# A Critical Review of Peer-to-Peer Crowdfunding Model as Alternate Finance for Start-ups

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# **ABSTRACT**

The study gives a detailed examination of Peer-to-Peer crowdfunding and explores the possibilities of recommending it as a better financing option for start-up capital for businesses. Peer-to-Peer by its nature enables borrowers to obtain loans directly from lenders without the use of intermediaries. It therefore makes it easier for business to have access to start-up capital which is not available to them from the more traditional sources. Consequently, the study considers the relevance of this crowdfunding model by reviewing the defining literature and evaluating the dynamics of the model. In particular, the study critically considers the key concepts of the model and how it could be applied practically. The study is conducted in the form of review of literature and expression of opinion. Consequently, the experiential justification of the models presented is outside the scope of this paper.

JEL Classification: G0, G3,

Keywords: crowdfunding, peer-to-peer, startup, capital, alternate

#### I. INTRODUCTION

Past research about crowdfunding (CF) has shown that crowdfunding gives entrepreneurs access to capital, which hitherto they will be unable to access from traditional funding sources. There is ample research to suggest that most entrepreneurs fail to raise venture capital because they do not qualify (Landström et al., 2019; Block et al., 2018; Cox and Nguyen, 2018; Bellavitis et al., 2017). This is because they have growth challenges and lack the potential for a large public offering. In addition, there are too many entrepreneurs competing for funding from fewer venture capitalists thereby creating funding gaps. These funding gaps have been filled by crowdfunding, which presents varied funding opportunities for entrepreneurs and small businesses who cannot access funding from the banks (Dorfleitner et al., 2018; Vismara, 2016; Agrawal et al., 2014; Mollick, 2014; Sahm et al., 2014).

The study, therefore, starts with an overview of prevailing literature on the selected CF model, consequently, limited empirical evidence is offered precisely on the validation for the CF model presented in our study. We also restricted our study generally to P2P crowdfunding model as an alternate source of raising start-up capital for businesses. First, based on a review of existing literature, the study presents the various definitions of crowdfunding. It further presents the diversity in these definitions. Second, the selected model of crowdfunding is presented and discussed in details.

Distinctive from prior researches, our study aimed at enhancing existing literature on how start-ups could explore P2P as alternate funding instead of depending on more traditional funding sources such as the banks. We therefore contribute to literature by analytically proving and aligning with a small number of researchers that P2P can be a reliable funding source for start-ups.

#### A. Concept of Crowdfunding

Crowdfunding is the process of raising funds from a large group of people using online platforms to fund start-up projects (Mollick, 2014). This takes the form of an open call Howe (2006, 2008) and it is not limited by geographical boundaries (Agrawal et al., 2015; Belleflamme et al., 2014). Raising money from the crowd involves certain laid down procedures as shown in Figure 1. First, there must be a fundraiser, which is usually an entrepreneur or start-up company with a business idea or a venture. The fundraiser then sells this idea to the funders or the crowd on online platforms (Mollick, 2014). The platform, therefore, becomes an intermediary between fundraisers and the funders. The project or business venture is then advertised on the online platforms and then an appeal is made to the general public (Kraus et al., 2016).

There are three main players involved in CF campaigns and these are the project initiators who propose the project or business venture to be funded Kaartemo (2017) and Cordova et al. (2015), individuals or group of individuals who back the project or business venture by making financial contributions and the internet platforms which launch the project or business venture (Vismara, 2016). While the study recognizes that crowdfunding can serve as an alternative source of funding, perhaps, of even more concern is that, lack of information between project initiators and backers can result in the project's inability to meet the project goal (Belleflamme et al., 2014).

However, a striking feature of crowdfunding is the platforms, which are the mediums that help to bring all three parties together (Mollick, 2014). Individuals or backers making financial contributions normally select and support projects that attract their interest. These could be social projects or business ventures. The backers would donate to these social projects in the form of supporting a good course for altruistic purposes (Moon and Hwang, 2018). In the case of business ventures, the backers buy shares in the venture for capital gains purposes or dividend purposes. Raising funds from the crowd has very little restriction in the sense that unlike the more traditional sources like the banks and equity finance, Ahlers et al. (2015), smaller amounts of money can be paid by the crowd during a call for crowdfunding appeals. The crowd plays an important role because they provide the needed funds and they act as an alternate source of finance for projects or business ventures (Cumming et al., 2019).

Crowdfunding

Crowdfunding

Contributions

Contributions

Contributions

Contributions

Contributions

Contributions

Contributions

Startups/
Entrepreneurs

Entrepreneurs

Figure 1
Crowdfunding Model (Belleflamme et al., 2014; Moon and Hwang, 2018)

Source: Belleflamme et al., 2014; Moon and Hwang, 2018

# II. METHODOLOGY

This section begins with an overview of prevailing literature on the chosen CF model. Consequently, limited experimental evidence is offered on the validation for the CF model presented in our study. The paper commences with an overview of extant literature in the subject area and therefore limited empirical evidence is available specifically on the justification for the model presented in our study. We also limited our study generally to the field of P2P crowdfunding as an alternate source of finding for start-ups. The study, therefore, presents the various definitions of crowdfunding based on a review of existing literature in the subject area. It further presents the diversity in these definitions and proposes a comprehensive definition. In addition, the selected model of CF is presented and discussed in details.

# A. Definition of Crowdfunding

Prevailing research suggests that there is an increase in the demand for the adoption of CF as alternate funding for start-up businesses. Subsequently, it has caught the attention of scholars who have given different definitions for the CF concept (Cumming et al., 2019; Block et al., 2018; Kuppuswamy and Bayus, 2015a; Kuppuswamy and Bayus, 2015b; Belleflamme et al., 2014; Mollick, 2014). Nevertheless, in spite of increasing scholarly interest in the concept, there is no acceptable definition that fully captures the dynamics of this phenomenon (Ahlers et al., 2015; Agrawal et al., 2014; Mollick, 2014). Therefore, within this section, the prevailing crowdfunding definitions are presented and the definition for the study is introduced. The study also aims at delinking crowdfunding from crowdsourcing and other crowd-based initiatives by presenting distinctive features of crowdfunding, which makes it stand in its own right as a fledgling discipline (Hossain 2015).

The usual argument is that crowdfunding emerged in the US and stems from the concept of crowdsourcing (Belleflamme et al., 2014; Hemer, 2011; Mollick, 2014; Moritz and Block, 2014a). Some scholars, Hossain (2015) and Howe (2006) therefore argue that CF is a branch of crowdsourcing because of their shared common features. However, other scholars, Block et al. (2018) are of the view that crowdfunding should be regarded as a separate concept and should be differentiated from other crowd-based concepts.

Evidence emerging from reviewed literature suggests that the US author Jeff Howe created the term "crowdsourcing" (Landström et al., 2019; Jespersen, 2018; Lalit and Reddy, 2018; Mollick, 2014; Kleemann and Voß, 2008; Howe, 2006). The term thus became the standard concept for outsourcing tasks to the public (Kleemann and Voß, 2008; Howe, 2006). This definition was made popular by Kleemann and Voß, (2008). They defined crowdsourcing as a process that:

"Takes place when a profit - oriented firm outsources specific tasks essential for the making or sale of its product to the general public (the crowd) in the form of an open call over the internet, with the intention to animate individuals to make a contribution to the firm's production process for free or for significantly less than the contribution is worth to the firm."

(Kleemann and Voβ, 2008)

Going by this definition, it is clear that the internet acts as a platform for interaction between businesses and the crowd (Kleemann and Voß, (2008). The interaction enables a business to outsource their tasks such as new product design, development of new products and helping them to solve specific problems (Pinto and dos Santos, 2018; Jespersen, 2018; Hiller, 2017; Hossain, 2015). Comparatively, in the case of crowdfunding, the crowd is called upon to make financial contributions to fund specific projects. This thus denotes a form of crowdsourcing (J. Block *et al.*, 2018; Hiller, 2017; Rusdin *et al.*, 2017; Brüntje, 2016).

Despite the above, the overall evidence emerging from the literature suggests that there are variations in the definitions of crowdfunding among scholars. The study therefore, presents the following prevailing definitions (Cumming *et al.*, 2019; Block *et* 

al., 2018; Kuppuswamy and Bayus, 2015a; Kuppuswamy and Bayus, 2015b; Belleflamme et al., 2014; Mollick, 2014).

Taking it from the perspective of making an appeal to backers for a donation in return for a reward (reward-based), according to Belleflamme et al. (2013), crowdfunding involves an open call, mostly through the internet, for the provision of financial resources either in the form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes.

Steinberg (2012) on the other hand, emphasizes that crowdfunding is an alternate funding for new ventures by defining it as the process of asking the general public for donations that provide start-up capital for new ventures. Viewing it from a different angle and contrasting Steinberg (2012) and Belleflamme and Schwienbacher's (2013) definitions, Wheat et al. (2013) saw crowdfunding as a possible avenue for individuals to raise start-up capital by describing it as a new internet-based method of fundraising in which individuals solicit contributions for projects on specialized crowdfunding websites.

Mollick (2014) expands the definition of crowdfunding by emphasizing how minimal contributions from a large number of people could constitute substantial capital for start-ups. He defines crowdfunding as:

"The efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries."

(Mollick, 2014)

Lambert and Schwienbacher (2010) add another dimension to the existing definitions. They include voting rights for backers who might support a particular initiative. Their definition has some link with equity crowdfunding, which shares some similarities with equity shares. According to them, crowdfunding involves an open call, essentially through the internet, for the provision of financial resources either in the form of donation or in exchange for some form of reward and/or voting rights to support initiatives for specific purposes.

Ordanini et al. (2009), apart from affirming earlier definitions, adds firm size to their definition. They specifically talk about medium size investments, an element that is missing in the earlier definition. They, therefore, define crowdfunding as:

"An initiative undertaken to raise money for a new project proposed by someone, by collecting small to medium-size investments from several other people (i.e., a crowd)"

(Ordanini et al., 2009)

Agrawal et al. (2011) takes the definition a step further by adding the dimension of how distance or geographical location does not affect crowdfunding activities. According to them, contributions are independent of geographical distance.

Bouncken et al. (2015) on the other hand explored the contributions of the internet to crowdfunding by viewing crowdfunding as "a recent web 2.0 based phenomenon gaining more and more scientific attention". According to them the "Crucial factor for success of the concept is the digitalization of society with growing presence of the

internet" (Bouncken et al., 2015).

Taking a closer look at the various definitions, it has become increasingly problematic to grasp the meaning of crowdfunding because each definition has some key elements missing. First, the definitions of Steinberg (2012), Hemer (2011) and Ordanini et al. (2009) do not cover risky crowdfunding forms such as debt crowdfunding (Peer-topeer) and equity crowdfunding. Likewise, Lambert and Schwienbacher (2013) also ignore debt crowdfunding (Peer-topeer). In addition, they left out the possibilities of groups and individuals raising funds via the crowd, particularly, in the entertainment industry (Hossain, 2016). Mollick (2014) and Lambert and Schwienbacher (2010) on the other hand, provided a broader definition of the crowdfunding concept by introducing new elements such as culture (Mollick, 2014) and voting rights (Lambert and Schwienbacher, 2010).

To sum up, Table 1 shows the prevailing definitions of crowdfunding as a concept. Overall, even though the definitions do not recognize crowdfunding in the African context, there is a general understanding that crowdfunding refers to fundraising activities from the public using the internet (crowdfunding platforms). The study, therefore, adopts the definition of Mollick (2014) because it provides a definition which can somewhat be adapted to suit crowdfunding within the African context. In addition, the study defines crowdfunding in a broader sense covering all forms of crowd fundraising activities that include the use of other platforms such as Mobile Money (MoMo).

Table 1
Definitions of Crowdfunding

	Definitions of Crowdianding
Author	Definition
Belleflamme et al. (2013)	"Crowdfunding involves an open call, mostly through the Internet, for the provision of financial resources either in the form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes."
Agrawal et al (2011)	"Proximity: contributions are independent of geographical distance"
Hemer (2011)	"open call, essentially through the Internet, for the provision of financial resources either in form of donations (without rewards) or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes."
Mollick (2014)	"The efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries."
Wheat et al. (2013)	"Crowdfunding is an initiative undertaken to raise money for a new project proposed by someone, by collecting small to medium-size investments from several other people (i.e., a crowd)." (P4 and 5)
Steinberg (2012)	"Crowdfunding is the process of asking the general public for donations that provide startup capital for new ventures."

Source: Author's compilation

#### III. DISCUSSIONS AND CONCLUSION

# A. Peer-to-Peer (P2P) Crowdfunding

Peer-to-Peer (P2P) crowdfunding is a lending system where individual investors lend out money to entrepreneurs to start their businesses (Kuppuswamy and Bayus, 2017). Peer-to-Peer lenders usually lend out the money to investors for interest purposes on online platforms (Kaartemo, 2017). The online platforms aim at matching individuals who have surplus money to lend out to businesses that require money for the businesses (Nordin, Sum, and Zainuddin, 2018). This form of lending takes place without the involvement of the banks or other financial institutions (Patwardhan, 2017). It helps entrepreneurs who require a minimum amount of money to start their businesses to have access to capital without going to the banks (Moritz and Block, 2014a; Hemer et al., 2011). The Peer-to-Peer lending system, which started as a simple way of issuing loans to individuals online, is now a complex loan scheme that depends on technology (Mateescu, 2015).

Peer-to-Peer crowdfunding, unlike other forms of online lending platforms depends on conventional credit data to grant loan applications and to determine interest rates. Lenders operating on Peer-to-Peer (P2P) platforms use the data for the selection and screening of loans for investment (Mateescu, 2015). Crowdfunding of loans under P2P has now advanced from the era of using smaller multiple investors to an era where bigger investors like the banks, wealth managers and hedge funds patronise the loans (Brown et al., 2017). The Peer-to-Peer lending system acts as an intermediary between lenders and borrowers (Forbes and Schaefer, 2017) and it is controlled by banking regulations (Hemer et al., 2011).

# B. Platforms

In the following, two of the current biggest Peer to Peer crowdfunding platforms, Upstart and Funding Circle, are described in detail. If not stated otherwise, the respective website of the platforms is the source of references.

First, Upstart is a USA-based first artificial intelligence online lending platform founded in 2012, which uses a statistical model to determine credit worthiness and loan eligibility of applicants. This model was developed using variables such as employment history, education, academic performance, area of study and students' GPA. When Upstart was launched in 2012, it began with a product known as Income Share Agreement (ISA). The ISA makes it possible for individuals to raise money by agreeing to share a percentage of their future earnings. This was later replaced by the personal loan market, which offers a 3-year loan product, and this later changed to a 5-year loan product (www.upstart.com). Upstart issues out loans with a minimum of \$1000 to \$50,000 maximum and this carries an annual percentage rate of 8.85% (Fleming and Sorenson, 2016). Upstart offers personal and business loans for paying medical bills, repayment of student loans and start-up businesses. The Upstart platform is popular among the youth who have no credit history to access loans from traditional sources like the banks but have the potential to repay their loans (Fleming and Sorenson, 2016).

Second, Funding Circle is a UK based P2P crowdfunding platform that was founded in 2010. It permits investors to lend out money directly to start-ups as well as medium-sized firms (Mateescu, 2015). The platform has about 71,000 retail investors,

banks, financial institutions as well as the UK government (Forbes and Schaefer, 2017). Funding Circle platform is estimated to have given out about \$5 billion loans to 40,000 businesses worldwide. The loans offered by Funding Circle ranges from \$25,000 to \$500,000 payable within 5years (www.fundingcircle.com). The loans can be used for business expansion, launching innovative ideas, new equipment and hiring more people (www.fundingcircle.com).

Borrowers who want to borrow on the platform have to fill the loan application form online. The form, which requires some basic information about the applicant, must also state the amount required. The application must have other supporting documents (Dushnitsky and Fitza, 2018). Before September 2015, loan rates on Funding Circles were determined through an auction process. However, this approach was later replaced with the use of risk category and loan term in determining the loan rate. Individual and institutional investors can purchase loans from their countries of origin. However, the US marketplace is restricted to only accredited individuals and institutional investors based in the country (www.fundingcircle.com). Further examples for P2P crowdfunding platforms are presented in Table 2.

Table 2
List of selected P2P Platforms

Equity Crowdfunding Platform	Country
Upstart	USA
Funding Circle	UK
B2B FinPal	Malaysia
Nusa Kapital	Malaysia
Prosper.com	USA
Crowd Genie	Singapore
Pezesha	Ghana

Source: Author's construction

# C. Empirical Results

Some empirical studies on P2P crowdfunding find support for the understanding of racial and age discriminations, dynamics of social networking, the role of project narration and herding on the P2P market (Barasinska and Bundesbank, 2014).

To begin with, Pope et al. (2011), in their study "What's in a Picture....?" show empirical evidence in support of the fact that pictures play a vital role in the success rates of loan listings. According to them, pictures on loan listing showing black women, elderly and overweight applicants are less likely to be successful. However, pictures on loan listing with white women with a military background have a high success rate (Pope et al., 2011). There is therefore, racial discrimination against black women, overweight applicants and the aged regarding loan applications. In a related study on the role social networking plays in funding success on P2P platforms, Lin *et al.* (2013) came out with the view that it is easier for friends to have their loans funded and at a cheaper rate than other borrowers outside the social network (Lin *et al* 2013). According to them, friends in the social network play an important role in spreading information about their credit quality to other potential borrowers.

Taking it from the angle of the contributions of personal traits on the funding success, Ravina (2012) points out that beauty and race influence the decisions of lenders.

According to Ravina (2012), loan applications of beautiful women have a higher success rate in their loan application even though they may have poor credit rating, which could make them default in the loan repayments. In contrast, Burtch et al. (2014) present evidence from their study on the Kiva platform to show that lenders prefer to transact businesses with borrowers within their geographical boundaries and with people with whom they share similar cultures. They conclude that the dual roles of geographical distance and cultural differences affect lenders' decisions regarding the support for particular borrowers (Burtch et al., 2014).

On the issue of the effects of narratives on P2P crowdfunding, Allison (2014), looks at how lenders respond to both intrinsic and extrinsic signals embedded within business narratives. They find out that in the micro-lending environment, narratives that addressed the intrinsic motivations of lenders to help others are funded faster (Allison, 2018). By contrast, taking narratives from a different viewpoint, Herzenstein, Sonenshein, and Dholakia (2011) found out that an increase in identity claims result in a greater chance of funding success, even though it has a lesser loan performance. The assertion on narratives is confirmed by Gao and Lin (2015) who state that loan default rates are higher for loans whose narratives are less readable, less objective and less optimistic (Hiller, 2017).

Regarding herding behaviour, a study by Andrews (2010) shows that strategic herding behaviour is prevalent among lenders such that potential funders follow the behaviour of their peers on social media and crowdfunding platforms. According to them, herding is positively linked with loan performance and this is reflected in repayments of loans by borrowers. The results of strategic herding are confirmed by Zhang and Liu (2012) who state that lenders use the lending decisions of their peers to measure the credit worthiness of potential borrowers. In addition, unfavourable loan characteristics such as low credit worthiness increase herding (Andrews, 2010). Empirical results from scholars on P2P are captured in Table 3.

Table 3
Results for P2P Crowdfunding

	Results for 121 Crowdianding
Author	Empirical findings
Pope and Sydnor (2011)	Discrimination: Loan funding success is related to
	the personal characteristics of the project initiator
Zhang and Liu (2012)	Herding behaviour: Herding behaviour exists as funders infer
	creditworthiness of project initiator by peer lending decisions.
Ravina (2012)	Discrimination: Loan funding success is related to beauty and race.
Lin et al. (2013)	Social networks: Probability of getting funded is positively correlated with
	the internal social network size and quality.
Herzenstein et al. (2011)	Linguistic patterns: Increase in identity claims leads to higher probability
	of getting funded but lower performance of the loan.
Burtch et al. (2014)	Proximity and culture bias: Funders prefer geographically proximate and
	culturally similar project initiators.
Andrews (2010)	Herding behaviour: Herding behaviour exists and is positively related to
	prior contributions and subsequent performance of a loan.
Gao and Lin 2015	Linguistic patterns: Less readable, less optimistic, less objective narratives
	are more likely to default.
Allison et al. (2014)	Linguistic patterns: The probability of being funded is higher when
	addressing intrinsic motivations.

Source: Author's compilation

#### IV. CONCLUSION

We evaluated and discussed how P2P crowdfunding model could help in providing start-up capital for businesses. We also considered the projections made by scholars that P2P crowdfunding will eventually over take venture capital as a major source of start-up capital for entrepreneurs (Walthoff-Borm et al., 2018). In addition, we considered the fact that because P2P lending could take place without the involvement of the banks or other financial institutions Patwardhan (2017), it has the capacity to help entrepreneurs who require a minimum amount of money to start their businesses to have access to capital without going to the more traditional sources like the banks (Moritz and Block, 2014a; Hemer et al., 2011). We therefore propose a research outline that will enhance the practical and theoretical concepts of the financing gaps facing start-ups (Miller et al., 2018). Largely, based on evidence emerging from the literature, we propose that start-ups should rather adopt P2P as an alternative finance in order to a stable funding stream.

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