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THE USE OF BLOCKCHAIN IN CROWDFUNDING

Abstract. Nowadays, financing sector offers various functions and provides many opportunities for people from the banking environment as well as for ordinary people. However, nowadays, traditional banking system has many boundaries that inhibit the expansion and development of activities and slow the current existing processes. Should the banking environment be completely reconsidered? Alternatively, is there different optimal solution? This article describes current problems in the sphere of banking services, the definition of crowdfunding and advantages that can be obtained with the use of blockchain technology.

Keywords: Crowdfunding, Blockchain, banking system, fund-raising, platforms, private & public blockchain.

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Аннотация. На сегодняшний день финансовый сектор предлагает различные функции и предоставляет множество возможностей для людей, кто связан с банковской деятельностью, а также для простых людей. Однако, в настоящее время традиционная банковская система имеет множество ограничений, которые препятствуют расширению и развитию деятельности и замедляют уже существующие процессы. Следует ли полностью пересмотреть принцип работы банковской системы? Альтернативно, существует ли оптимальное решение? В данной статье описываются актуальные проблемы в сфере банковских услуг, определение crowdfunding и преимущества, которые могут быть получены с использованием технологии blockchain.

Ключевые слова: Crowdfunding, блокчейн, банковская система, сбор средств, понимание, платформы, частный и публичный блокчейн.

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Түйіндеме. Бүгінгі таңда қаржы секторы банк қызметімен байланысты адамдар, сондай-ақ қарапайым адамдар үшін кептеген қызметтер мен мүмкіндіктерді ұсынады. Бірақ, банктің дәстүрлі жүйесі қызметтің кеңеюі мен дамуына кедергі келтіріп, қолда бар процестерді бәсеңдетеді. Банк жүйесі жұмысының принципін толығымен қайта қарастыру қажет пе? Балама шешімі бар ма? Бұл мақалада банк қызметтері саласындағы маңызды мәселелер

сипатталып, blockchain технологияларын пайдалану арқылы алынатын crowdfunding анықтамасы және оның артықшылары айтылады.

Түйінді сөздер: Crowdfunding, блокчейн, банк жүйесі, қаржы жинау, түсінік, платформалар, жеке және кепшілік блокчейн.

Introduction. Today there is an increasing application of crowdfunding idea in different business sectors. Crowdfunding is the act of financing, a task or wander by fund-raising from countless who each contribute a moderately little sum, commonly through the Internet. Crowdfunding can be described as a method that helps to raise money. This method is growing and becoming very popular around the world. Approximately, crowdfunding platforms raised around 16 billion USD in 2014 and around 32 billion USD in 2015. (Buterin 5), Private and Public Blockchain). Crowdfunding is a process that involves the crowd itself – many people that contribute certain amount of money to support a project [1-2].

In this article, critical contemplation in the improvement of current financing environment is discussed in the form of proposal of a new technique received from the combination two existing . The main objective of this article is to affect acute current problems in the financing services together with the most frequently discussed shortcomings in crowdfunding idea and to make an attempt to paint and propose the most suitable and efficient solution in order to get around; avoid these problems. After all these actions, to expose the most important advantages . Crowd funding is a new way to collect financial support or money from a huge number of people who use Internet (Heminway and Hoffman). Schwienbacher has defined crowd funding as a type of a call or ring through the Internet, in order to find financial resources through a donation or an exchange. Different types of crowdfunding are illustrated in Figure 1

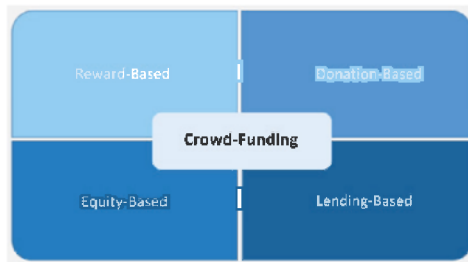


Figure 1

For small business or startups, it is very difficult to obtain proper loans from banks. Crowdfunding will help new companies to find initial financial capital - money through the Internet. Crowdfunding opens a new alternative channel that provides financing with a low cost, high speed, and no boundaries to companies and organizations. (Bradford). Figure 2 below describes the Crowdfunding process [3].

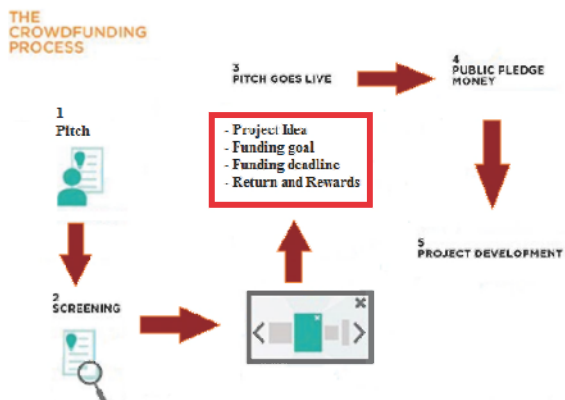


Figure 2

Problems. If the bank gives a loan it secures itself in various ways to ensure that customer pays back the loan. Moreover, sometimes customers face bankruptcy and assets reserved to pay off debts. Due to investment angels customer often loses control of business and business might potentially fail [4-6].

Current problems:

1. Trust. If there is no trust, it will become very difficult to create interest in project and this will lead to failure in meeting targets.
2. Platform choice. Crowdfunding provides businesses offer services. Seem as a positive fact, but as a practice shows the bigger options, the more extensive companies become and the higher quality service is provided.
3. Building Interest. One of the biggest mistake is creating a project first and then trying to generate the interest.
4. Technology double payment problem.

5. Security and data integrity problems.
6. Low flexibility that often causes poor reliability in various ways.
7. Threat of loss of business relationships.
8. Business control.

(Buterin 5, Private and Public Blockchain)

Crowdfunding gives beneficial points in providing startups with financial resources and furthermore initiates innovation. But still, governmental and legal aspects must be improved. What is a blockchain? Blockchain presents decentralized database model that improves data/information integrity and security. The reason is that it cannot be forged. Thus, the technology has a great future application in the financial industry.

Proposed solution. One of the best ways to solve most of the current problems of financing services will be the combination of crowdfunding idea with blockchain technology. In other words - "crowdfunding blockchain". Crowdfunding blockchain will become a new way of raising money.

It features no boundaries, cheap cost, and very high speed, and as a result promotes innovations. Crowdfunding is experiencing very fast progress. But still, some problems are kept to be unsettled. (Walport 2016, Bloomberg View 2016) [7].

1 Crowdfunding blockchain is secure, effective, cheap answer for the enlistment of stocks and offers of organizations financed by crowdfunding;

2 Crowdfunding blockchain makes exceptionally basic those exchanges of crowdfunding courses and contributes circulation;

3 Crowdfunding blockchain Empowers peer-to-peer transactions the middle of moguls furthermore entrepreneurs, serves on unravel issues about administrative furthermore security of reserve administration; also it aides will tackle those issues with stage decision. Blockchain will permit peer-to-peer transactions the middle of separate product situations. (Buterin 5, Private and Public Blockchain)

4 Crowdfunding blockchain will be used to make voting stage for crowdfunders that serves them with a chance to be included previously, corporate governance. (Belleflamme)

5 Will ensure privileges also investment from claiming little investors ; this will help to solve the problem with creating interest. As it was mentioned before one of, the biggest mistake is creating project first and then trying to generate interest. But crowdfunding blockchain technology will function with only interested people form the very beginning. (Walport).

Examples of Potential applications. With these highlights, crowdfunding blockchain innovation might be connected in numerous territories. Swan presents three classifications of potential applications (Swan 2015). The first is cash, including money exchange, settlement, and E-installment frameworks. The second is shrewd contracts in monetary markets. The third is other social applications past money and monetary markets, for example, public accountant, voting, and medicinal services applications (Swan). Pilkington additionally talks about the utilization of blockchain in advanced recognizable proof, voting frameworks, and money related applications (Pilkington). Huckle talks about potential utilizations of blockchain innovation in the mutual economy (Huckle). The national banks of numerous nations, including Britain and China, have issued reports or articulations to advance the exploration on blockchain and its applications in budgetary industry (Bloomberg View). Deloitte are utilizing blockchain innovation to enhance its reviewing administration (Deloitte) [8].

Figure 3 on the top of the next page shows Bloomberg’s View of Crowdfunding Model.

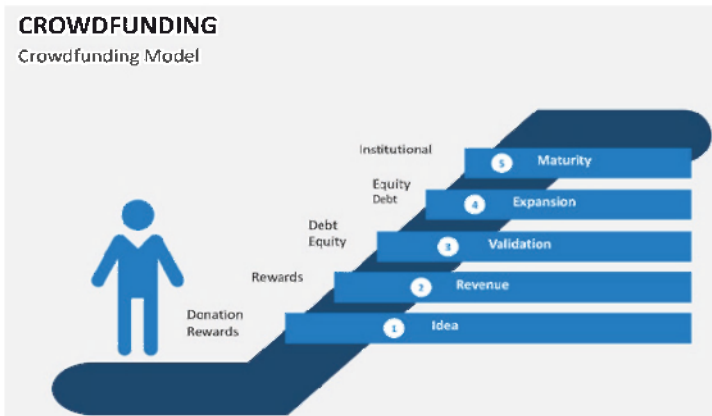


Figure 3

Advantages. The use of crowdfunding blockchain gives a list of advantages:

- First, if all there is nobody contending for business control.
- There is no money to pay back.

- Only few personal relationships might potentially be damaged.

Crowdfunding blockchain model is a subversive mechanism with many benefits. Decentralized structure empowers to work with high effectiveness and shoddy cost. It doesn't have blackouts of an incorporated database. This takes care of the issue with trust. Blockchain isn't controlled by anyone, so the topic of trust isn't helpful for this situation. (Buterin 5, Private and Public Blockchain). Innovation does not confront the twofold installment issue. It enhances security and information respectability that cannot be fashioned. Crowdfunding blockchain is programmable; this implies it builds adaptability and dependability in different ways.

Practical applications of crowdfunding blockchain technology.

Crowdfunding blockchain gives positive influence in financing start-ups and small companies. It will contribute innovation. Crowdfunding blockchain encourages organizations to fund-raise on the Internet, where the amount of investors may be vast; interconnections are poor; and areas are isolated. Blockchain-based investor records may be utilized as a superior approach to customary paper archives. Blockchain's highlights of decentralized information administration and hostile to fraud ensures high security (Walport). Crowdfunding blockchain offers a digitized arrangement, that will lessen human cost and limit the way toward getting ready paper archives, conveying records by post and affirmation of reports. Crowdfunding blockchain investors situated in various districts can safely enlist their rights requiring little to no effort. "Because of the unpredictability of corporate administration by and by , this thought can't totally resolve the issues of corporate administration and ensuring investor interests"(Pilkington). As per the writing survey, investigation of the qualities of the piece chain and utilizations of square chain, blockchain innovation in mix with crowdfunding thought has high esteem and great prospects in taking care of the issues of capital administration and improvement of the procedure (Buterin 5, Private and Public Blockchain).

The Crowdfunding blockchain investors are scattered in a wide area, making it more imperative to finish and approve the enrollment of investors. The customary procedure of enlistment of the investors ineffectual. Blockchain innovation offers a more protected, successful and cheap answer for enlistment of possession rights and rearranges the unpredictable procedure of enrollment (Walport). Second, the operation turns around to capital and the exchange of a property complex at the operational level. Be that as it may , the system of capital administration, in view of blockchain innovation,

can give safe online exchanges, which enormously improves the exchange procedure and the exchange of offers. This will encourage the dispersion of offers and initiate the market .

Thirdly, there are issues of security and consistence in the administration of money streams. With crowdfunding blockchain, it is conceivable to accomplish point-to-point exchanges and direct exchanges between the clients; assets can be moved straightforwardly from the records of the financial specialists by the Fund-pillagers, not going through the stages of core interest. This understands the issues of budgetary security and regard. (Walport). Fourth, the crowdfunding investors confront troubles in voting and securing their rights and premiums. Blockchain innovation can help make a safe internet-voting framework, giving a way to the scattered investors to take an interest in corporate administration. Fifth, the control of the controller over the value investment can be upgraded using bound together administration stage, the property of the blockchain. Controllers can acquire point-by-point and particular data about the market, in this way expanding the viability of direction of speculators, Fund marauders and stages preparing (Walport).

Conclusion. From a hypothetical perspective, crowdfunding blockchain innovation is the arrangement that gives productive and practical enrollment of the offers, the exchange and exchange of offers and an investor vote in center industry, dispensing with the legitimate dangers related with the administration of assets. It can likewise help controllers to screen and comprehend the market of crowdfunding. Consequently, crowdfunding blockchain applications have great prospects in the supply of financing (Buterin 5, Private and Public Blockchain). At a display, the use of blockchain in the administration of capital is still in the examination organized; there are numerous legitimate and specialized issues that should be tended to . There is a requirement for a locking of the undertaking and directors of the market effectively coordinated with each other, execute a blocking application and actualize imaginative arrangements. They have to extend their comprehension of the innovation blocking, its esteem, openings and dangers (Belleflamme).

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