Crowdfunding as a Business Innovation to Finance SMEs for Sustainable Development Goals to Anticipating the Impact of Corona Virus Pandemic Disease (Covid-19) in Indonesia

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ABSTRACT
The purpose of this research is to see the potential for crowdfunding in financing SMEs and startup businesses during the Corona Virus Pandemic (Covid19) in Indonesia in the context of Sustainable Development Goals as a Business Innovation. The questionnaire was taken to SME owners who have seen crowdfunding domiciled in Indonesia, to see the effect of crowdfunding perceptions, social norms, regulations, entrepreneurship and technology, and the market on crowdfunding supported capital. Four variables (social norms, regulation, employers, and technology) studied showed a positive and significant effect, except for the perception of crowdfunding variable which showed a weak and insignificant effect. The limitation of this research was carried out in Indonesia during the Covid 19 period with a policy of social distancing and working from home.

Keywords: SDGs, Covid-19, Crowdfunding, SMEs.

1. INTRODUCTION
The Sustainable Development Goals (SDGs), adopted by all Member States of the United Nations in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030, consists of 17 goals [1]. SDGs number 8 is to promote sustainable economic growth, higher productivity, and technological innovation. Encouraging entrepreneurship and developing employment to achieve full and productive employment and decent work by 2030. An estimated 172 million people worldwide were unemployed in 2018 - an unemployment rate of 5 percent. Due to an increase in the workforce, the number of unemployed is projected to increase by 1 million annually and reach 174 million by 2020. Around 700 million workers lived in extreme or moderate poverty in 2018, earning less than US $ 3.20 per day per person. In total, 2 billion workers were in informal employment in 2016, an increase of 61 percent of the world's workforce [2].

In Indonesia, the coronavirus was first confirmed on March 2, 2020, when a dance instructor and his mother were infected by a Japanese citizen. On 9 May 2020, the pandemic had spread to 34 provinces. So far Indonesia has recorded 11,587 cases with 864 deaths with a fatality rate of 7%, including one of the highest in the world. The number of deaths due to COVID-19 in Indonesia may be far higher than reported. This case is reportedly the second-highest in Southeast Asia after Singapore.

The impact of COVID-19 on the economy of the country and the world has been enormous, since it was announced by WHO (World Health Organization) on March 11, 2020, as a global pandemic. This triggered the pessimism expressed by UNCTAD (United Nations Conference on Trade and Development that COVID-19 will make the world economy decline by +/- US $ 1 trillion and world economic growth below 2% far below the previous prediction of 2.5% (World Bank, January 2020) In addition to disruption of supply chains to and from China, the lockdown policy of several countries also the decline in oil prices has worsened economic conditions in 2020.
The impact of Covid19 on the growth of several business sectors was negatively affected, including the travel sector (-45%), construction (-28%), advertising (-27%), manufacturing (-16%), insurance (-13%), and several sectors other business. But on the other hand, several business sectors were positively affected, such as the media sector experiencing positive growth (+ 34%), finance (+ 28%), food (+ 22%), healthcare (+ 16%), and pharmacy (+ 4%), as shown in figure 1.

Figure 1. The business sector affected Covid-19.

The financial sector was one of the positive affected COVID-19 even though the banking and insurance sectors experienced a contraction of negative growth. The financial sectors that were positively affected by COVID-19 were Fintech and Crowdfunding. Some popular crowdfunding sites in Indonesia are 1) kolase.com which provides funding for creative industry players, musicians, event organizers, book writers, and creative planners; 2) Akseleran, giving loans to SMEs; 3) kitabisa.com, a site that houses people/institutions to donate or raise funds; 4) ayopeduli.id, funding for social and religious issues; 5) GandengTangan, funding micro businesses for sustainable social interests.

Since COVID-19 is predicted to circulate between the next 4 months to 2 years, therefore optimism must be voiced louder. Some countries treat economic stimulus in the form of direct cash assistance (in the USA of the US $ 500 billion, US $ 1,000 per taxpayer), loan guarantees for the tourism/travel/hotel sector, airlines and cargo, and a 100% guarantee for MSME sector loans with the aim of continuity employment for its employees [3]. This is the right time to conduct self-reflection related to the implementation of good business ethics and improve relations with the social environment to reduce negative impacts while maintaining and fostering positive impacts including corrective policies in the economic and financial fields to create new business behavior after COVID-19 [4].

The European Crowdfunding Network in early April 2020 surveyed crowdfunding platforms in Europe to identify potential impacts related to Covid19. The survey was conducted in 14 European countries for all types of crowdfunding (donations / awards-25%, loans-35%, and equity-40%). It was reported that there was a high negative impact on capital flows from investors, also a high negative impact was reported on the flow of agreements with a reduced number of new projects [5]. Previously the European Commission on February 4, 2020, had issued a “Digital finance outreach 2020” which contained concerns of the European community regarding the impact of Covid19 on the financial sector including crowdfunding in Europe. There has been no scientific research report on the impact of Covid19 on Crowdfunding in developing economies, such as Indonesia.

The alarming complexity of COVID-19 and the threat of an economic crisis that might occur beyond the 1997-1998 financial crisis then raises the question, “Can Crowdfunding carry out its role in funding the positively affected sectors of COVID-19?” to answer this problem the study was carried out during the coronavirus pandemic in Indonesia, by distributing questionnaires online.

2. LITERATURE REVIEW

Most entrepreneurs face the common problem of lack of funds and also difficult to obtain funding by attracting external capital or funding at the beginning of their new product development. Investors and some banks also became prefer to avoid risks to protect their investment from the risk of financing new businesses [6]. Therefore, it is, not easy for entrepreneurs to get financial support at the current time. Because of this, crowdfunding comes as an alternative/new way to obtain funding in many developing countries, including Indonesia, therefore it is there are still many difficulties to get a positive response from the community since most of them afraid of taking risks and uncertainty when trying to crowdfunding [7].

Crowdfunding implementation is very important to improve financing capabilities for small or new ventures in developing countries [8]. As the growth of financial capabilities is a significant change and unstable in the country's economy, the number of an entrepreneur is the factor affecting the growth. Even in South East Asia, crowdfunding is still in the growing stage, and factors that influence is the technology itself and how fast the implementation will take [9]. Therefore, the researcher stresses the importance of identifying an entrepreneur's involvement in crowdfunding as the main proposed of this research.

Crowdfunding is the financing of a project or a venture by a group of individuals instead of professional parties (like, for instance, banks, venture capitalists or business angels). In theory, individuals already finance investments indirectly through their savings, since banks act as an intermediary between those who have and those
who need money. In contrast, crowdfunding occurs without any intermediary: entrepreneurs "tap the crowd" by raising the money directly from individuals [10]. The typical model of communication is through the Internet [11]. A relatively new form of informal venture financing called “crowdfunding” allows entrepreneurs to directly appeal to the general public for financial help in getting their innovative ideas off the ground. Besides that, related to crowdsourcing, crowdfunding involves an open call (through the Internet) for the provision of financial resources either in the form of donation or in exchange for some form of reward to support initiatives for specific purposes [12]. For nowadays, crowdfunding is one of an important platform to gather all investor and entrepreneurs in one place to reach the same goals based on an internet platform and makes easier to everyone to join to help them all [13].

Crowdfunding development in Indonesia is greatly rapid. In the realm of donation-based crowdfunding, we have some platforms like Wujudkan, KitaBisa, or AyoPeduli (Wang et al, 2019). In March 2015 also has emerged loan-based crowdfunding familiar with crowdlending. The name of the Crowdlending platform is GandengTangan. For five months of running, GandengTangan already has three projects funded [14]. The emergence of a crowdfunding platform and crowdlending in Indonesia is a sign that everyone now has easy access to funding. Some crowdfunding platforms and crowdlending in two countries are not achieved success yet. The key to success is the collaboration between the platform and real public participation [15].

Stronger entrepreneurial condition is identified by the new startup's creation and the ability of existing entrepreneurs to scale up and strengthen their businesses [16]. To be able to create a stronger entrepreneurial condition, the Indonesian GEM study shows that education level affects the nascent and new entrepreneurship rate with opportunity-motive, with a significant difference of being an opportunity motive of those who have graduated from high school and tertiary education degree. Thus, improving educational quality in entrepreneurship, especially for high school and university students or graduates is important [15].

According to the GEM [18] Indonesia’s TEA rate is fairly low within the efficiency-driven economies. It is the third lowest and shares this spot with Romania. However, in comparison with previous years, the TEA rate has increased by 0.56% to 4.96% compared to the previous year (4.4%). National Expert Survey (NES), indicates that Indonesia provides much assistance in terms of infrastructure and funding to encourage more young entrepreneurs especially for small and medium enterprises (SMEs). Now, SMEs are becoming a common form of employment and they tend to be engines of job creation, seedbeds for innovation, and entrepreneurship [19].

![Figure 2. Theoretical framework.](image)

As described in the framework, it shows how all the variables are interrelated and have their characteristics as an effective way for entrepreneurs to seek funding. Crowdfunding is a new platform that enables entrepreneurs to earn money online and directly and can be implemented as an alternative way to get funding, while other variables such as perceptions of crowdfunding, social norms, regulation, employers and technology are the variables that support crowdfunding can be implemented as a way funding alternatives based on variable codes in each ASEAN country, as shown in figure 2.

**Hypo-Theses**

This study uses a theoretical framework and hypotheses as is drawn in Figure 2.

About the research background in the previous discussion, the hypotheses are formulated as the following:

- **H1:** Crowdfunding perception has a positive and significant relationship toward the Successful of implementation crowdfunding as an alternative way. This hypothesis base on Wehnert et al [20]. In this variable we know the respondents' answers about Crowdfunding is about selling products and services through social media and networks. Crowdfunding exists based on funds only from a charity, there is no major difference between crowdfunding and another funding sourcing. Crowdfunding occupy intermediate positions between business and non-profit organization

- **H2:** Social Norms have a positive and significant relationship with the Implementation of crowdfunding as an alternative way. This hypothesis base on Anglin et al [21]. In this factor we know the respondents' answers about As a career path, people view crowdfunding in your country in a favorable way, building a trusting relationship between individuals takes a great deal of time and experience, Incubators/accelerators in my country are actively teaching crowdfunding, people are very comfortable using online rating systems (the like button, feedback, star ratings, and so on) on websites.
H3: Regulatory has a positive and significant relationship toward the Implementation of crowdfunding as an alternative way. This hypothesis base on Walthoff-Born et al [22]. In this part we know the respondents’ answers about The level of regulation/process complexity involved in starting a business today is very easy, High engagement of the population towards social media including LinkedIn, Facebook, Twitter, other local social networks, Crowdfunding in my country is fostered by the NGO’s, Government is focused primarily on investor protection, Government is focused primarily on access to capital for businesses.

H4: Entrepreneurship and Technology have a positive and significant relationship toward the Implementation of crowdfunding as an alternative way. This hypothesis base on Chen et al [23]. In this section we know the respondents’ answers about The level of Internet and/or mobile smartphone penetration in your country is good enough, High engagement of the population towards social media including LinkedIn, Facebook, Twitter, other local social networks, The banking system uses and supports electronic funds transfers, or are other Internet or mobile money transaction enabled services are available, Business skills (accounting, marketing, and so on) are already learned.

H5: Capital Market has a positive and significant relationship toward the Implementation of crowdfunding as an alternative way. This hypothesis base on Bagheri et al [24]. In this variable we know the respondents’ answers about Financing for a start-up is provided by governments/banks, Financing for a start-up is provided by friends and family, Banks are active in lending to small businesses and start-ups, Angel investors are actively making investments in early-stage businesses.

3. METHOD

This paper is a policy study that aims to explore information related to the role of crowdfunding in funding SMEs in Indonesia. This study uses a quantitative approach. The questionnaire was designed based on previous research. The questionnaire was distributed to the owner or operator of SMEs who had known about the existence of crowdfunding which is domiciled in Indonesia as many as 200 respondents. The questionnaire answers returned were 110 SMEs operating in Indonesia. The response rate on average is 55%. Questionnaires are distributed through internet-based (google form). Data analysis uses multiple linear regression. Hypothesis testing using SPSS v 26.0. The findings of this study provide recommendations for policymakers in designing or redesigning crowdfunding in times of crisis (COVID-19) or when anticipating special conditions (natural disasters, financial crises, recessions, or other special conditions). The body text starts with a standard first-level heading like INTRODUCTION or any other heading This template, modified in MS Word 2007 and saved as a “Word 97-2003 Document” for the PC, provides authors with most of the formatting specifications needed for preparing electronic versions of their papers. All standard paper components have been specified for three reasons: (1) ease of use when formatting individual papers, (2) automatic compliance to electronic requirements that facilitate the concurrent or later production of electronic products, and (3) conformity of style throughout a conference proceedings.

4. FINDING & DISCUSSION

Descriptive statistics are used to describe the basic features of the research participants. Data analysis shows the basic demographic of data collected from 110 respondents in Indonesia, also the results from questionnaires regarding the perceptions, social norms, regulatory, entrepreneur and technology, and also capital market to influence the crowdfunding as an alternative way to solving entrepreneur financing problem in ASEAN country. In the questionnaire, the demographic of respondents are covered gender, age group, educational level, occupation, nationality, and entrepreneurship engagement.

Demographic respondents as shown in table1. stated that respondents are mostly men (63.6%) and young between 21-30 years old. The education level of most respondents is Baccalaureate (72.7%), while the occupation level of the most respondent is a student (49.1%). The nationality of most respondents in Indonesia (63.6%) and Malaysia (21.8%). There are respondents with Thai (8.2%) and Filipino (6.4%) nationalities because they are studying in Indonesia and are also conducting business activities. Most respondents were initial business people (<5 years) of 51.8%.
In table 2 shows that all of the hypothesis is accepted. For SME entrepreneurs who live in Indonesia, the success of crowdfunding implementation is determined by the social norms, regulatory, entrepreneurship & technology, and capital markets. But it is not influenced by the perception of crowdfunding.

**Perception Of Crowdfunding**

Public perception of crowdfunding is: a) Crowdfunding is about selling products and services through social media and networks, b) Crowdfunding is only based on funds from charities, c) There is no big difference between crowdfunding and other funding sources, d) Crowdfunding occupies intermediary positions between businesses and non-profit organizations.

The findings of this study are less favorable for crowdfunding success, besides its weak influence is also not significant. The conduciveness of perception of crowdfunding can be balanced with the influence of other variables, for example by increasing the influence of social norms, regulations, and technology. Such as medical research by Aleksima et al [25] which found evidence that the lack of success of crowdfunding campaigns can be closed by establishing and maintaining professional contact through social media such as tweeters and the use of other applications based on internet technology.

This study found evidence that weak and insignificant perceptions of crowdfunding, as in Indonesia, show that crowdfunding cannot be accepted as one of the business media. The community considers that crowdfunding is only a fundraising medium for social rather than business purposes. The trust factor, especially from potential lenders or potential investors, is an important key to the success of crowdfunding.

This finding is in line with Strohmaier et al [26] which states that distrust is the main deterrent for someone who becomes a funder. The findings of this study are also in line with Wehnert et al [20] that a potential customer is interested in campaigning for funding on a crowdfunding platform because he believes that the platform can meet his needs, and a potential lender or investor is motivated to funding a project or business is because it believes that the money will be useful, used as campaigned and believes that the money will return.

**Social Norms**

The findings of this study found evidence that there are social norms that view crowdfunding: a) as an unfavorable career path, b) require a lot of time and experience in building trusting relationships between individuals, c) Business incubators have not supported crowdfunding, d) the community has not to feel comfortable using an online ranking system (like button,
feedback, star rating, etc.) on a website or the internet. This finding confirms that the influence of social norms on the success of crowdfunding in Indonesia is weak (0.348) although significant.

Increasing the magnitude of the influence of social norms can be achieved by increasing the content of business campaigns that involve the participation of the general public such as testimonials to the benefits of crowdfunding for businesses that are developing in the community. Government or financial authority is expected to increase efforts to promote financial inclusion online. Besides, the use of RSC (Risk Scoring Customer) application assistance to recognize characters and various information about potential customers quickly with the help of big-data servers owned by RSC providers who collaborate with crowdfunding platforms will facilitate the formation of a fair social norm when the crowdfunding platform decides to pass or not a project or business campaign.

This finding is in line with research by Robiady et al [27] who found storytelling techniques to increase customer involvement and the achievement of successful donations. This research is also in line with Sahaym et al [28] which states that the success of a crowdfunding campaign is mediated by social media contributions.

**Regulatory**

There are 5 components in the regulatory indicators in this study, namely: 1) ease of doing business, 2) government involvement in business, 3) NGO's involvement in business, and 4) government siding with investors or the public, 5) government involvement in developing business capital. In terms of ease of doing business, in 2019 Indonesia was ranked 73 which has not changed compared to 2018. World Bank Group [29]. This statistical ranking of ease of doing business is in line with respondents’ answers where respondents from Malaysia are generally satisfied and very satisfied with the questionnaire questions. In contrast respondents from Indonesia generally felt dissatisfied and or very dissatisfied about the ease of doing business. This finding indicates that the easier it is for people to do business, the more new business models to develop, including crowdfunding. So the probability of crowdfunding to succeed in Malaysia is higher than Indonesia because of the ease of doing business. This finding is in line with Ruiz et al [30] as well as Ashraf et al [31].

**Entrepreneurship and Technology**

This Covid-19 momentum can be used as a strong fulcrum to change the paradigm of traditional entrepreneurship into technopreneurship. At a time when many regions are implementing WFH (work from home) to avoid the spread of the coronavirus, which is transmitted through human contact, the use of information and communication technology in business to create revenue and streamline costs is a must. The findings of this study are in line with Kusharsanto and Pradita [32] although the transformation of entrepreneurship into technopreneurship in Malaysia has taken place several years ago in Indonesia this change began to be felt afterward.

The finding that Technopreneurship is feasible to be implemented in SMEs that have relatively cheaper advantages in the cost of resource use and competitive pressure in terms of poor networks to catch up with large-scale capital-intensive businesses that are accustomed to using technology to support their business in line with Sin et al [33]. Likewise, the findings of this research on the use of social media via the internet, email, Facebook, Instagram, tweeters will be very effective in creating sales across traditional areas limited by distance and geography in line with research by Purnomo et al [34] which states that the agricultural sector also requires technopreneurship, this is following SMEs in Indonesia where the agricultural sector is still dominant in the economy, especially in rural areas.

Another finding of this research is that the success of crowdfunding in funding SMEs in Indonesia depends on the readiness of the community and the government in the provision of infrastructure and technology absorption. The influence of technology on the success of crowdfunding in Indonesia is lower than in Malaysia, one of which is caused by the perception of Indonesian people about crowdfunding that is less conducive. This finding is in line with the research results of Wahjono et al [35] as well as Kim et al [36] which states that the use of alternative financial models such as crowdfunding can unlock funding for business startups is an opportunity for economic growth that is suitable for implementation under special conditions such as when the world is being hit by the Covid-19 pandemic.

**Capital Market**

Respondents’ answers prove that funding sources or crowdfunding capital are: a) conducted by the non-government private sector not a bank not a capital market securities company, b) this is a substitute for sources of funds from friends and family, c) this is because the banking / and or the capital market does not actively provide loans or funding to SMEs and startup businesses, d) this is because Angel investors are not yet well connected with SMEs and startup businesses. This finding confirms that the influence of capital markets on crowdfunding success is significant and in medium level Indonesia (0.629). This means that the ability and strength of the capital market in a broad sense influences the success of crowdfunding. This finding is in line with Wang et al [37] which states that the rapid growth of crowdfunding equity platforms is caused by the presence of Angel Investors who usually move and enliven the capital market. The Angel investors succeeded in democratizing the financial markets to become more
egalitarian, unlike in banking which is friendly to big businessmen and complicated in funding SMEs and business startups, even if it is gradual or evolutionary.

Crowdfunding Design in the Covid-19 period

Research on the success of crowdfunding during the coronavirus pandemic (Covid-19) in Indonesia found evidence that crowdfunding success is determined by 4 factors namely the Social norms, Regulatory, Entrepreneurship & Technology, and Capital Market. Perception of crowdfunding variable is insignificant.

![Figure 3](image)

Figure 3. Redesign of Crowdfunding Mechanism in the Covid-19 period

The crowdfunding mechanism during and after Covid-19 needs to be redesigned as shown in Figure 3. By complying with the Covid-19 pandemic prevention protocol, namely by avoiding physical contact between potential lenders and the crowdfunding platform and between potential customers and the crowdfunding platform. All transactions in the form of campaigns or money transfers to fund innovative projects and startup businesses that will not be financed by banks are carried out through and only through the internet through the crowdfunding platform mechanism. The role of RSC (risk scoring customer) will greatly help speed up the decision-making process in funding a project or business.

5. CONCLUSION

In connection with several problems faced by crowdfunding in funding SMEs during and after COVID19, steps are needed so that crowdfunding can be implemented successfully, one of which is to redesign the crowdfunding mechanism by involving more customers and lenders/investors. The involvement is in terms of improving perceptions about crowdfunding so that it can be more accepted and friendly as an institution that can provide funding for SMEs and business startups that are more democratic and egalitarian than banking. The government or financial authority (Central Bank and Financial Services Authority) is expected to increase efforts to promote financial inclusion online to support the improvement of social norms about crowdfunding.

From the regulatory side, the government and the business community are expected to be able to improve the ranking of the ease of doing business in the country to attract international business interest to participate in projects or businesses that are campaigned in a country.

Hard efforts are needed to change the paradigm from entrepreneurship to technopreneurship and encourage the readiness of the community in mastering technology to facilitate the mastery of crowdfunding operations. In terms of capital markets, efforts should be encouraged to lure angel investors/lenders to join the crowdfunding platform and share their money involved in projects or businesses that are being carried out by SMEs and business startups. Storytelling techniques such as testimonials, feedbacks, and asterisks ranking can be used

6. RECOMMENDATIONS

The results of this study recommend that the crowdfunding platform is conducted during the COVID 19 period by providing convenience to customers with a lending scheme with a waiver of installment fines and interest payments and if necessary exemption of interest costs during the COVID 19 period, on the other hand, crowdfunding operators also need to ask investors for willingness or lenders not to ask for interest rate.

Also, serious efforts from crowdfunding platform operators together with the Financial Services Authority are needed to improve perceptions and social norms so that the business community can more easily accept crowdfunding as an inclusive funding institution for SMEs and more democratic and egalitarian business startups.

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