


# Success Factors of the Implementation of Crowdfunding for Start-Ups

Kennedy D. Gunawardana, University of Sri Jayewardenepura, Sri Lanka

 <https://orcid.org/0000-0003-3381-9058>

## ABSTRACT

There are number of challenges which are faced in implementing crowdfunding in Sri Lanka. Crowdfunding platforms in Sri Lanka are being used to gather funds, mainly for charities and to find seed money for startups. This study focuses on finding success factors affecting the implementation of the crowdfunding projects which are hosted to gather capital for startups. The study contains a proposed conceptual framework developed by reading recent literature with the facts contributing to the success of startups through crowdfunding and analyzing information gathered from experts in Sri Lanka. Variables namely web presence, investors, crowdfunding team, goal and rewards were analyzed together with the success of funding startups via crowdfunding. Finally, all the variables except web presence indicated significant towards the success of funding startups via crowdfunding.

## KEYWORDS

Creativity, Crowdfunding, High Technologies, Innovative, Start-Up

## INTRODUCTION

Crowdfunding is a new method of funding initiatives of cultural, social or for-profit nature ventures and projects by raising monetary contributions (Mollick,2013). Crowd-funding 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) (Ordanini,2009). These are often advertised and performed through Internet-facilitated platforms by individuals or a group of people in need of financial support (Mokter,2017). Crowdfunding is more focused on collecting financial resources from a large pool of small scale investors rather than a collecting from a small number of large scale investors (Belleflamme,2010; Alessandro, 2015).

There are many successful platforms available in the world, especially in Europe and the USA, which have funded piles of projects in need of financial help. Over 34 Billion US dollars have been raised on crowdfunding platforms in the US in the year of 2015 (David,2015). However, crowdfunding has not yet been considered as a popular method of fundraising in Sri Lanka. Although there are few crowdfunding platforms emerged in the recent past which have a small number of startup projects, fund raising campaigns hosted in them, the success rate of such events is inferior compared to other countries. Help.lk (Dhanushka,2015) and Crowdisland.lk (LBO, 2016) are two crowdfunding platforms currently available in Sri Lanka. Crowdfunding has proven itself to be a successful methodology

DOI: 10.4018/IJSKD.2020100106

in collecting investments. It is popular in the world for many of its qualities over other means of gathering funds. Convenience is one of the most important characteristics it has. Unlike applying for a loan or meeting with potential investors, crowdfunding has an easy process to go through, for both investors and entrepreneurs (Drew,2014). The startup industry is growing rapidly around the world. There is a moving trend for startups in Sri Lanka as well. The available high technologies, literacy, creativity, innovativeness of the youth is making this the ideal time to grow startup industry in Sri Lanka. Although the energetic youth has new ideas to develop their own businesses, it has not been easy for them to find financial help they need to kick start the business. Currently it is very hard for an individual to obtain a bank loan as it requires to prove their income or wealth, which most of young generation find it hard do so. The main research question of this paper is what are the factors which are affecting successful implementation of crowd funding among business startups in Sri Lanka as developing country point of view.

The findings of the empirical approach have important theoretical and practical implications. On the theoretical side, it introduces factors affecting to the successfully implementation of crowd funding in developing countries which having common characteristics of emerging technology adaptation, new experiences of new business, new laws and regulations about IT and fresh knowledge of the community. The findings also have implications for Industries, as this can be considered an alternative for certain business projects, especially in the creative industries sector, where a growing demand is identified, not only as a method of financing, but also as a strategy for strengthening the bond with customers and potential Investors.

## **LITERATURE REVIEW**

As defined by Belleflamme (2014), crowdfunding uses the same concept as “crowdsourcing” in that “crowds” are the main provider of ideas, solutions and feedback. The difference here is that in crowdfunding, the crowd provides financial resources (Wieck,2013). The word “crowdfunding” literally means funding from the crowd, that is, receiving small investments from a crowd of people that cumulate to a large sum. With the rapid development of the internet, funding patterns have also been developed by using internet platforms as a transaction market, instead of traditional financial intermediaries such as banks and institutional investors. Crowdfunding, through crowdfunding internet-based platforms, has grown rapidly in recent years as a Geographic proximity

There has been considerable debate in the literature on the effect of physical distance between investors and borrowers. Applied to the crowdfunding context, the two main views are as follows: The first perspective holds that geographic distance is irrelevant in crowdfunding, whereas the second perspective contends that distance is relevant. Wieck (2013) state that internet-based crowdfunding platforms can be used as a new form of funding to financially support small and start-up businesses. Before online platforms became widespread, financial intermediaries were the traditional source of funding. For example, banks mediated between investors and borrowers by receiving money from investors and using that money to issue loans to borrowers. However, as the internet developed, crowdfunding emerged as a method for funding start-up ventures. The difference from traditional funding methods is that crowdfunding uses online platforms as a transaction market, thereby allowing each individual to find an investor or a borrower online. One of the most remarkable advantages of crowdfunding is that transaction costs can be reduced through the use of web-based platforms (Wieck,2013). Bakos (1991) analyzes the advantages of electronic marketplaces and finds that they help reduce research costs, thus decreasing the relevance of the physical distance between investors and borrowers. That is, physical distance is no longer a problem that investors must consider. In addition, Kim and Hann (2013) find that, unlike the difficulties associated with the traditional channels for accessing capital, web-enabled crowdfunding has the potential to democratize access to capital. They assert that crowdfunding provides a new channel for capital for both individuals and

small businesses. This new channel, online platforms, requires considerably less time to complete transactions and facilitates creating projects or conducting transactions, regardless of geographical distance. In essence, because of the development of the internet, physical distance is not particularly important in crowdfunding. Furthermore, web-based platforms have reduced transaction and research costs, resulting in relatively easier transactions between investors and borrowers, irrespective of the physical distance between them. As any neologism, “crowdfunding” could be considered a faddish concept linked with temporary social trends (such as crowdsourcing or micro-funding in the sole area of financial practices) and contemporary economic contexts (financial crisis, credit crunch, etc.). Nevertheless, a historical view on alternative ways of raising funds shows this practice is far from being substantially new, the only novelty proceeding from technologies (i.e. Internet) and vocabulary (Castrataro,2011). Thus, the term “crowdfunding” would be worth being examined, so as to determine if it only reflects a contemporary make up for old ideas, or, on the contrary, if it is meaningful of a deep change in social structures. But wherever the true meaning lies between these two extremes, the use of “crowd” as a “key actor” should be examined more thoroughly, as well as the process of funding, which covers different fields of practices. Indeed, considering society through the only scope of crowd may seem quite reductive, unless it proves some ideological usefulness.

### **Crowdfunding for Startups**

Researchers in many countries has focused on crowdfunding as it is becoming popular in practice. (Bi,2016). Majority of the studies has focused mainly on three areas. First, there are a number of researches which have been conducted on the crowdfunding business model. Crowdfunding is still a modern and emerging model in business investment (Mollick,2013). Cordova, and Gianfrate (2015), say Crowdfunding is an open call, essentially through the internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes. Additionally, Mollick (2013) states that this open call takes place in online platforms which provide the way for investors and entrepreneurs to connect without standard financial intermediaries.

The many-to-many network theory (Gummeson,2006), service-dominant logic (S-D logic) (Vargo & Lusch,2011) and service logic (Grönroos & Ravald,2011) are theoretical approaches which have described the paradigm shift involved in assigning new tasks to the actors who participate in value creation. Among the premises underpinning these theories, one which stands out is the replacement of the classic concept of value provision with the concept of value co-creation as a benchmark for strategy planning and design. Consumers are seen as active agents in the co-creation process, and are able to participate in activities which were traditionally designed, managed and controlled by organizations, moving them from a central towards a more lateral position, from which they participate actively with all of the other agents. From this perspective, Gebauer (2010) consider that “organizations should take a comprehensive view of value co-creation if they are to exploit its full strategic potential”. Gummeson (2006) points out the collaborative and interconnected nature of value creation, which must be planned through searching for benefits for all of the value network partners in order to achieve the situation which he has termed balanced centrality. Organizations manage social networks with the objective of creating benefits for all members. This new reality has led to a turnaround in the direction of marketing, which until now has been focused on the client, introducing balance in its place.

Crowdfunding systems are complex in the sense described by Gummeson (2006), as many different agents participate in them, and their structure and functioning include much broader functions than mere financing; they are structures that are created to enable value co-creation for all of the various actors through applying the resources of all of the participants in order to create a market-oriented and relationship-based product. Crowd-funding is a recent and very new phenomenon which is undergoing a transformation.

## Type of Crowd Funding

The investor's share of profits, legal complexity and the level of information shared between the fundraiser and the investor differs significantly depending on these four types of crowdfunding. According to the study conducted by Zheng (2014) social network connections of an entrepreneur, obligations to fund other aspiring entrepreneurs and the mutual understanding of making the crowdfunding project a success between the investors and the crowdfunding project team had compelling reactions on the performance for a crowdfunding project in both China and America. Agrawal (2010) explored that the geographical origin of investors in the Sella Band platform did not have a noticeable effect on the successfulness of the crowdfunding project. Agrawal (2010) stated "the average distance between artist-entrepreneurs and investors is about 3000 miles, suggesting a reduced role for spatial proximity." The information passing from the entrepreneur or the charity collector to the crowd has a significant importance on a crowdfunding project (Ahlers 2015). Examples for such information are convincing business ideas or charity needs and achievable project goals and it will be beneficial to keep the awareness of the project up to date, naturally on easily accessible media, such as web platforms. In addition to that, Kappuswamy and Bayus (2013) studied a number of projects hosted on Kickstarter and presented that information of an investor such as their other funding decisions plays a major role in a successful project.

Motivations of crowdfunding platform founders, investors and entrepreneurs to engage in crowdfunding projects (Bi 2016). Via a qualitative exploratory study of creators and funders, Gerber (2011) figured that the creators are motivated to participate in raising funds, network with others in the industry, receive validation for their contribution to the society, simulate successful experiences with others and spread awareness of work with other interested persons through social media platforms. Investors are motivated by the return investments, rewards they receive from a successful crowdfunding project, support creators and their reasons to gather funds, and establish connections with people in social media networks. (Bi, 2016).

The previous literature has identified crowdfunding as an online portal to connect investors and entrepreneurs. Additionally, the nature of investors, the rewards they receive, the mutual understanding between investors and crowdfunding project team on factors such as project goal, duration has an impact on a given crowdfunding project. The essence of the literature can come to an idea that web presence and keeping the audience updated on the crowdfunding project also has a heavy impact on crowdfunding.

## Success of Startups

Success of a startup is determined by a vast number of variables. A growing body of literature has attempted to address the determinant factors of a successful startup. George (2016) mentions that according to the findings of The Global Startup Ecosystem Ranking (GSER) 2015, the capital has significant effect on estimated startup output. Moreover, Amit (1998) figured out that capital availability heats up the competition of investors for the financing of startups. Furthermore, Shane (2003) mentions that a bigger number of aspiring persons get inclined to act entrepreneurial when capital is easily accessible which enables them to reach financial support they need to kick start their ideas.

Crowdfunding has grown enormously since the passage of "The Jumpstart Our Business Startups Act" (the "JOBS Act") in 2012. In 2015, crowdfunding raised nearly \$34bn and that is expected to skyrocket to \$300bn by 2025 (Barnett, 2015). Given that the total size of the US commercial real estate market is \$7 trillion, crowdfunding makes up only \$2.5bn of this market, indicating much room for growth. Furthermore, according to Alternative Investing Crowdfunding Statistics, if crowdfunding continues to increase at its current rate, it will surpass venture capital in a few years. As the demand for crowdfunding continues to grow, crowdfunding is anticipated to reach \$96bn in funding each year by 2025. Benefiting from these high growth rates, real estate crowdfunding (RECF) is rapidly becoming a legitimate financing alternative to the traditional investment channels. In fact, RECF is

now the fastest growing segment of the crowdfunding market, having broken the \$1bn mark in 2014 and the \$2.5bn mark in 2015.

Alicia and Robert (2007) have studied in depth to understand the relationship between startup capital and the success of startups. According to them, it is highly likely that the outcome of a startup could rapidly grow with each higher level of startup capital. They also point out that the link between the success of a startup and the startup capital is very strong. To add to that, Alicia and Robert (2007) presents their statistically analyzed conclusions as Firms with \$100,000 or more in startup capital are 23.0 percentage points less likely to close than are firms with less than \$5,000 in startup capital and are 9.9 percentage points less likely to close than are firms with \$25,000 to \$99,999 in startup capital. These results hold even after controlling for detailed owner and firm characteristics including business human capital and the industry of the firm. Consequently, they conclude that the entrepreneurs who has less access to startup capital will be forced to start small and less successful businesses.

Bosma and Thurik (2003) pointed out that according to Blanch and Oswald (1998), Holtz-and Rosen (1994), a significant number of nascent entrepreneurs abandon the startup process as a result of lack of funding. On the other hand, Bosma. (2003) disagrees with Alicia and Robert (2007) on the fact that a large amount of capital will always result in success. They furthermore point out in their study that a large amount of startup capital provided to an immature and unshaped entrepreneur by investors can be considered as a risk.

In conclusion, according to previous research, access to financial capital can be considered as one of the most compelling factors when it comes to initial phases of startups. The ease of access to capital investment will result a higher number of new startups being born. Furthermore, having access to capital will result the establishing startups to be more successful and steady startups.

### **Effects of Crowdfunding on Successful Startups**

Shane (2003) mentions that there are four main factors that favor the entrepreneurial opportunities. They are wealth, economic stability, taxation and availability of capital. Out of these factors, capital availability is the most easily fluctuating factor. The entrepreneurs in more economically stabilized environments have more chance in succeeding in pursuing their dreams and vice versa for others because of less amount of opportunities they get to reach resources from geographically disconnected investors. Crowdfunding is a good solution for the entrepreneurs to overcome the barrier of reaching out to geographically or personally not connected investors and to get the attention of the crowd.

Top performing crowdfunding platforms with startup projects have three common qualities (Antonenko & Kleinheksel,2014). To list them down, the first quality is that the crowdfunding project team and the entrepreneurs request a justifiable amount for the startup. The second is to attract investors with categorized system of rewards. The last is to connect with investors and keep the public crowd updated via periodic updates and progress reports. To prove that, Antonenko, Lee and Kleinheksel (2014) analyze top ten successfully crowdfunded technology startup projects in 2013 and come to a conclusion that all of them kept their supporters updated of the recent developments.

Mollick (2013) used an analyzed dataset to provide underlying dynamics of success and failure of crowdfunded startups. He mentioned that a vast number of crowdfunding projects that are hosted to gather seed investment for startups, succeed by narrow margins and personal networks of either the crowdfunding project creators or entrepreneurs.

To add to that, Paschen (2016) presents the following factors which affects the success of crowdfunding startups, in addition to just funding. The first factor is to validate the comprehensive business idea and to see if it solves any consumer problem that is already there. The second is to refine the product or service with possible customers, gain their feedback on both positive and negative aspects before starting the crowdfunding project. The third is to accurately present the business idea, how it will perform before the crowdfunding project starts to save money and time both by identifying the amount of expected interest from the crowd. The last factor is to focus on marketing. Web presence and appearance on any other channel that will help get the attention of potential

investors, before and after starting the crowdfunding project is highly valuable. Majority of the high performing crowdfunding startup projects put an effort to publish their status updates and progress reports online to keep their investors and other interested parties informed. Furthermore, carefully selecting startup ideas to be hosted in crowdfunding platforms and a significant focus on marketing on online platforms also results the success of crowdfunded startups.

## **Investors**

Startup founders usually have less operating history and has less recognition among the other businesses and that makes it harder for them to convince investors of their real business value. (Paschen,2016). According to Paschen (2016) such entrepreneurs have difficulty in reaching other investment options such as bank loans, venture capital or angel investments. Problems like these has lead entrepreneurs to use crowdfunding platforms in the recently years as it makes easy for them to make connections with investors.

Investors those who are investing on crowdfunding startups are gradually starting to pick equity based crowdfunding to invest over the other means of crowdfunding in last few years although the reward based crowdfunding platforms are still bigger in volume. (Stanko & Henard,2015). Investors who invest in equity based crowdfunding platforms prefer to invest in a product that is in a later stage than in the development stage. This ensures that the project has already overcome technical and timeline problems that they could face in the developing time.

On the other hand, reward based crowdfunding investors often pick projects that are in the early stages and prefer to be involved in the process giving advices and preference decisions they have gained from their experiences. (Agrawal & Goldfarb,2010). This support and feedback received from the investors are often valued by many entrepreneurs to take key decisions and to avoid common mistakes in order to drive their business to the success.

Paschen, (2016) mentions that investors sometimes trigger herd behavior, in which individual investors mimic actions of others according to an analysis conducted by Phung in 2007. Social pressure and many other reasons can cause herd behavior on investors. Furthermore, Paschen, (2016) stated that, four investors contributing \$1 to a crowdfunding project will trigger three other investors to do the same, having no other specific reason than having seen the others involved in the project. It can be achieved by publishing the information about investors and their decisions in the public for others to see.

Information asymmetry between the founders and investors is a challenge faced in crowdfunding. Paschen 2016) says that releasing information about the startup especially financial information reduces the information asymmetry between startup and investors. Sharing valuable information has been identified as a reason which drives equity based crowdfunding projects a success. Publishing business data early gives an additional chance of reaching out to more reputable investors and conveying them. Steininger and Veit (2017) says some investors use different sources to solve the lack of information problem such as reaching out to the founders or processing data that the founders have published using their own experiences.

Furthermore, the success of a startup project hosted in a crowdfunding platform depends on the number of investors supporting the project. Mollick (2013), concluded that the number of investors has a big impact on the success of a startup. The higher the number of investors involved, it is likely that the crowdfunding project will succeed.

According to literature, crowdfunding is a big opportunity for the entrepreneurs to make connections with the investors to get monetary support as well as project guidance. Some scholars show equity based investors prefer projects in later stages of the development process while others conclude that reward based investors pick projects in the starting stage. Therefore, it is important to know to which platforms and category of crowdfunding a startup falls into before hosting in crowdfunding platforms. And additionally, balancing the information between and among investors and founders will also be beneficial to make the startup a success.

## Rewards

There are many variations of rewards offered in crowdfunding platforms. The rewards received by the crowdfunding investors generally receive them in different ways. The first way is material compensation and it is usually given in the form of monetary rewards which often consists of monetary payments on agreed timelines to refund the investment given to the crowdfunding project by the investors. Material compensation can also be an offering of products or services to the investor. The second way is immaterial compensations. They are often received in the form of social acknowledgment and this is considered as the most famous amongst the two. Paschen (2016). The different types of rewards which are offered to the supporters differs mainly along with the type of crowdfunding. (Kraus,2016)

## Donation Based Crowdfunding

According to Kraus, (2016) and Paschen, (2016) investors connected to donation based crowdfunding model do not expect a tangible return for their contribution. Furthermore, Kraus, (2016) studies 2015 industry report revealed that second biggest global funding volume is generated by donation based crowdfunding. Investors do not receive a monetary reward but instead they are offered valued rewards such as personal recognition, opportunity to meet the entrepreneurs or participate in the process of the project. Furthermore, his study shows that donation based crowdfunding is popular for projects with smaller funding goals.

## Lending Based Crowdfunding

Kraus (2016) says that lending crowdfunding can be one of the three following models. The first is the presales model which offers the finished product for the investors. The second is the traditional lending model which will make an agreement between the founders and the investors to repay loans with predetermined interests. The third is the forgivable loan where the founders will repay the contributions only if they start generating revenue.

## Equity Based Crowdfunding

This raises money from investors in return for an ownership stake in the startup firm. Mollick (2013) mentions that this model offers the investors to be equity stakeholders in return for their contribution with the target of sharing profits in the future. In this model, the investors will be buying the shares of the startup. Previous literature suggests that the method of offering varies depending on the crowdfunding platform and according to the project nature. Furthermore, founders should be aware that investors prefer different types of forms of rewards and that it is important to pick the right crowdfunding platform which suits best for the startup and to reach the correct crowd in order to make the startup a success.

While reward and donation-based crowdfunding has quickly become popular due to the success of Indiegogo in 2008 and Kickstarter in 2009 (Agrawal 2013; Cumming 2016; Mollick,2014), equity crowdfunding has been slow in gaining comparable momentums. This is attributed to regulatory constraints around the world on marketing financial securities to the general public (Ahlers,2015; Hornuf &Schwienbacher,2016). It has been only fairly recently that RECF, which enables the crowd to co-fund real estate projects, has emerged. Equity and RECF are intended to help entrepreneurs fund their real estate projects or company. As a result, crowdfunding has become a viable alternative to traditional sources of entrepreneurial finance and a method to “democratize” finance by providing investment opportunities that, so far, have been restricted to institutional and accredited investors, to innovative start-ups (Agrawal,2015; Kim &Hann,2015; Mollick,2014). Equity and RECF are fundamentally different from other forms of crowdfunding in that the crowd makes investment decisions and not consumption – or donation-related funding. Therefore, current understanding of crowdfunding based on the studies of consumption- or donation-based funding has limited applicability

to investment-based crowdfunding because crowd incentives and expected compensations in RECF are very different.

Some aspects of reward-based crowdfunding that are already being investigated include the effect of gender, geographical distance, social capital of entrepreneurs and the local environment in which investors live (Agrawal,2015; Kim & Hann,2015; Mollick,2014). That these features are also relevant in studies that address investment based crowdfunding. In addition, equity and RECF inevitably depend on some attributes of the individuals who participate in these campaigns

## **Crowdfunding Project Team**

Crowdfunding project team are the ones who are usually implementing the crowdfunding platform and handling the projects in them. Bi (2016) refers who has done a qualitative study of creators and founders on three popular crowdfunding platforms. The findings of that study show that the crowdfunding project teams are usually motivated in conducting crowdfunding projects to raise funds for others and sometimes for themselves, receive validation from the society, network and get connected with others, grow awareness of their work via social media and recreate successful stories of others.

Crowdfunding project team creates a webpage on the platform for reward-based crowdfunding platforms like Kickstarter to introduce their project to the crowd (Bi,2016). The team explains the purpose and production details of the startup via that introduction. The team is supposed to deliver a very much detailed introduction of the crowdfunding project. According to the study conducted by Bi, (2016) word count of the introduction of a crowdfunding project in a reward based platform is considered as a signal of the project quality. A higher number of word count will naturally attract more readers to invest in the project. Additionally, Bi, (2016) mention that adding a good video about the startup will also enhance the number of interested crowd to invest in the project.

Furthermore, Steininger and Veit (2017). mention that understanding the decision-making process of the investors is beneficial from a point of crowdfunding project team. As an example, when the functionality and interfaces of the crowdfunding platform influences on investor decisions, the crowdfunding project team can re-evaluate the design of the platform to help investors make their job easy.

It is clearly visible that there is a big role played by the crowdfunding project team in a crowdfunding platform. They are responsible for attracting crowd and potential investors by presenting accurate as well as attractive details about the startup. They also should think about the user-friendliness of the platform interfaces and make it more suitable to get more favorable investor decisions via the webpage. Therefore, it can be concluded that there is a significant contribution from the crowdfunding project team to make the crowdfunding project a success and eventually drive the startup to the success.

## **Goal**

There are two goals associated in the context of crowdfunding. They are the goal of the crowdfunding project and the goal of funders. (Schwienbacher & Larralde,2010). In this study we mainly focus on the crowdfunding goal. Crowdfunding goal is the goal set by the founders and the crowdfunding team and that is the amount they have decided to raise from the crowdfunding project. This goal is set to seek the amount needed for the startup either to kickstart the project or upgrade or further develop products or services that they have already started. As for the founding of Mollick (2013) and Schwienbacher and Larralde (2010) crowdfunding projects with lower goals have a higher probability of achieving the success although the goal should be sufficient to cover the costs of the startup.

Dinh and Tang, (2018) say in Vietnam, five most well-known crowdfunding platforms are following the “all or nothing” or threshold model. This model only collects money from the funders if the target goal is collected. According to that model a crowdfunding project is successful only if the target goal is reached by collecting the target amount or more. Antonenko and Kleinheksel (2014)



state that the entrepreneur is usually expected to reach the crowdfunding campaign goal within a given time frame and if they are unable to reach the target goal by then, the funders will not be charged and the whole crowdfunding project will be declared a failure eventually making the startup a failure.

According to many scholars, setting a realistic, achievable yet sufficient goal for the crowdfunding project has a significant impact on the success of the crowdfunding campaign. Therefore, setting a reachable, realistic and well-deserved goal to a crowdfunding project is very important as failing to achieve the full goal will make the whole crowdfunding project a failure and no money will be collected from the investors.

## **Web Presence**

A crowdfunding project's webpage lets the founders to publish more details about themselves, the startup and post a video pitch of the startup. The founders are also allowed to post related and attractive pictures, details about rewards offered to the investors and any additional detail that would attract the potential investors. Additionally, the founders can include photos of themselves to add a personal touch to the project's webpage, which is proven to influence the investors to help them recognize the founders or the organization. Furthermore, a link to the founder's or the project's Facebook or other social network site's link can be included on the webpage to give the potential investors more access to get to know the details better. Interested parties such as potential investors, supporters and friends can gain more information about the startup and the founder and create early awareness by liking and sharing social network pages (Kraus,2016).

Dinh and Tang (2018) study the contents which should be in a project webpage. Project information is identified as a key part of the webpage which has an impact on investor's decisions. It includes information about how the founders are going to use the collected capital for the startup and detailed information of the startup, product or service they are going to develop. Including risk information is one of the crucial information backers consider before making an investment. Showing the risks could get investors to help mitigate such risks. Adding pictures and videos represents the founder's idea than words usually do. Lee and Kleinheksel (2014) mention that the video, supporting text and images should illustrate the concept into the viewer's mind. Another important content in the web page is the updates. According to Dinh and Tang, (2018) founders tend to stop updating the investors on the website after a while. But many scholars including Mollick (2013) has proved that including project updates to improve the web presence of the startup can have a direct impact on the success of a crowdfunding project. Alessandro (2015) mention that a higher number of updates does not prove the quality of the startup, thus it will not be a reason for the investors to invest more. Comments section represents the involvement of the investors and it acts as a mediator to communicate with other interested investors and to entrepreneurs get the investors involved in the development of the startup. Additionally, founder details such as email, phone number, founder's Facebook page and backer details, project goal, project duration, funded details are valued information to attract more investors. (Alessandro,2015; Antonenko & Kleinheksel, 2014; Dinh and Tang,2018)

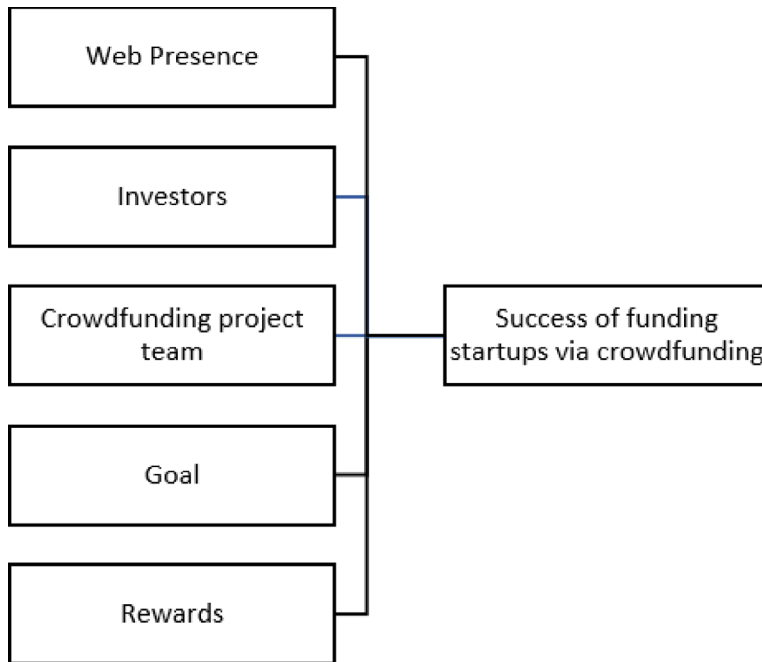
All these components, containing texts, pictures as well as well-prepared videos add more value to the project to attract more investors and to give them sufficient information which will convince them to invest in the project.

## **RESEARCH FRAMEWORK AND HYPOTASES**

### **Conceptual Framework**

This study will explore independent variables namely, investors, rewards, crowdfunding project team, goal, rewards together with the dependent variable success of funding startups via crowdfunding as shown in Figure 1.

Figure 1. Conceptual framework



## METHODOLOGY

Given the novelty of the phenomenon under investigation, and the deductive nature of the research questions, this study is employed a quantitative, sample-based approach research.

### Sample

The sample of the population will be 20 Information Technology related companies in Sri Lanka. This will include many types of professionals who has enough computer literacy and trust to consider investing in an online platform. The sample will contain individuals from those companies with an annual turnover more than \$ 12000. Employees those who are receiving a monthly salary more than \$1000 of companies which having annual turnover more than \$12000.

### Data Collection

Software Industry was chosen for this study as it consists of employees who has high computer literacy and are open to the concept of online donation or investment. The online questionnaire which consisted of 34 questions was sent out to the target audient through instant message platforms, personal messages and was also passed through contacts to their colleagues working in different companies in the industry. Roughly the questionnaire was sent out to 500 people in total and 427 were collected. Therefore, the return rate of the questionnaire is 85.4%.

### Participants

The objective of the research is to identify the challenges and barriers of effectively establishing crowdfunding in Sri Lanka. To achieve that objective, this study examined the factors encouraging the potential investors of crowdfunding platforms. Employees in software industry in Sri Lanka was chosen in this study for many reasons. The main reason behind choosing this population was their

computer literacy. Their knowledge and understanding towards online platforms is considerably higher than others. This sample involved people who has been working for a long time in the industry as well as newly employed people. An online survey was used to collect data and the survey was sent out to selected people personally as well as through contacts in organizations.

The sample there is slightly more male respondents than females. The sample consists of 55% of Males and 45% are females. Age of the respondents 55% from 20-29 age group. It is followed by 41% of responders who fall into age between 30 – 39 years range. There is 2% each from between 40 – 49 years’ age group and above 50 years’ age group. Majority of the respondents are Degree holders. They are 62% from the total respondents and it is followed by 36% of respondents who are post graduates. Only 2% are under graduates. The survey was delivered to employees of software industry and the minimum qualification for the job is to hold a degree in a related field. The recorded 2% are interns who are working in the industry as a requirement to complete their degree.

### Correlation Analysis

Table 1 holds the correlation values between independent variables and the dependent variable. Therefore, all the independent variables namely, web presence, investors, crowdfunding project team, rewards and goal were identified to have a relationship with the dependent variable success of funding startups via crowdfunding as all the variables displayed a correlation with a significance value less than 0.01.

**Table 1. Pearson Correlation between the dependent and independent variables**

	Success of Crowd Funding Startups via Crowdfunding
Web presence	0.52**
Investors	0.62**
Crowdfunding Project Team	0.62**
Goal	0.60**
Rewards	0.66**

\*\* Correlation is significant at the 0.01 level (2-tailed)

### Data Analysis and Findings

Multiple linear regression model includes the dependent variable success of funding startups via crowdfunding and predictors web presence, investors, crowdfunding project team, goal, reward. The Table 2 shows the model summary and it measures goodness of fit. This table includes Adjusted R square value of 0.57 and a R square value of 0.58, meaning 58% variance in success in funding startups via crowdfunding is explained by the predictors.

Table 3 indicates that the F-test is significant and therefore, it can be assumed that according to the regression model, the variables web presence, investors, crowdfunding project team, goal and rewards explain a significant amount of the variance in team effectiveness.

**Table 2. Model summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.76	0.58*	0.57	0.35

\*Predictors: (Constant), web presence, investors, crowdfunding project team, goal, reward.

Table 3.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	65.00	5	13.00	108.53	0.000*
Residual	47.68	398	0.12		
Total	112.68	403			

\*Dependent Variable: Success of funding startups via crowdfunding

All of the significant values are less than 5% (0.05) except for web presence variable. Which implies that according to those values Investors, crowdfunding project team, goal and rewards predictors are significant while web presence is the only variable which was not significant.

According to the Table 4 which holds coefficients, it is estimated that success of funding startups via crowdfunding increases by 13% with one-unit change in investors if there is no change in the rest of the variables. Same way the success of funding startups via crowdfunding increases by 25% with one-unit change in crowdfunding project team, 22% increase with one-unit change in goal and with the highest percentile success of funding startups via crowdfunding increases 37% with one-unit change in rewards variable. A non-significant percentile of only 8% happens with one-unit change in web presence variable.

Table 4. Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-32	0.21	0.00	1.51	0.131
Web presence	0.08	0.05	0.07	1.58	0.114
Investors	0.13	0.06	0.11	2.13	0.033
Crowdfunding project team	0.25	0.06	0.21	4.45	0.000
Goal	0.22	0.05	0.19	4.16	0.000
Rewards	0.37	0.05	0.34	7.88	0.000

### Hypothesis

A positive impact on success of funding startups via crowdfunding was predicted from the hypothesis by the presence of other variables namely, web presence, investors, crowdfunding project team, goal and reward.

It is clear that the data supported the Hypothesis 2, Hypothesis 3, Hypothesis 4 and Hypothesis 5 although the Hypothesis 1 was not supported by the data. In detail, the hypothesis concerning the web presence was not supported while the hypothesis concerning investors, crowdfunding project team, goal and reward were supported.

### Web Presence

Web presence did not show a positive relationship with the success of funding startups via crowdfunding and according to the regression model the web presence did not show significant

towards success of funding startups via crowdfunding as it displayed a 0.114 significant level and its more than 0.05. Therefore, the null hypothesis cannot be rejected.

**Ho1:** There is no relationship between web presence and success of funding startups via crowdfunding.

### **Investors**

Investors showed a relationship with success of funding startups via crowdfunding and the regression model including the 5 independent variables and the dependent variable, success of funding startups via crowdfunding showed a significance value of 0.033 value for investors. Therefore, it can be concluded that investors impact success of funding startups via crowdfunding, as the null hypothesis can be rejected at 0.05 significance level.

**Ha2:** There is a relationship between investors and success of startups via crowdfunding.

### **Crowdfunding Project Team**

Crowdfunding project team showed a relationship with success of funding startups via crowdfunding and the regression model showed a significance value 99% confident level for crowdfunding project team. Therefore, it can be concluded that crowdfunding project team has an impact on success of funding startups via crowdfunding, as the null hypothesis can be rejected at 0.01 significance level.

**Ha3:** There is a relationship between crowdfunding project team and success of startups via crowdfunding.

### **Goal**

Goal showed a relationship with success of funding startups via crowdfunding and the regression model including success of funding startups via crowdfunding with a significance value for goal. The null hypothesis can be rejected at 0.01 significance level and the goal significantly impact the success of funding startups via crowdfunding.

**Ha4:** There is a relationship between goal and success of startups via crowdfunding.

### **Rewards**

Rewards showed a relationship with success of funding startups via crowdfunding with a significance value for crowdfunding project team. As a result, it can be stated that rewards have an impact on success of funding startups via crowdfunding, as the null hypothesis can be rejected at 0.01 significance level.

**Ha5:** There is a relationship between rewards and success of startups via crowdfunding.

## **CONCLUSION**

The key objectives of this study are to analyze the relationship between crowdfunding factors and success of funding startup businesses in Sri Lanka and to find the relationship with success of crowd funding and factors which are influence to the success. The 5 independent variables namely web presence, investors, crowdfunding team, goal and rewards were analyzed together with the success of funding startups via crowdfunding. The independent variables impact 58% of the variance in success of funding startups via crowdfunding. Furthermore, all the variables except web presence indicated significant towards the success of funding startups via crowdfunding.

The findings of this study can be valuable to those who are interested in starting their own startups and are surfing through the ways of gathering seed money, also those who are looking for investment methods and are willing to help the emerging entrepreneurs in the country on the concepts of crowdfunding and the challenges in implementing it to fund startup businesses successfully.

## REFERENCES

- Agrawal, A., Catalini, C., & Goldfarb, A. (2013). Some simple economics of crowdfunding. *NBER Working Paper No. w19133*. Washington, DC.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2015). Crowdfunding: Geography, social networks, and the timing of investment decisions. *Journal of Economics & Management Strategy*, 24(2), 253–274. doi:10.1111/jems.12093
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. [ETP]. *Entrepreneurship Theory and Practice*, 39(4), 2015. doi:10.1111/etap.12157
- Ahlers, G. K. C., Cumming, D. J., Guenther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, Vol. 39, No. 4, 955-980. Angels: Edward Elgar. 381-397.
- Alicia, M., Robb, & Robert, W, Fairlie. (2009). Determinants of Business Success: An Examination of Asian-Owned Businesses in the United States.
- Antonenko, P.D., Lee, B.R., & Kleinheksel, A.J. (2014). Trends in the crowdfunding of educational technology startups. *Techrends TECH TRENDS*, 58-36.
- Barnett, C. (2015). Trends show crowdfunding to surpass VC in 2016. *Forbes*, 9(June), available at [www.forbes.com/sites/chancebarnett/2015/06/09/trends-showcrowdfunding-tosurpass-vc-in-2016/#5c225b074547](http://www.forbes.com/sites/chancebarnett/2015/06/09/trends-showcrowdfunding-tosurpass-vc-in-2016/#5c225b074547)
- Barnett, C. (2015). Trends show crowdfunding to surpass VC in 2016. *Forbes*, 9(June), available at [www.forbes.com/sites/chancebarnett/2015/06/09/trends-show-crowdfunding-tosurpass-vc-in-2016/#5c225b074547](http://www.forbes.com/sites/chancebarnett/2015/06/09/trends-show-crowdfunding-tosurpass-vc-in-2016/#5c225b074547)
- Belleflamme P., Lambert, T., & Schwienbacher, A. (2010). Crowdfunding: An Industrial Organization Perspective.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Tapping the right crowd. *Journal of Business Venturing*, 29(5), 585–609. doi:10.1016/j.jbusvent.2013.07.003
- Bi, S., Liu, Z., & Usman, K. (2017). The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71, 10–18. doi:10.1016/j.jbusres.2016.10.001
- Blanchflower, D. G., & Oswald, A. J. (1998). What makes an entrepreneur? *Journal of Labor Economics*, 162660.
- Bosma, N., & Thurik, R. (2003). Success and risk factors in the pre-startup phase. *Small Business Economics*, Vol. 26, No. 4 (May, 2006), 319-335.
- Buyana, K., Lwasa, S., & Kasaija, P. (2019). Gender Ideologies and Climate Risk: How is the Connection Linked to Sustainability in an African City? *International Journal of Social Ecology and Sustainable Development*, 10(1), 16–30. doi:10.4018/IJSESD.2019010102
- Castrataro, D. (2011). A social history of crowdfunding. *Social Media Week*, 12 December, available at: [http://socialmediaweek.org/blog/2011/12/a-social-history-of-crowdfunding/#.UsRci-J\\_v08](http://socialmediaweek.org/blog/2011/12/a-social-history-of-crowdfunding/#.UsRci-J_v08)
- Cordova, A., Dolci, J., & Gianfrate, G. (2015). The Determinants of Crowdfunding Success: Evidence from Technology Projects. *Procedia: Social and Behavioral Sciences*, 181, 115–124. doi:10.1016/j.sbspro.2015.04.872
- Cordova, A., Dolci, J., & Gianfrate, G. (2015). The determinants of crowdfunding success: evidence from technology projects. *3rd International Conference on Leadership, Technology and Innovation Management*. 115-124. *Procedia-Social and Behavioral Sciences*. doi:10.1016/j.sbspro.2015.04.872
- David. (2015). Massolution Crowdfunding Industry 2015 Report. Available at: <http://crowdexpert.com/crowdfunding-industry-statistics/>
- Dhanushka. (2015). Sri Lanka's first crowdfunding platform launched. Available at: <http://www.dailymirror.lk/71467/sri-lanka-s-first-crowdfunding-platform-launched>(Accessed: 3 August 2017)
- Drew, H. (2014). 5 Reasons Why Crowdfunding Is the Next Big Investing Trend. Available at: <https://www.forbes.com/sites/drewhendricks/2014/08/27/5-reasons-why-crowdfunding-is-the-next-big-investingtrend/#1a93af616c0a>
- Galli, B. J. (2018). Importance and Impact of Culture and People in Continuous Improvement. *International Journal of Sociotechnology and Knowledge Development*, 10(4), 13–44. doi:10.4018/IJSKD.2018100102

Gebauer, H., Johnson, M., & Enquist, B. (2010). Value co-creation as a determinant of success in public transport services. *Managing Service Quality*, 20(6), 511–530. doi:10.1108/09604521011092866

George, L. M. (2016). The Dynamics of European Startup Hubs – A Comparative Perspective of Berlin, London and Paris.

Grönroos, C., & Ravald, A. (2011). Service as business logic: Implications for value creation and marketing. *Journal of Service Management*, 22(1), 5–22. doi:10.1108/09564231111106893

Gummesson, E. (2006a). Many to many marketing as grand theory: a Nordic school contribution. In F. Lush & S. L. Vargo (Eds.), *The Service – Dominant Logic of Marketing: Dialog, Debate and Directions* (pp. 339–353). New York, NY: ME Sharpe.

Gummesson, E. (2006b). Qualitative research in management. *Management Decision*, 44(2), 167–179. doi:10.1108/00251740610650175

Holt, D. B. (1995). How consumers consume: A typology of consumption. *The Journal of Consumer Research*, 22(1), 1–16. doi:10.1086/209431

Hornuf, L., & Schwienbacher, A. (2016). Crowdfunding–angel investing for the masses? In C. Mason & H. Landström (Eds.), *Handbook of Research on Venture Capital* (Vol. 3). Business.

Kim, K., & Hann, I. (2015). Does crowdfunding democratize access to capital? A geographical analysis. *SSRN Electronic Journal*, doi: .10.2139/ssrn.2334590

Kraus, S., Richter, C., Brem, A., Cheng, C.F., & Chang, M.L. (2016). Strategies for reward-based crowdfunding campaigns. *Journal of Innovation & Knowledge*, 13-23. 10.1016/j.jik.2016.01.010

Kuppuswamy, V., & Bayus, B. L. (2015). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter. *Journal of Innovation & Knowledge*, 22(1), 1–16.

Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. In D.J. Cumming ed. *The Oxford Handbook of Entrepreneurial Finance*, Oxford: Oxford University Press.

LBO. (2016). Crowdfunding platform Crowdisland.lk launched for Sri Lankan startups. Available at: <http://www.lankabusinessonline.com/crowdfunding-platform-crowdisland-lk-launched-for-sri-lankan-start-ups/> (Accessed: 10 August 2017).

LIRNEasia. LIRNEasia. Survey of Undergraduate Degree Programs 2012. Available at:[http://lirneasia.net/wp-content/uploads/2012/06/HE HEISurvey2012June27PPT.pdf](http://lirneasia.net/wp-content/uploads/2012/06/HE-HEISurvey2012June27PPT.pdf)

Mahajan, P., & Rana, A. (2018). Sentiment Classification-How to Quantify Public Emotions Using Twitter. *International Journal of Sociotechnology and Knowledge Development*, 10(1), 57–71. doi:10.4018/IJSKD.2018010104

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. doi:10.1016/j.jbusvent.2013.06.005

Ordanini, A. (2009). Crowd funding: customers as investors. *The Wall Street Journal*, 23 March, p. r3.

Rodil, K., Nielsen, E. B., & Nielsen, J. B. (2018). Sharing Memories: Co-Designing Assistive Technology with Aphasic Adults and Support Staff. *International Journal of Sociotechnology and Knowledge Development*, 10(1), 21–36. doi:10.4018/IJSKD.2018010102

Scheel, C., & Pineda, L. (2011). Building Industrial Clusters in Latin America Paddling Upstream. *International Journal of Sociotechnology and Knowledge Development*, 3(1), 34–54. doi:10.4018/ijskd.2011010102

Schroter, W. (2014). Top 10 Business Crowdfunding Campaigns of All Time. Available at: <https://www.forbes.com/sites/wilschroter/2014/04/16/top-10-business-crowdfunding-campaigns-of-all-time/#685545013e9f> (Accessed: 15 August 2017).

Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus New Horizons in Entrepreneurship*. London: Yale University Press. doi:10.4337/9781781007990

Stanko, Michael, A., Henard, David, H. (2015). Toward a better understanding of crowdfunding, openness and the consequences for innovation. *Journal of Service Management*, 22(1), 5–22.



- Steininger, Dennis, M., & Veit, D. (2017). An Interdisciplinary Review of Investor Decision-Making in Crowdfunding. *Journal of Service Management*, Vol. 24, No. 3, 2-23 Vol. 21 No. 1, 11-26.
- Tran, T., Dinh, A., & Tang, T. (2018). Exploring Factors Influencing the Success of Crowdfunding Campaigns of Startups in Vietnam. *Journal of Service Management*, 22(1), 5–22.
- Valtolina, S., & Di Gaetano, S. (2018). ICT-based Methodology for Fostering ADHD Students Inclusion in Classrooms. *International Journal of Sociotechnology and Knowledge Development*, 10(1), 1–20. doi:10.4018/IJSKD.2018010101
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17. doi:10.1509/jmkg.68.1.1.24036
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10. doi:10.1007/s11747-007-0069-6
- Wieck, E., Bretschneider, U., & Leimeister, J. M. (2013). Funding from the crowd: An internet-based crowdfunding platform to support business set-ups from universities. *International Journal of Cooperative Information Systems*, 22(3), 1340007. doi:10.1142/S0218843013400078
- Zuma, K. P., Mason, R. B., & Maharaj, M. (2019). Awareness of the Space Industry as a Career Opportunity in South Africa. *International Journal of Sociotechnology and Knowledge Development*, 11(1), 29–51. doi:10.4018/IJSKD.2019010103

*Kennedy D. Gunawardena is Professor of Accounting Information Systems at the department of Accounting, University of Sri Jayewardenepura, Sri Lanka. In addition to being the professor of Accounting in his department, He is the chairman of the Board of studies and Coordinator of the PhD in management program of Management, faculty of Management studies and commerce in the same university. He teaches cost and management accounting, accounting information systems, artificial neural networks for accounting and research methodology in accounting and finance for the undergraduates and postgraduates students.*