Role of Blockchain Technology in Crowdfunding
(International Banking and Finance)

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ABSTRACT
Crowdfunding is a new and innovative method for funding various kinds of ventures, wherein individual founders of the ventures can request for funds. The ventures may be working for profit motive, cultural or social. The funds are usually given in return for future products or equity. It includes the use of internet social media platforms to connect investors with entrepreneurs in order to raise capital for various kinds of ventures in return for compensation.

Internet and social media became new platforms that emerged. Social media and internet play vital role in raising funds for entrepreneurs and other non-profit organizations.

The paper shall first deal with the role of technology in crowdfunding, followed by the various crowdfunding platforms that have emerged in the recent times.

Blockchain is a unique, independent and a transparent system which keep the transactions between parties transparent. Crowdfunding is based on the trust between the investors and stakeholders.

The emergence of new technologies has great potential in crowdfunding organizations as well as individuals. Crowdfunding platforms using the blockchain technology increase the credibility of various projects and ventures and therefore attract huge funds from investors and donors.

Keywords: Crowdfunding, Blockchain Technology, Synergy, Smart Contracts
RESEARCH OBJECTIVES:

- To study the nature of crowdfunding
- To determine the role of technology in crowdfunding
- To analyse various case studies.
- To recommend a solution to overcome the challenges posed.

RESEARCH QUESTIONS:

1. What is Crowdfunding?
2. What are the limitations of current crowdfunding platforms?
3. How does blockchain technology help in overcoming the challenges?

RESEARCH METHODOLOGY

In order to conduct this research, the doctrinal method is been utilized. The paper shall have an inter-disciplinary study involving law and finance. The quantitative method of research was conducted. The research that has been conducted mainly focuses and analyses various case studies and how technology is playing an important in each case. In order to gather extensive research information, various articles, websites, and journals were referred. The research conducted shall consist of both primary and secondary sources. The primary sources include the case studies, whereas the secondary sources include the articles, journals and books that have been referred. This article has been written in descriptive and analytical form.

LITERATURE REVIEW

1. “Some Simple Economics of Crowdfunding.”
   In this paper, the author walks us through the case study in USA. They provide a preliminary exploration of the underlying economics. They attempted to highlight to which economic theories are applicable.

2. “Crowdfunding and Venture Capital: Substitutes or Complements?” The authors in this paper, basically attempt to study the dynamics of crowdfunding and if venture capitalists and the investors of crowdfunding are complimentary in nature.

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1 Ajay Agarwal, Journal of Innovation and Policy
2 Mario D’Ambrosio, Journal of Private Equity
3. “Lemmings in the Crowd: Success and failure of crowdfunding platforms”\(^3\). In this paper, the author tries to analyse the determinants which make a business a success or a failure, especially the crowdfunding platforms. They have analysed the case studies of Kickstarter and Indiegogo in particular.

4. “How Blockchain is Revolutionizing Crowdfunding”\(^4\). In this paper, the author explains the limitations of the crowdfunding platforms and the benefits of blockchain technology and how it is the future of crowdfunding owing to the ease and transparency of this model.

**ANALYSIS**

Looking back into the history, conventional practices like raising money through small loans to poor families were practised followed by providing microcredits to small entrepreneurs which were unable to qualify for bank loans.

New technology and innovation always make a huge impact on humans and the society. With the emergence of new technology, it definitely will impact the existing ones.

This transformation can definitely be seen with crowdfunding.

The number of projects being launched through crowdfunding platforms has increased significantly.

Stakeholders would usually like to track the way the organization is working, and be a part of the same, provided financial information is 100% transparent. And therefore, it is important for the entrepreneurs as well as stakeholders to maintain transparency, credibility and also understand the legal and regulatory framework behind the project.

**What is crowdfunding?**

Crowdfunding is basically the practice of funding a project or a start-up through raising money from various individuals. It is usually done using the internet, as it is easily accessible to gather contacts and determine the stakeholders of the project. Crowdfunding can be a suitable method for personal use, for real estate, loans, start-ups, and other businesses.

Crowdfunding is emerging as one of the most affordable and viable options for young entrepreneurs in the country.

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\(^3\) Eliana Baici, Journal of International Social Science

\(^4\) Ahmad Banafa
In the recent times, India has witnessed a massive growth in the start-up industry. It is because people want to break out of the barrier of working 9-5 and our government supports it. The government has a significant role to play in this, as they’re offering some advantages for start-ups such as relief from paying tax for the first three years and much more. Start-ups often look out for investors and try to approach VCs to get funding. Sometimes it gets tedious. Start-ups can try using crowdfunding as it increases the brand reach and it’s easier than approaching a VC. 

Some of the best examples of crowdfunding platforms are Kickstarter, Indiegogo, Startengine, Ketto, etc. These platforms encourage entrepreneurship and are most-commonly used for creative projects, everything from music, art, films as well as technology. They usually charge a fee of around 4%-5%. Sometimes, the rewards are in the form of products or even being a part of the designing activity.

**TYPES OF CROWDFUNDING**

The type of crowdfunding to be used usually depends on the kind of business or activity that is being set up. The goals and objectives of the business influence the type as well. There are three basic types of crowdfunding. They are:

- **Debt form of Crowdfunding:** In this medium, the investors or rather contributors are paid the money back along with interest. It is also known as “peer to peer’ lending and usually does not involve the traditional banking methods.

- **Equity based Crowdfunding:** In this method, the investors become partially the owners of the business project. They are also accredited with dividends. This is in a way kind of a gamble because, if the project is successful, the share value will go up, otherwise down.

- **Donations:** In this medium, the investors don’t look for any kind of financial returns. They invest in their belief on the project which is usually cause-based. However, perks can be given in order to show gratitude towards the donators. Examples of these kind of projects are, charities, disaster relief, and other not-for-profit organizations.

However, it does not come with its own challenges.

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5 Mayukh Choudhury, “How Crowdfunding works in India”
Limitations of the existing crowdfunding platforms:

1. **Exorbitant fees**: Usually, crowdfunding platforms take a certain amount of fee for every project that is listed. Sometimes, it’s a specific amount, and other times, it is taken as a percentage of the contribution made by the contributors. This is a drawback for the availability of the funds since start-ups are literally looking for every rupee to help themselves.

2. **Scam start-ups**: In some cases, start-ups turn out to be scams and leave the investors with no option but to suffer the loss of their investment.

3. **IP risk**: Sometimes, few start-ups don’t protect their intellectual property and in order expose them to other experienced investors who can steal their idea and enter the market with the resources they could arrange for.

4. **DIY marketing**: Sometimes, its aggressive advertising and marketing that the start-ups need, rather than spreading the word. And this kind of marketing requires a huge expenditure which again falls as a challenge on the funds for the start-ups.

5. **Fine print rules and regulations**: Not that all platforms accept all kinds of services to be provided for. They have their own criterion, and if the start-up isn’t meeting the criteria mentioned, then it poses as an obstacle for a start-up’s innovation and business.

I shall discuss about various ventures and projects that have raised capital through crowdfunding, including whether they fall under success or failure stories.

- **Manu**: This movie is supposedly the first major crowdfunded Telugu movie. “Manu” is a telugu film directed by Phanindra Narisetti. Nirvana Cinemas after being distributors of major movies like Bahubali, Mahanati and Arjun Reddy, they picked up Manu as their next project. Within, 4 days he managed to gather funds of approximately Rs.1 Cr. The movie which was shot with just an iPhone for over 89 days did emerge as a huge hit, and opened the gates for crowdfunded movies in the industry.

- **Versatyl**: Versatyl is India’s first travel jacket that has been crowdfunded. The jacket comes with 29 features and 18 pockets including features like seam-sealed, 100% waterproof and windproof. It also comes with a flexible and quite breathable and a washable anti-pollution face mask that protects an individual from dust, wind and cold. The basic object of this jacket is to provide convenience to a customer for a clever storage while travelling. Saneen Javali, the founder saw crowdfunding as an option. He had raised over 600 million INR through crowdfunding campaigns and shipped over 5000 jackets. The company managed to raise 378% over their initial goal within just 8 days and therefore proved to be a successful start-up.
• **Freedom 251**: You have probably heard of Freedom 251 by Ringing Bells Pvt. Ltd., aka the smartphone which came out for just Rs.251. Their campaign calling it the cheapest smartphone in the world gathered around 30,000 customers who pre-ordered for the same. Further, the website crashed due to the heavy internet traffic that it received. The server did not work as it almost took 6 lakh clicks per second. Along with the shipping charges of Rs.40/-, the phone costed Rs.291/- and therefore the company collected an amount of Rs.87,30,000 before the server crashed. This entire start-up proved to be a scam due to many reasons. To name a few, for some reason it was possible for customers to buy half a phone for Rs.125, the company claimed to have 650+ service centres though, one valid centre was not provided and the most important reason being that it’s impossible to manufacture a phone at that cost. This has come down as an alarm being called as a potential scam.

• **CST-01**: CST-01 is basically known as the world’s thinnest watch. This is considered to be one of the longest running crowdfunded failures. The venture was supposed to come up with the world’s thinnest watch, that is 0.8mm in thickness along with a digital display. While they received funds up to $1 million, they ran into a few issues, the main reason being that watches just aren’t that easy to make. The economies of scale were increasing which means that the costs are going to get doubled, if the issue as solved. They further went onto to explain that they are out of money. They planned for selling each watch for $129 but somehow it did not seem profitable. They further failed to even ship the watches that were ordered and failed to gain Kickstarter as their backer, and in 2016 filed for bankruptcy.

Keeping in mind all the afore mentioned challenges of existing cloud funding platforms, one solution that can be of best use to overcome these limitations is block chain technology. However, crowd funding with the help of block chain technology can prove to be even more genuine when it comes to the means of funding various kinds of projects as well as causes.

**SYNERGY BETWEEN BLOCKCHAIN AND CROWDFUNDING**

In present times, we are a generation wherein we want to see results of our contributions immediately. The upcoming generation of investors would not want to be just passive givers. Stake holders would like to keep a track of the way the organisation is functioning, whether it is achieving its goals and guide accordingly. This requires 100% transparency, and authentic financial information of the related project activity. Blockchain solves this issue.

Blockchain is basically an independent and transparent model which reduces uncertainty between parties who are exchanging the values. Though it is a new technology, it can be used in real time cases like crowdfunding.
Though, its not a very familiar technology, but it can definitely be of help specially in the ventures that have crowdfunding as their source of finance. Crowdfunding is based on the trust between the investors and stakeholders. In order to eliminate any kind of uncertainty with respect to utilization of the funds, blockchain technology is the way.

Speaking in general, most of the crowdfunding campaigns that are considered to be successful require the trust of the investors as well as the prestige of the campaign creator. “Transparency and immutable information are key advantages of Blockchain.”

Benefits of blockchain in crowdfunding:

1. **Token system:**
   While crowdfunding requires enabling the emergence of tangible products, blockchain usually relies on asset tokenization in order to provide investors with equity or similar concepts, namely ICO (Initial Coin Offering). In this way, investors would be able to see the success that is in fact proportional to the subsequent success of the company itself. This basically means that it has the potential to exploit the various investment opportunities in the world. Funds being a major aspect for start-ups, this could help them by saving money on recruitment of their employees by granting them compensation proportional to the ownership of the business, therefore converting it into an employee-owned enterprise. In this case, asset tokens act as currency of their own form, hence allowing the organisations to hire more professionals, particularly for marketing and advertising.

2. **Excess availability:**
   Any company that uses blockchain technology for crowdfunding would definitely get funded. Additionally, any individual who has an internet connection will be able to contribute to such projects. To individuals who invest in crowdfunding using blockchain technology, it is beneficial in a way that “fraud” will be absent in such cases because the investors will receive their ownership or a fraction of the enterprise immediately.

3. **Decentralization:**
   The advantage in this model is that, start-ups are not going to utilize the services of any platform or platforms in order to raise funds. They no longer have to abide by any rules or regulations as provided by various platforms. Hence, any project that has the capability of gaining exposure can get funds and therefore can also omit the requirement

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6 Vladislav Buchnev, “How technologies transform fundraising and crowdfunding”
of paying the fees to the platforms. Thus, this makes crowd funding cheap and affordable to the investors and contributors.

4. Smart Contracts:
There are various ways in which smart contracts enabled by blockchain technology can establish more accountability when it comes to crowd funding. First and foremost, the smart contracts would create obstacles that would hinder the funds from being released without derivation with regards to a project or any other legitimate campaign. Therefore, this would in turn prevent huge sums of money from being embezzled by those who have a malafide intention or persons who are not eligible to run the campaign in the first place. It is self-executing and by default transfers the amount of capital for further development if all the criterion are met.

Give Bytes is the first Crypto-mining crowdfunding platform that enables customers who face financial barriers to donate as well. The customers for the same are required to have access to a computer, and the unused computing power shall be donated to raise funds for a campaign. Through blockchain technology, Give Bytes allows the computer to ‘mine’ cryptocurrency by just a click.

CONCLUSION

It is quite evident that crowdfunding has huge potential in present times as well as in the future. Even though it comes with its own drawbacks and challenges, this form of funding is helping new start-ups and innovators, entrepreneurs and other creators. In the future, when blockchain will the backbone of major investor contributions, it will make crowdfunding easier, transparent and accessible. It is only a matter of time.

In order to conclude I would like to affirm that the potential and influence that the emerging technologies possess, for crowdfunding, is immense. The current solutions for the challenges that the usual crowdfunding platforms pose, are now able to transform the society for better. Crowdfunding platforms using the blockchain technology hold more credibility and therefore, I believe are the future for the right investment for investors.
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