevant information to investors.

Founders have different crowdfunding needs, and they signal to investors through project information and reviews. Meanwhile, entrepreneurs must rely on observable signals such as their past experience and project characteristics to demonstrate the credibility and viability of their crowdfunding projects. Davies and Giovannetti (2018) found that signals regarding the entrepreneur’s credibility and the project’s quality contribute to crowdfunding success, and these two signals are complementary. Green crowdfunding can overcome some of these problems. For example, Buttice et al. (2019) found that green crowdfunding campaigns have large capital goals, provide more information (both visual and verbal), and are launched by creators with significantly more social capital that has been developed on the crowdfunding platform. Communication between information senders and receivers helps reduce information asymmetry and helps receivers make investment decisions. Guillochon (2022) found that regional heterogeneity in green crowdfunding is influenced by income, Internet, and population density factors. Such regional heterogeneity affects the number of investors and the duration of geographically constrained campaigns.

2.3. EMPIRICAL REVIEW

Existing empirical studies on crowdfunding have identified many antecedents of project success, such as project characteristics (Burtch et al. 2016; Mollick 2014; Younkin and Kuppaswamy 2018), project description (e.g., text quality and visual quality) (Scheaf et al. 2018; Zhou et al. 2018), as well as creator and backer characteristics (Davis et al. 2017; Johnson et al. 2018). Prior research has conducted a literature review on crowdfunding and its success, which mainly focuses on reviewing the categories of crowdfunding and its success and explaining the determinants of crowdfunding success within several types (Moritz and Block 2016; Popescul et al. 2020; Yuan et al. 2016). The most closely related review work on crowdfunding success in our study is the research of Kaartemo (2017) and Shneor and Vik (2020).

Kaartemo (2017) identifies and reviews four main determinants of crowdfunding success: project-, creator-, backer-, and platform-related factors. It synthesizes and evaluates the findings in empirical research by providing examples of these determinants. The researcher explains the effect of each determinant on crowdfunding success by reviewing the research findings of each representative study. Shneor and Vik (2020) identify the general trends and research gaps concerning independent variables based on each primary crowdfunding model (i.e., reward-, equity-, loan-, and donationbased) separately. Then, they further build several integrated frameworks for the influential independent variables based on

each main crowdfunding model. The independent variables have similar measurements and persistently significant effects in a direction.

Based on the literature, we identify three types of determinants of crowdfunding success: project-, fundraiser-, and platform-related factors. Project-related factors reflect project characteristics and the soft information associated with the project (Cumming et al., 2020). The description of a project is the most critical soft information that potential backers need to understand the project and decide (Zhou et al., 2018). The description includes both text-related and visual-related factors. The text's narrative characteristics - such as quality, readability, sentiment, word count, spelling errors, style, and specific terms - can influence backers' understanding of the project. Visual-related factors are video- and image-related factors. Crosetto and Regner (2018) use project-level data from Startnext to study funding dynamics and pledgers' motivations. Mollick (2014) explores the effect of project goal, duration, comments, and updates on funding success.

Fundraiser-related factors are those associated with the individual, entrepreneur, or firm that creates the project. Drawing on signaling theory, Huang et al. (2021) examine how signals of entrepreneurs' credibility (success, failure, backers, industry experience) produce crowdfunding success in different signaling environments. Lagazio and Querci (2018) investigate how social networks help crowdfunding projects succeed. Mollick (2014) suggests that the geography of fundraisers is related to successful fundraising. The project mix of founders echoes the cultural products of the cities they are based in. Nashville is music-based, Los Angeles is dominated by film, and San Francisco has technology-, game-, and design-related products.

Platform-related factors include the number of projects funded on the platform, the type of platform, and the number of years since its establishment. Different crowdfunding platforms have different requirements for crowdfunding projects (e.g., the standard practice of retaining funds received from the crowd at the end of a project), which can also affect project success (Cumming et al., 2020). Using data from Kickstarter and GoFundMe, Josefy et al. (2017) investigated the influence of platform type on crowdfunding success and found that projects created on Kickstarter are more likely to succeed. Ralcheva and Roosenboom (2020), meanwhile, conducted group tests on different platforms to examine the effect of the platform model on crowdfunding success.

Studies show that such geographical differences also exist for crowdfunding, influenced by cities' economic development levels and cultural products. Using STATA to map the geographic distribution of projects, Mollick (2014) found that successful Kickstarter projects are unevenly distributed in the United States and tend to be concentrated in certain areas; in other words, crowdfunding success rates in the United States are influenced by where the project is initiated. Pietro and Buttice (2020) noted that different national institutional environments lead to differences in the spread of crowdfunding among countries. Buttice et al. (2019) specifically investigated how different national institutional settings affect the diffusion of green-oriented crowdfunding projects.

Cumming et al. (2017) hypothesized that the levels of the diffusion of clean-tech campaigns across countries reflect countries' informal institutional characteristics. Thus, clean-tech initiatives should be more common in countries with specific cultural characteristics, such as a long-term orientation (e.g., concern for future generations) and low individualism (e.g., propensity to accept that others will benefit from positive externalities, without paying). Such characteristics are found to be significantly associated with the likelihood of seeing a clean-tech campaign on Indiegogo. Furthermore, the institutional settings of different countries affect the distribution of green crowdfunding campaigns. Buttice et al. (2019) suggested that green campaigns are more widely distributed in countries with a limited environmental sustainability orientation.

3. METHODOLOGY

3.1. Data

The data was gathered from survey based on a customized questionnaire administered for this study. The questionnaire was composed of two main sections: The demographic information of the participants and the questionnaire elements that address research objectives. The study randomly distributed 200 questionnaires to different individuals, such as researchers, managers and government agencies. Table 1 presents the demographic information of the participants. In Panel A, all distribution of all participants is represented. Out of the total participants, only 86 respondents (43% of sample) have researchers experience, who respond to understanding the benefits, challenges, and potential solutions associated with crowdfunding, especially in the context of alternative venture financing. Only information extracted from the 86 respondents who reported they had knowledge of crowdfunding was used to complete the analysis (Table 1: Panel B).

Table 1: Demographic information of the participants

| Section | Class | A: Total Survey | | B: Final Sample | |
|-----------|-------------------------|-----------------|---------|-----------------|---------|
| | | Number | Percent | Number | Percent |
| Gender | Male | 154 | 77.00% | 68 | 79.07% |
| | Female | 46 | 23.00% | 17 | 19.77% |
| | Prefer not to say | 0 | 0.00% | 1 | 1.16% |
| Age | Below 25 | 22 | 11.00% | 6 | 6.98% |
| | 25-44 | 141 | 70.50% | 65 | 75.58% |
| | 45-60 | 35 | 17.50% | 14 | 16.28% |
| | Above 60 | 2 | 1.00% | 1 | 1.16% |
| Religion | Christain | 68 | 34.00% | 28 | 32.56% |
| | Muslem | 118 | 59.00% | 54 | 62.79% |
| | Prefer not to say | 14 | 7.00% | 4 | 4.65% |
| Education | Undergraduate | 6 | 3.00% | 3 | 3.49% |
| | Graduated | 28 | 14.00% | 14 | 16.28% |
| | Postgraduate | 166 | 83.00% | 69 | 80.23% |
| Program | Accounting | 20 | 10.00% | 8 | 9.30% |
| | Business Administration | 45 | 22.50% | 15 | 17.44% |
| | Economics | 45 | 22.50% | 26 | 30.23% |
| | Finance | 45 | 22.50% | 18 | 20.93% |
| | Information Technology | 45 | 22.50% | 19 | 22.09% |

3.2. METHODS

To assess respondent information on the link between crowdfunding and infrastructural development, a 5-point Likert scale was employed, ranging from 1 (strongly disagree) to 5 (strongly agree); 1 (Very similar) to (5 (somewhat distinct) and 1 (Very useless) to (5 (very useful). The responses were coded, transcribed, and classified to identify similar themes. To ensure the survey questionnaire's reliability, a pilot examination was implemented with a sample of 30 responses. The survey internal consistency was evaluated according to the Cronbach's alpha test. The outcome reflects a Cronbach's alpha value (> 0.83), thus established the appropriateness and reliability of the questionnaire's information for the study.

Next, we complete the analysis with simple descriptive analysis based on computation of weighted average. The method used to demonstrate the aim considers an essential paradigm shift away from the usual examination of the cause-effect relationships and mere theoretical discussion to a linear and simple analytical approach by computing a weighted mean to consider the strength of the examined issues. This paves way for a novel analytical procedure to reflect relationship between investor behavior and

entrepreneurial projects in a non-linear assessment, for which certain factors surveyed may be hypothesis to influence the interdependence between the alternative investment (crowdfunding) and investment matching.

4. RESULTS AND DISCUSSION

4.1 Results

In the empirical section, before the paper demonstrate peoples' perspective on the utilisation of crowdfunding for the development of infrastructures in Nigeria, the questionnaire first confirms the knowledge of the respondents regarding crowdfunding as linked to the entrepreneurship field. A total of 86 affirmative and valid responses from the 200 participants acknowledge understanding of the concept: a response of rate 46.4%. Hence, we evaluate the administered questionnaires on the issues to access how crowdfunding can be utilised for infrastructural development only for these respondents. The results, which addresses the study objectives, are presented in Table 2 to 4.

The first objective addresses the extent to which the respondents considered crowdfunding to be 'distinct' from other related venture financing options for infrastructural development. According to the procedure the paper uses the Likert five-point scales varying from 1 (very similar) to 5 (very distinct) to address this. As contained in Table 2, the valid responses received and collated based on this objective ranges from 83 to 86. On the average the participants noted that crowdfunding is a quite distinct concept from other entrepreneurship financing such as Outright sales (4.45), Loan Procurement (4.25), Initial Public Offering (4.01) and Venture Capital (3.94), but on the average like Crowdsourcing (2.58). This distinctiveness supports the antecedents that crowdfunding differ from several associated funding sources (Skirnevskiy & colleagues, 2017).

Table 2: Distinctiveness of Crowdfunding from Other Related Concepts

| Sectors | [1] | [2] | [3] | [4] | [5] | #Res | Weight | Rank |
|-------------------------|-----|-----|-----|-----|-----|------|--------|------|
| Crowdsourcing | 18 | 29 | 12 | 15 | 10 | 86 | 2.58 | 5 |
| Initial Public Offering | 0 | 15 | 8 | 20 | 39 | 82 | 4.01 | 3 |
| Loan Procurement | 0 | 8 | 11 | 16 | 48 | 83 | 4.25 | 2 |
| Sales | 0 | 5 | 8 | 16 | 56 | 85 | 4.45 | 1 |
| Venture Capital | 3 | 13 | 12 | 16 | 42 | 86 | 3.94 | 4 |

Very similar [1], Somewhat similar [2], Neither similar nor distinct [3], Somewhat distinct [4], Very distinct [5], Weighted (Computed Weighted average [5.00]); #Res (Number of responses marked)

The second objective addresses the extent to which the respondents considered crowdfunding as potentially 'usefulness' for financing infrastructural in different sectors. According to the procedure the paper uses the Likert five-point scales varying from 1 (very useless) to 5 (very useful) to address this. As contained in Table 3, the valid responses received and collated based on this objective ranges from 83 to 86. The evidence supposes that crowdfunding is potentially more useful for infrastructural development in sectors as Tech. & Telecom (4.38), Agriculture (4.23), Health Care (3.98), Financial Service (3.88) and Real Estates (3.74), but least useful in sectors as Education (2.44), Transportation (2.66), Energy, Oil & Gas (3.63) and General Industry (3.72). This lends support to the facts that education would be better finance with involvement of the Government in the country.

Table 3: Potential Usefulness of Crowdfunding in Infrastructural Financing

| Sectors | [1] | [2] | [3] | [4] | [5] | #Res | Weight | Rank |
|-------------|-----|-----|-----|-----|-----|------|--------|------|
| Agriculture | 2 | 6 | 6 | 28 | 44 | 86 | 4.23 | 2 |
| Education | 28 | 23 | 12 | 13 | 9 | 85 | 2.44 | 9 |

| | | | | | | | | |
|--------------------|----|----|----|----|----|----|------|---|
| Energy, Oil & Gas | 5 | 14 | 16 | 21 | 28 | 84 | 3.63 | 7 |
| Financial Service | 2 | 5 | 21 | 31 | 27 | 86 | 3.88 | 4 |
| Health Care | 3 | 7 | 17 | 20 | 38 | 85 | 3.98 | 3 |
| Industry (General) | 4 | 12 | 18 | 21 | 30 | 85 | 3.72 | 6 |
| Real Estates | 2 | 10 | 20 | 28 | 24 | 84 | 3.74 | 5 |
| Tech. & Telecom. | 1 | 5 | 8 | 18 | 53 | 85 | 4.38 | 1 |
| Transportation | 25 | 18 | 15 | 15 | 12 | 85 | 2.66 | 8 |

Very useless [1], Somewhat useless [2], Neither useless nor useful [3], Somewhat useful [4], Very useful [5]; Weighted (Computed Weighted average [5.00]); #Res (Number of responses marked)

Thirdly, we access to what extent ownership structure affects the success of crowdfunding for infrastructural development. According to the procedure, the respondents identify how the ownership structure of the project – whether individual (sole) own, own by private corporation, government owned or multinational owned will affect successful crowdfunding campaign using the Likert five-point scales varying from 1 (Unsuccessful) to 5 (very successful) to address this. As contained in Table 4, the valid responses received and collated based on this objective ranges from 83 to 86. The evidence supposes that crowdfunding is potentially more useful for infrastructural development especially when the project is owned by domestic private enterprises (3.6), individual (3.08), international (2.18), but may prove unsuccessful for government (1.56).

Table 4: Potential Success of Crowdfunding due to Ownership Structure

| Ownership | [1] | [2] | [3] | [4] | [5] | #Res | Weight | Rank |
|---------------------|-----|-----|-----|-----|-----|------|--------|------|
| Government | 63 | 9 | 5 | 3 | 5 | 85 | 1.56 | 4 |
| Individual | 3 | 8 | 10 | 21 | 42 | 84 | 3.08 | 2 |
| International | 36 | 18 | 16 | 10 | 5 | 85 | 2.18 | 3 |
| Private Enterprises | 10 | 13 | 11 | 19 | 33 | 86 | 3.60 | 1 |

Note: Unsuccessful [1], Somewhat unsuccessful [2], Neither unsuccessful nor successful [3], Somewhat successful [4], Very successful [5]

4.2. Practical Implications

The processes and consequences of crowdfunding for project developments are attracting increased interest. The paper completes a survey to show the distinctiveness, usefulness and ownership structure of crowdfunding in Nigeria.

First, the outcome assists individuals, such as business practitioners, entrepreneurs, investors and policy makers, leading in crowdfunding campaigns to understand the nature, especially, the distinctiveness, of the crowdfunding from other related financing form. Thus, help in optimizing crowdfunding for infrastructural development by offering information that led to increased crowdfunding performance.

Second, the outcome provides guidelines and insight that can assist venture capitalist manage aspects concerning sector the crowdfunding would be most useful. Thus, it suggests that investors must place factors such as the sectoral difference at the centre of decisions in indulging in any crowdfunding campaigns. The outcome assists venture capitalist and entrepreneurs to better comprehend how intrinsic factors, such as sectors to engage their project in will influence their crowdfunding campaigns. This insight highlights immediate implications for the selection of the crowdfunded project before launching the campaign, as factors that drive successful campaign for the collective funding vary between the sector for the infrastructure would service.

Third, the outcome suggests that individuals will invest in any crowdfunding project must outcome the ownership structure of the project into considerations as some may not be successful as evidence. This

insight highlights the relevance of careful selection of the crowdfunded project before investing into it, as factors that drive the success of the collected fund to achieve it aims vary between the ownership form.

Lastly, the insights convey relevant information for policy makers and can inform regulations inclined to guide transactions on digital platforms as well as to shape the behaviors of the venture capitalist. The guidelines and regulations for crowdfunding in the country can be made to reflect the findings of the research by modifying according to the sectors or ownership structure of the project. Also, the standard reporting practices for crowdfunding projects be extended to reflect other non-financial information, including past crowdfunding success, forms of self-expression, and usefulness of the proposed projects (Chandler et al., 2021).

5. CONCLUSIONS

The emergence of crowdfunding supports engagement in collective behaviors (Stosic et al., 2018; Li et al., 2016). The alternative entrepreneurship financing involves combination of the efficiencies afforded via internet technologies (Rowan, 2019), and has been able to reach segments underserved such as female-led businesses (Haddad & Hornuf, 2019; Brush, et al., 2018) as well as signalling broader democratization financing and ensuring fairer resource reallocation. Since the launch of the first crowdfunding platform, the number of active platforms and successful crowdfunding projects has grown worldwide, drastically shaping the landscape for entrepreneurs funding (Research & Markets, 2021). The crowdfunding platforms are expected to reach a market size of US\$28.2 billion by 2028 (Bloomberg 2023; Fundera.com, 2024).

This paper examines recent developments on crowdfunding and demonstrates its implications for infrastructural development. We introduce a simple survey approach not applied to previous study to examine the distinctiveness of crowdfunding, the extent usefulness of crowdfunding in different sectors and how the ownership structure of crowdfunding Can influence utilising it for infrastructural development in Nigeria. The method used to demonstrate the aim considers an essential paradigm shift away from the usual examination of the cause-effect relationships and mere theoretical discussion to an analytical approach. The approach can be extended to alternative financing, especially where historical data is unavailable.

In the analysis, the sample includes 86 participants who has previously participated, through academic writing or investment purposes in related crowdfunding projects and are selected through a random sampling technique. The findings shows that crowdfunding is a quite distinct concept from other entrepreneurship financing such as sales, loan procurement, initial public offering, and venture capital, but on the average like crowdsourcing. Moreso, crowdfunding is potentially more useful for infrastructural development in sectors as Tech. & Telecom, Agriculture, Health Care, Financial Service, and Real Estates, but least useful in sectors as Education, Transportation, Energy, Oil & Gas and General Industry. Lastly, crowdfunding is more useful for infrastructural development especially when the project is owned by domestic private enterprises, individual, international, but may prove unsuccessful for government owned. The outcome offers critical implications for infrastructural developments and can inform future research on crowdfunding.

Suggestions for Future Research

You need to write down the author's proposals for solving the problem of the issue. (250-300 words)

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Text of the Acknowledgements (Cambria, font size 11 pt, justified). The section is for expression of gratitude to individuals or organisations for all possible technical assistance, ideas, financial (material) aid, which made the research possible, etc.

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|-------------------------|---|-----|-----|-----|-----|
| | Very similar [1], Somewhat similar [2], Neither similar nor distinct [3], Somewhat distinct [4], Very distinct [5] | | | | |
| | [1] | [2] | [3] | [4] | [5] |
| Loan Procurement | | | | | |
| Initial Public Offering | | | | | |
| Venture Capital | | | | | |
| Crowdsourcing | | | | | |

3. How would crowdfunding be **useful** for infrastructural financing in these sectors?

| | | | | | |
|--------------------|--|-----|-----|-----|-----|
| | Please Mark as [X]: Very useless [1], Somewhat useless [2], Neither useless nor useful [3], Somewhat useful [4], Very useful [5] | | | | |
| Sectors | [1] | [2] | [3] | [4] | [5] |
| Agriculture | | | | | |
| Education | | | | | |
| Energy, Oil & Gas | | | | | |
| Financial Service | | | | | |
| Health Care | | | | | |
| Industry (General) | | | | | |
| Real Estates | | | | | |
| Tech. & Telecom. | | | | | |

| | | | | | |
|----------------|--|--|--|--|--|
| Transportation | | | | | |
|----------------|--|--|--|--|--|

4. To what extent will sourcing funds through crowdfunding based on this ownership of infrastructural projects be **successful**?

| | | | | | |
|---------------------|---|-----|-----|-----|-----|
| | Please Mark as [X]: Unsuccessful [1], Somewhat unsuccessful [2], Neither unsuccessful nor successful [3], Somewhat successful [4], Very successful [5] | | | | |
| Ownership | [1] | [2] | [3] | [4] | [5] |
| Individual | | | | | |
| Private Enterprises | | | | | |
| Government | | | | | |
| International | | | | | |