Blockchain-based Crowdfunding: what impact on artistic production and art consumption?

Author(s): De Filippi, Primavera;

Keywords: blockchain; cryptocurrency; cryptoequity; artistic production; crowdfunding; creative commons

Crowdfunding relies on the contribution of a large number of individuals in order to finance the production of a particular work. Already a few crowdfunding platforms have been deployed on the blockchain, rewarding people?s financial contributions to a project with actual shares of the project. Their interests become therefore more aligned with that of the author, since anyone investing in the project becomes an active shareholder, whose return on investment ultimately depends on the success or failure of that project.

TEduChain: A blockchain-based platform for crowdfunding tertiary education

Author(s): Rashid, Mahmood A; Deo, Krishneel; Prasad, Divnesh; Singh, Kunal; Chand, Sarvesh; Assaf, Mansour;

Publisher: Cambridge University Press in 2020

Blockchain is an emerging technology framework for creating and storing transaction in distributed ledgers with a high degree of security and reliability. In this paper, we present a blockchain-based platform to create and store contracts in between students and their higher education sponsors facilitated by intermediary brokers denoted as fundraisers. The sponsorship might be in any form, such as scholarship, donation, or loan. The fund will be arranged and managed by a group of competitive fundraisers who will hold the distributed ledgers and act as the miners in the blockchain network.

The role of blockchain technology-based social crowdfunding in advancing social value creation

Author(s): Nguyen, Loan TQ; Hoang, Thinh G; Do, Linh H; Ngo, Xuan T; Nguyen, Phuong HT; Nguyen, Giang DL; Nguyen, Giang NT;

Publisher: Elsevier in 2021

Keywords: Crowdfunding; Blockchain; Social crowdfunding; Social value creation

This study investigates the practical applications of blockchain technology in socially oriented crowdfunding platforms (SCPs). In recent years, SCPs have grown due to their perceived benefits compared to traditional funding channels. However, skepticism remains regarding the potential for the further development of crowdfunding platforms, especially SCPs, due to restrictions on attracting investment as well as concerns related to transparency, reliability, and trustworthiness. The recent applications of blockchain technology in crowdfunding promise a possible solution to current obstacles, and may facilitate SCPs. Employing a qualitative research approach based on three case studies, this study addresses how blockchain technology can be used to facilitate the social value creation of crowdfunding when adopted as an alternative infrastructure. Accordingly, this study identifies both the facilitators of the social value creation process through blockchain technology (e.g., reducing operational costs, increasing trust and transparency, and cultivating a broader crowdfunding community) and the barriers of this application in terms of development costs and legal requirements. In addition to answering calls to investigate the role of blockchains in facilitating social activities, this study expands the emerging literature by demonstrating the practical applications of blockchain use in crowdfunding.

Alternative fundraising: success factors for blockchain-based vs. conventional crowdfunding

Author(s): Hartmann, Felix; Grottolo, Gloria; Wang, Xiaofeng; Lunesu, Maria Ilaria;
Publisher: IEEE in 2019
Keywords: Crowdfunding; non-financial vs financial; Blockchain-based crowdfunding

Blockchain-based crowdfunding is an emerging economic phenomenon and a state-of-the-art strategy to finance ventures. It bears similarity to conventional crowdfunding, but has its own unique characteristics. Therefore the success factors that affect the outcome of traditional crowdfunding may have a different impact on blockchain-based crowdfunding. Despite that the number of blockchain-based crowdfunding campaigns has increased drastically in the past few years, there is a lack of good understanding of what the success factors are for them in comparison to the ones for conventional crowdfunding. Such understanding is crucial for companies to design their blockchain-based fundraising initiatives properly and facilitate potential investors to seek main signals and drivers of outstanding projects. Furthermore it could help regulators and market participants to understand how the existing regulatory framework applies to blockchain-based crowdfunding. Due to specific characteristics of blockchain-based crowdfunding, regulatory frameworks may require potential re-interpretation of requirements to allow an effective application of regulations. To fill this knowledge gaps, we have reviewed a set of relevant literature on success factors for conventional and blockchain-based crowdfunding. The result of this literature review sheds light on the directions for future research and development. The contribution of our work is a better understanding of the distinctions and similarities of blockchain-based crowdfunding compared to traditional crowdfunding.

Crowdfunding the insurance of a cyber-product using blockchain

Author(s): Vakilinia, Iman; Badsha, Shahriar; Sengupta, Shamik;
Publisher: IEEE in 2018
Keywords: Cyber-insurance; Blockchain; Crowdfunding; Sealed-bid auction

Organizations are interested in transferring their cyber-risks to insurers aiming to mitigate the cost of cyber-threats. However, cyber-insurance has not been widely accepted due to several obstacles. First, the lack of reliable data to measure the cyber-risks makes it hard to calculate the insurance premium. Second, there are legal and procedural hurdles for assessing the organizations security posture deterring insurer for auditing. On the other hand, the blockchain technology has been extensively popularized due to its ability to provide transparency and security. Blockchain applies the distributed ledger to store transaction histories, and the information is stored across a network of computers instead of on a single server. In order to improve the application of the cyber-insurance, in this research, we propose a new framework to insure a cyber-product using the blockchain technology. First, a vendor initiates a request for insuring a cyber-product, then the interested insurers participate in a sealed-bid auction by bidding their preferred premium for the insurance service. The auction winners will be selected as the insurers, and they receive tokens in return of their obligations. In the case of an indemnity request, the auditor checks the validity of a request, then calls the claim function to retrieve the corresponding amount from the funds collected from the insurers. Furthermore, we propose a new method to implement a sealed-bid auction for the insurance crowdfunding in smart contract.

Tokenomics: A new opportunity in the Real Estate business? A qualitative approach to crowdfunding and blockchain interaction

Author(s): Creta, Fabio; Tenca, Francesca;

Keywords: real estate crowdfunding; blockchain; tokenomics; tokenization

This article discusses how platform administrators operating within the ecosystem of real estate crowdfunding could implement technology innovations, such as blockchains or the use of digital tokens, and list the benefits that could be obtained by the real estate sector. We introduce an exploratory analysis of multiple case studies, consisting of 12 businesses that manage real estate crowdfunding platforms. The information gathered through interviews provides an idea of how the shared opinions of professionals in the trade is identified with factors and variables that affect the opening of this alternative finance segment. In terms of implications, this is one of the first studies exploring the adoption of innovative technologies by real estate crowdfunding platforms and, as far as we know, it is the first to analyze the impact of tokenization

Don't Slip on the Initial Coin Offering (ICO): A Taxonomy for a Blockchain-enabled Form of Crowdfunding

Author(s): Fridgen, Gilbert; Regner, Ferdinand; Schweizer, André; Urbach, Nils;
Keywords: Blockchain; Smart Contract; Initial Coin Offering (ICO); Token; Token Sales; Cryptocurrency; Crowdfunding; Taxonomy.

Blockchain is rapidly evolving and there is an increasing interest in the technology in both practice and academia. Recently, a blockchain use case called Initial Coin Offering (ICO) draws a lot of attention. ICO is a novel form of crowdfunding that utilizes blockchain tokens to allow for truly peer-to-peer investments. Although, more than 4.5 billion USD have been invested via ICOs, the phenomenon is poorly understood. Scientific research lacks a structured classification of ICOs to provide further insights into their characteristics. We bridge this gap by developing a taxonomy based on real-world ICO cases, related literature, and expert interviews. Further, we derive and discuss prevailing ICO archetypes. Our findings contribute to theory development in the field of ICOs by enriching the descriptive knowledge, identifying design options, deriving ICO archetypes, and laying the foundation for further research. Additionally, our research provides several benefits for practitioners. Our proposed taxonomy illustrates that there is no one-size-fits-all model of ICOs and might support the decisionmaking process of start-ups, investors and regulators. The proposed ICO archetypes indicate how common ICOs are designed and thus might serves as best practices. Finally, our analysis indicates that ICOs represent a valid alternative to traditional crowdfunding approaches.

Integrating waqf crowdfunding into the blockchain

Author(s): Mohsin, Magda Ismail Abdel; Muneeza, Aishath;

This chapter presents the revival of waqf in both its forms - immovable and movable - to demonstrate the potential of waqf in order to integrate it with contemporary fintech innovations like crowdfunding and blockchain. With reference to blockchain technology, which is a decentralised public ledger, it has been used for different applications, from security, shipping, to commercial transactions. WaqfCoin, using modern technology, which integrates crowdfunding and blockchain, will promote charitable endowment. In Malaysia using one of the ten stipulations which is istibdal, an old waqf school was converted into a college known as Al-Mashoor Maahad in Penang. There has been huge support for different schemes through online waqf donation based on the waqf shares model. The practice of creating waqf shares in Muslim-majority as well as Muslim-minority countries provides successful cases in raising funds to meet the different needs of various communities.

Can FinTech Progress the Real Estate Sector? The Disruptive Role of Crowdfunding & Blockchain: A Systematic Literature Review

Author(s): Creta, Fabio; Mazaj, Jelena;

Keywords: FinTech; Crowdfunding; Blockchain; Real Estate; Systematic Literature Review

The aim of this article is to examine the literature on the role of two dominant players within the FinTech world in recent years: on the one hand, crowdfunding and on the other, blockchain. Our focus will be on the traditionally static and non-innovative real estate sector, trying to analyse how the latter can benefit from the use and interaction between these two new actors. Through a systematic literature review (SLR), 143 scientific articles based on current literature have been identified to better understand the topic. The information collected from the selected articles is presented and summarised in specific tables and graphs for a more immediate understanding. The qualitative research software Nvivo was also used. This research found 43 out of 143 articles analyse the phenomenon of crowdfunding based on blockchain technology from an economic point of view. After the descriptive results through qualitative analysis, the evidence that emerged is that none of the articles analysed deals with the issue in terms of real estate to understand possible practical implications and further theoretical contributions. This research work suggests to investors who intend to invest in real estate, how new investment methodologies could bring enormous benefits to a sector that is less prone to innovation and traditionally static, considering how the use of new technologies applied to alternative financing instruments would make real estate investments much more attractive and accessible. This study contributes to advancing knowledge of the FinTech world, specifically of new alternative financing instruments such as crowdfunding and new emerging technologies such as blockchain, from a theoretical point of view. As far as the authors are aware, this is the first study that systematises the international literature on the subject, highlighting the main contributions written on the subject, always keeping a focus on real estate.

Blockchain and initial coin offerings: blockchain?s implications for crowdfunding

Author(s): Arnold, Laurin; Brennecke, Martin; Camus, Patrick; Fridgen, Gilbert; Guggenberger, Tobias; Radszuwill, Sven; Rieger, Alexander; Schweizer, André; Urbach, Nils;
Publisher: Springer in 2019
Keywords: Blockchain; Initial Coin Offering; ICO; Distributed L Cryptocurrency; Cryptotoken; Use Case Analysis

Interest in Blockchain technology is growing rapidly and at a global scale. As scrutiny from practitioners and researchers intensifies, various industries and use cases are identified that may benefit from adopting Blockchain. In this context, peertopeer (P2P) funding through initial coin offerings (ICOs) is often singled out as one of the most visible and promising use cases. ICOs are novel forms of crowdfund ing that collect funds in exchange for socalled Blockchain tokens. These tokens can represent any traditional form of underlying asset and have already been used, among others, to denote shares in a company, user reputations in online systems, deposits of fiat currencies, and balances in cryptocurrency systems. Importantly, ICOs allow for P2P investments without intermediaries. In this chapter, we explain the fundamentals of ICOs, highlight their differences to traditional financing, and analyze their pote ntial impacts on crowdfunding.

Swapping the underlying technology of crowdfunding contracts for blockchain-the perspective of Roger's five perceived attributes of innovation

Author(s): Zhao, Hongjiang; Coffie, Cephas PK;

Keywords: Blockchain; crowdfunding; innovation; fundraisers; investors; platforms

Blockchain is projected to become essential in crowdfunding. However, diffusing this innovation in crowdfunding contracts raises practical concerns. Consequently, using data from a semi-systematic review, we develop a framework focusing on crowdfunding parties and the five perceived attributes of innovation diffusion to evaluate the possibility of diffusion in crowdfunding. Employing thematic analysis, we identify two possible modes for blockchain application in crowdfunding. Results indicate the technology offers superior relative advantage and compatibility for contracting parties. Nonetheless, fundraisers and investors could have potential diffusion complexities because of limited knowledge. Platforms face uncertainties over the degree of mediation and regulatory compliance. Further, trialability and observability issues cast doubts on the potential switch. Therefore, advanced stakeholder engagement and blockchain regulatory reform is required to expedite this switch.

Venturing crowdfunding using smart contracts in blockchain

Author(s): Yadav, Nikhil; Sarasvathi, V;
Publisher: IEEE in 2020
Keywords: Ethereum; smart contracts; crowdfunding

Crowd funding is an online cash raising technique that started as a path for the people to contribute limited quantity of money to enable innovative individuals to fund the venture. Using crowdfunding, people can put resources into pioneering businesses through a middle medium or platform. The issue with the current crowd funding technique is that, third party medium don't give the assurance of the money investor contributed for the project and investor don't have control over the cash they contributed. This paper proposes the blockchain based crowd funding by using which the platform can give a private, secure and decentralized path for crowdfunding. The main objective of this paper is to let investors contribute to any project effectively by creating smart contracts through which the contributors can have a control over the invested money and also both the project creators and investors can effectively make and reserve funding for the project.

Crowdfunding fraud prevention using blockchain

Author(s): Pandey, Shivansh; Goel, Shivam; Bansla, Subodh; Pandey, Dhiraj;
Publisher: IEEE in 2019
Keywords: Blockchain; Crowdfunding; Ethereum; Smart Contracts; Solidity

Online crowdfunding enables people to raise funds for their project. People who are interested in a project can donate by making an online transaction. The donated money goes to the project manager, which he uses to complete the project or to make a product. This existing method of online crowdfunding has a major drawback. It does not allow contributors to have control over the money they have contributed. Since in the existing method the project manager has all the control over the money contributed he can very easily perform malicious activities. Here we address this problem faced by the existing online crowdfunding platforms by using ethereum network and smart contract. The development of Blockchain technology has allowed businesses to build decentralized models. It has derived new methods to conduct transactions and make agreements. One of the technologies that propose an alternative to the traditional model is the smart contract. A smart contract is similar to a contract in the physical world, but it is digital and represented by a tiny computer program stored in a blockchain. These smart contracts can be used to implement logic. A method has been proposed here that uses smart contract to manage all the activities performed in a crowdfunding campaign. The proposed method has been implemented and its various features are tested by funding campaigns on rinkeby test network.

Crowdfunding meets blockchain

Author(s): Sahdev, Navroop K;

Blockchain, the technology behind Bitcoin, promises to be nothing less than Internet 2.0. The financial services industry, in particular, is preparing for the disruption blockchain/distributed ledger technology promises to cause. In the current business environment, the majority of startups and small businesses have to look for alternative sources of funding given that ?going public? is increasingly expensive. The crowdfunding space has seen tremendous growth as an alternative way to raise capital by businesses. However, these crowdfunded shares cannot be traded for 7-10 years on average on any given platform in the U.S. currently.

To build a trading platform on the blockchain which is completely P2P, immutable, fully transparent and low cost presents some key design issues. In particular, the issue of liquidity - and price discovery - on the blockchain continues to be a puzzle. At the same time, the proposition of removing middlemen from equities trading is a very attractive one, streamlining the process of capital formation with higher market efficiency. The current paper addresses the following key questions: How can a DLT trading platform ensure adequate liquidity? What would be the process of price discovery? While some recent studies hail blockchain technology as a boom for market liquidity, it is not immediately clear what the impact of P2P trading would be on the prices of various stocks. There are no ?solutions? just yet. At the same time, the lack of regulation around trading on the blockchain creates an environment of uncertainty for all players. In particular, the implementation of such a platform can revolutionize capital formation and build robust markets in both developing and developed countries where crowdfunding has proven to be a successful model. While my research is targeted at solving a very specific pain point for both researchers and companies working on distributed ledger technology, ultimately, it would be a significant step forward towards onboarding underserved communities across the world who don?t have access to financial services.

Blockchain crowdfunding projects evaluation using GRA-TOPSIS

Author(s): Yu, Chunxia; Leng, Yi; Li, Jing; Yu, Jiacheng;
Publisher: Emerald Publishing Limited in 2020
Keywords: Evaluation; TOPSIS; Crowdfunding; GRA; Blockchain technology

Purpose
This paper aims to propose a novel blockchain crowdfunding projects evaluation approach using extended techniques for order preferences by similarity to ideal solution (TOPSIS) under fuzzy environment.
Design/methodology/approach
By analyzing the characteristics and operation process of blockchain crowdfunding model, this paper formulates the evaluation index system from three dimensions of human resources, capital and publicity. In addition, the entropy method is used to calculate the weight of each indicator to avoid subjective judgments; different alternatives are evaluated using the grey correlation analysis (GRA) and TOPSIS-integrated method which considers the distance and similarity between alternatives simultaneously.
Findings
By analyzing the characteristics and operation process of blockchain crowdfunding model, this paper formulates the evaluation index system from three dimensions of human resources, capital and publicity. In addition, the entropy method is used to calculate the weight of each indicator to avoid subjective judgments; different alternatives are evaluated using the GRA and TOPSIS-integrated method which considers the distance and similarity between alternatives simultaneously.
Originality/value
Blockchain crowdfunding has become a new model for fund-raisers to raise funds from public investors. This paper proposes a novel blockchain crowdfunding projects evaluation approach using extended TOPSIS under fuzzy environment.

Blockchain based crowdfunding systems

Author(s): Saadat, M Nazmus; Halim, S Abdul; Osman, Husna; Nassr, R Mohammad; Zuhairi, Megat F;

Keywords: Blockchain; Crowdfunding; Malaysia; Smart contracts

Initially, blockchain is only used as a foundation of cryptocurrency, but today, we can see the rise of this new emerging technology are being implemented in many industries. In the future, most technologies around the world are expected to use blockchain as an efficient way to make online transactions. One of the areas that blockchain technologies can be applied is crowdfunding platforms. The most common problem with current crowdfunding scene in around the world including is that the campaigns are not regulated and some of the crowd-funding campaign turned out to be fraud. Besides, the completion of some projects also was significantly delayed. This project aims to solve these problems by applying Ethereum smart contracts to the crowdfunding site to that the contracts will be fully automatically executed, thus preventing frauds and ensuring that the projects can be delivered within duration given.

Blockchain based crowdfunding systems in Malaysian Perspective

Author(s): Saadat, Md Nazmus; Rahman, Syed Abdul Halim Syed Abdul; Nassr, Rasheed Mohammad; Zuhiri, Megat F;

Keywords: Blockchain; crowdfunding; Ethereum; smart contracts; Intelligent Information Systems

Blockchain was only used as a foundation of cryptocurrency initially, but today, we can see the rise of this new emerging technology being implemented in many industries. In the future, most technologies around the world are expected to use blockchain as an efficient way to make online transactions. One of the areas that blockchain technologies can be applied is crowdfunding platforms. The most common problem with current crowdfunding scene in Malaysia (and around the world) is that the campaigns are not regulated and some of the crowd-funding campaign turned out to be fraud. Besides, the completion of some projects also was significantly delayed. This project aims to solve these problems by applying Ethereum smart contracts to the crowdfunding site to that the contracts will be fully automatically executed, thus preventing frauds and ensuring that the projects can be delivered within duration given.

An exploratory study on the influence of guidelines on crowdfunding projects in the ethereum blockchain platform

Author(s): Bracamonte, Vanessa; Okada, Hitoshi;
Publisher: Springer in 2017
Keywords: Blockchain technology; Crowdfunding; Governance; Self-regulation

In 2016, the DAO, a project which had raised $150 million in token sales in a crowdfunding campaign carried out on the Ethereum blockchain, was hacked using a vulnerability in its code. As part of the response to the incident, the Ethereum Foundation issued two guidelines: a security measure and a value limit. However, the characteristics of decentralized blockchain platforms make it difficult to establish or enforce new rules. In this paper, we investigate whether these guidelines had any influence on subsequent crowdfunding projects, by qualitatively analyzing the information provided by the projects? organizers. The results indicate that the Ethereum Foundation guidelines had some, although limited, influence on how the projects were conducted, in particular with regard to setting a value limit to the campaigns. They also provide some evidence of the influence of the community in the implementation and improvement of security measures related to the smart contracts. We discuss these results in the context of the challenges of governance of crowdfunding projects running in public blockchain platforms.

Potential impacts of blockchain based equity crowdfunding on the economic feasibility of offshore wind energy investments

Author(s): Stekli, Joseph; Cali, Umit;
Publisher: AIP Publishing LLC in 2020

This paper explores the potential to reduce the levelized cost of electricity (LCOE) of offshore wind technology through the use of digitalized financial innovations made possible by Distributed Ledger Technology (DLT). Specifically, this paper proposed a novel application of DLT to crowdsource project finance for clean energy projects. An introduction to DLT technology and some of its potential applications is provided first. Next, the potential to move from a more centralized, top-down energy system to a more decentralized, two-way transactive energy system enabled by DLT is discussed. Within this new energy system framework, the idea of crowd-sourced equity funding of the capital cost of renewable energy is introduced. The impact of crowdfunded equity on the LCOE is then explored via the creation of a theoretical offshore wind installation off the coast of New Jersey. An existing offshore wind capital cost model is modified for use in the U.S., and an existing wind annual energy production model is utilized to provide inputs into a LCOE model. Finally, the potential impacts that DLT based crowdfunded equity may have on cost of debt, debt tenor, and debt-to-equity ratio are also input into the LCOE model in order to examine the range of potential impacts it may have on offshore wind LCOE.

Swapping the underlying technology of crowdfunding contracts for blockchain?the perspective of Roger's five perceived attributes of innovation

Author(s): Coffie, Cephas Paa Kwasi; Zhao, Hongjiang;

Publisher: Taylor & Francis in 2021

Keywords: Blockchain; crowdfunding; innovation; fundraisers; investors; platforms

Blockchain is projected to become essential in crowdfunding. However, diffusing this innovation in crowdfunding contracts raises practical concerns. Consequently, using data from a semi-systematic review, we develop a framework focusing on crowdfunding parties and the five perceived attributes of innovation diffusion to evaluate the possibility of diffusion in crowdfunding. Employing thematic analysis, we identify two possible modes for blockchain application in crowdfunding. Results indicate the technology offers superior relative advantage and compatibility for contracting parties. Nonetheless, fundraisers and investors could have potential diffusion complexities because of limited knowledge. Platforms face uncertainties over the degree of mediation and regulatory compliance. Further, trialability and observability issues cast doubts on the potential switch. Therefore, advanced stakeholder engagement and blockchain regulatory reform is required to expedite this switch.

Blockchain and initial coin offerings (ICOs): A new way of crowdfunding

Author(s): Martino, Pierluigi; Bellavitis, Cristiano; DaSilva, Carlos M;
Keywords: Blockchain; Initial Coin Offering; ICO; Cryptocurrency; Entrepreneurial Finance

Today, developers, businesses and individuals increasingly are using blockchain and initial coin offerings to raise capital. These new innovations may offer to entrepreneurs and investors interesting theoretical opportunities, as well as pose strategic, regulatory and law enforcement challenges, since they may enable the change of the business models of existing players in entrepreneurial finance and push the new players even further. The objective of this study is to investigate the potential advantages and challenges of blockchain technology and ICOs, and how they are going to affect the entrepreneurial environment. In particular, in addition to provide a first overview on blockchain and ICOs in the context of entrepreneurial finance, this study also aims to provide practical contributions for regulators, entrepreneurs and investors interested in these new financial innovations, by outlining ICOs? advantages and risks, and provide a research agenda for future research in this topic.

Decentralised application for crowdfunding using blockchain technology

Author(s): Gururaj, HL; Janhavi, V; Holla, Abhishek M; Kumar, Ashwin A; Bhumika, R; Goundar, Sam;

Publisher: Inderscience Publishers (IEL) in 2021

Keywords: crowdfunding; blockchain; smart contracts; peer-to-peer network; internet

Crowdfunding is a way for people, businesses, and charities to raise money. It works through individuals or organisations who invest in (or donate to) crowdfunding projects in return for a potential profit or reward. Investing this way can be risky. Security is the main challenging issue in crowdfunding contracts. Using existing literature on crowdfunding and blockchain technology, they put forward a conceptual framework that can provide the solution to the problems related to crowdfunding contracts using blockchain technology. This methodology points out the potential of crowdfunding decentralised applications to lower market inefficiencies by bypassing third parties and easing trades on secondary markets. This platform eliminates the interference of the middlemen. It is highly transparent and secure. A decentralised approach to crowdfunding forfeits all fees for the investor. It also gives a share of the project to the receiver. This model establishes a flexible platform for the fundraiser to start a campaign. The funders invest the amount if they feel the project to be genuine. Once 50% of the funds are received, it will be transferred to the initiator. It establishes a peer-to-peer relationship between the investor and the receiver.

Agricultural Crowdfunding Through Blockchain

Author(s): Desabathina, Naga Venkata Mohit; Merugu, Suresh; Gunjan, Vinit Kumar; Kumar, Bandreddi Sunil;
Publisher: Springer in 2022
Keywords: Crowdfunding; Blockchain; Agriculture; Technological interventions; Smart contracts

Farmers are the backbone of India's economy but every year there is an increase in the number of suicides in the agriculture sector. The main reason behind their suicides is the financial problems like debt, loan repayment, no security for the loan and the crowdfunding scams and frauds. In the financial sector of agriculture, there are many actors/participants involved and their transactions have to be managed. Blockchain-based agricultural crowdfunding will eradicate all the middlemen and connect the consumer to the farmer directly. Blockchain technology creates a platform between all the participants and provides a shared ledger/database to deliver an immutable and unique version of the truth among all the actors/participants in the network who don?t trust each other. Blockchain-based crowdfunding in agriculture creates a market for community members where they can financially back agriculture operations in exchange for groceries and establish a peer to peer network, with donations directly and uninterruptedly going to farmers.

Developing Blockchain-Based Crowdfunding Model for Property Investment

Author(s): Berawi, Mohammed Ali; Radjilun, Mohamad Khaerun Zuhry; Sari, Mustika;
Publisher: Springer in 2020
Keywords: Blockchain; Crowdfunding; Property investment; Platform features; Operational workflow

Crowdfunding is an approach that has been widely used to raise capital from individuals to finance a venture, known for its ability to reach a large pool of new capital gathered from the crowd. Though it has been extensively applied to finance property developments in real estate industry in some countries, crowdfunding method still has some drawbacks in regard to the accountability and transparency of the platform. Hence, this study attempts to propose a crowdfunding model for property investment that takes into account blockchain technology addressing those shortcomings. Both qualitative and quantitative methods are used to achieve the objectives of this study through literature review, questionnaire surveys, benchmarking study, and expert interviews. As a result, the features of crowdfunding platform utilizing blockchain technology that can improve the accountability and transparency are determined, and the design of the operational workflow for the blockchain-based property crowdfunding platform is proposed as an alternative to the conventional crowdfunding platform, therefore addressing financial issues in property investment.

Penerapan Blockchain dengan Integrasi Smart Contract pada Sistem Crowdfunding

Author(s): Aprialim, Fiqar; Paundu, Ady Wahyudi;

Keywords: Blockchain; Crowdfunding; Ethereum; Smart Contract; Transaction

The existing crowdfunding platforms still operate using centralized system. While centralized system can operate well, it requires a third party intermediary in order to operate and thus does not completely provide data security and transparency of crowdfunding activities. In addition, the existence of a third party intermediary in a crowdfunding activity also causes the existing processing costs to be expensive. Therefore, the crowdfunding system needs to be built in a decentralized manner so that it eliminates the need for third parties as intermediaries in the crowdfunding process. This study proposes a prototype of decentralized crowdfunding system using Ethereum blockchain and smart contract technology. The result of system functionality test using black box testing method shows that all functionality of the crowdfunding system can run properly while operate in decentralized architecture.

Crowdfunding capital in the age of blockchain-based tokens

Author(s): Lee, Patricia H;
Publisher: HeinOnline in 2018
Keywords: Regulation Crowdfunding; digital tokens; blockchain; capital formation; safe harbor exemptions; innovation; securities offerings; investment crowdfunding

To illustrate the findings, this Article proceeds like so. Part I provides a brief history of the Reg. CF exemption law and the research findings about investment crowdfunding, generally, and digital tokens, more specifically. Next, Part II provides insights on the current state of offering blockchain-based digital tokens to unsophisticated investors and the silver linings in the data. Finally, Part III provides recommendations for a path forward in Reg. CF. First, the SEC should re-evaluate its regulatory policy in light of the proliferation of blockchain-based token offerings and gaps in funding portals, and provide additional warnings to unsophisticated investors who may be taking on enhanced investment risk. The uncertainty and risk of digital tokens reliant on blockchain technology foretells a troubling high risk of investment loss, which may supplement the expected high risk of loss for startup tech companiees. Second, companies, particularly idealistic tech startups, that are considering the offer of digital tokens, should thoughtfully consider alternatives to these offerings. There remains a level of uncertainty and risk in these offerings, which could result in greater risk and liability than the alternative financing available to them. Lastly, economic development organizations should consider developing their role in attracting, designing, and implementing funding portals to provide the support that tech and other startup companies need to raise capital for their business.

Feasibility analysis of blockchain for donation-based crowdfunding of ethical projects

Author(s): Khan, Nida; Ouaich, Rachid;
Publisher: Springer in 2019
Keywords: Blockchain ; Throughput ; Smart Contract ; Fintech ; Donation

Donation is a necessary social tool that is plagued by many inherent shortcomings. A novel model in the form of a decentralized app was designed in the Ethereum blockchain to solve the challenges present and optimize the process of Zakaah donation. Load and stress tests on the prototype of the smart contract in the public testnet of Ethereum were analyzed to gauge the feasibility of mass usage. Similar tests were done in Hyperledger to conclude on the optimum blockchain platform for Zakaah. An anomaly was detected during the testing phase of the decentralized app in the public testnet of Ethereum and it was exploited to propose a novel strategy to enhance the throughput of Ethereum. The testing is a pioneer in evaluating the throughput and feasibility of a blockchain based financial product and provides a benchmark to validate the business and technical hypotheses of other similar financial products and services.

SECURE AND TRANSPARENT CROWDFUNDING USING BLOCKCHAIN

Author(s): Khatter, Harsh; Chauhan, Hritik; Trivedi, Ishan; Agarwal, Jatin;
Publisher: IEEE in 2021
Keywords: Crowdfunding; Blockchain; Smart Contracts; Transparency; Entrepreneur

Crowdfunding is the practice by which an individual or an organization can raise funds for a project, where a large number of people contribute small amount of money, typically via the internet. In today's world whenever an entrepreneur wants to implement his idea into the real world, he needs some money to bring his idea to life. Earlier when crowdfunding platform were not available the entrepreneur were able to target only a limited number of people for funding of the project also it was very difficult for them to reach out to the people who can fund the project. Now a day's a number of crowdfunding platform like Kickstarter exists which allows the entrepreneur to post their ideas on the platform where backers can see the project and can contribute some amount of money to that project. These crowdfunding platforms made it easier for the entrepreneur to reach out to a large crowd worldwide who can support their project. In the existing crowdfunding system, despite having many advantages there are some problem related to these systems such as charging a huge amount of money for maintenance, transparency in the system, and trust. Our application can remove these problems related to the existing crowdfunding system by providing a more transparent system where every transaction can be stored on the blockchain using the Smart Contracts.

Application of blockchain technology and crowdfunding to solve structural inefficiencies in digital rights and patents: a comparative analysis

Author(s): Gabl, Andreas; Krehl, Stephan Ulrich;

Publisher: Massachusetts Institute of Technology in 2017

The markets for patents and digital rights, in particular music, are both highly inefficient and feature a large number of intermediaries which capture significant shares of the value created. Therefore, the patents and digital rights systems seem to be perfectly suited for disruption by blockchain technology and crowdfunding. This study examines the structural inefficiencies of the two segments and explores how blockchain and crowdfunding could solve these. We find promising use cases for both concepts in the market of digital rights. In contrast, while crowdfunding solves certain inefficiencies in the field of patents, we believe that blockchain technology has only limited impact here. This thesis is based on academic literature and professional journals in the fields of patents, music, crowdfunding, and blockchain technology as well as self-conducted interviews with industry, legal, and technology experts.

Secure and Decentralized Crowdfunding Mechanism Based on Blockchain Technology

Author(s): Kumari, Swati; Parmar, Keyur;
Publisher: Springer in 2021
Keywords: Blockchain; Crowdfunding; Ethereum; Smart contracts

Crowdfunding is a mechanism of raising capital from investors for funding new business ventures. To facilitate crowdfunding, different crowdfunding platforms are available, such as Kickstarter and Indiegogo. Crowdfunding platforms provide a convenient way of raising funds for startups from investors. The major downside of the conventional crowdfunding platforms is that they require users to pay few percentages of the fundraised to the crowdfunding platforms as platform fees (e.g., Kickstarter charges 5% of the total fundraised as platform fee). In addition to platform fee, users are required to pay transaction fees to the payment processors. In this paper, we propose a secure and decentralized crowdfunding mechanism based on blockchain technology. The proposed crowdfunding mechanism eliminates the need of conventional crowdfunding platforms that charge entrepreneurs a sum of money as platform fees. The proposed mechanism allows entrepreneurs to make use of the total fundraised from investors and provides an immutable ledger of transactions between investors and entrepreneurs.

Secure and Enhanced Crowdfunding Solution Using Blockchain Technology

Author(s): Madaan, Lakshit; Jindal, Dikshita; Kumar, Amit; Kumar, Suresh; Naruka, Mahaveer Singh;

Publisher: Springer in 2022

Keywords: Blockchain; Crowdfunding; Ethereum; Metamask

In the modern world, online crowdfunding plays an important role where many investors can fund projects presented by various creators. Our project aims to compare the pros and cons of conventional crowdfunding and blockchain crowdfunding. In conventional crowdfunding, one faces many issues such as transparency issues, fraudulent issues, investor abuse etc. However, to overcome these issues, blockchain crowdfunding comes into play. Blockchain crowdfunding helps to overcome the issues faced in conventional crowdfunding. To implement blockchain crowdfunding, we have proposed a model named ?Block Funding?, which is made using Ethereum smart contracts. It consists of a web app made of React/Next.js and Ethereum smart contracts used in the backend. It primarily focuses on all the basic crowdfunding features as well as voting through blockchain. Moreover, the model is deployed on a Rinkeby test network.

Blockchain-Enabled Equity Crowdfunding for Energy Storage Investments

Author(s): Cali, Umit; Halden, Ugur; Dynge, Marthe Fogstad; Bukvic-Schaefer, Aleksandra-Sasa;
Publisher: IEEE in 2021
Keywords: Blockchain ; energy finance ; crowdfunding ; energy storage ; levelized cost of storage

Driven by techno-economic and climate change concerns, the energy sector is becoming more decentralized and decarbonized. With the increased deployment of intermittent energy sources such as photovoltaics, the need for energy storage is increasing. However, high costs still create a barrier for investing in such options. In this study, the Levelized Cost of Storage for residential scale Lithium-Ion battery is evaluated by comparing traditional and novel financing options such as blockchain-enabled crowdfunding. The proposed Financial Technology tool can allow multiple smaller stakeholders to offer loans with longer dept tenors and lower interests which will allow digital partial ownership of such investments and provide extra incentives for rapid deployment of energy storage solutions. The findings illustrate the economic viability of energy storage systems entering the European energy sector and highlight how blockchain-based FinTech tools can further accelerate the deployment of energy storage systems through energy financing.

Blockchain-Based Crowdfunding Application

Author(s): Patil, Viren; Gupta, Vasvi; Sarode, Rohini;
Publisher: IEEE in 2021
Keywords: Blockchain ; Crowdfunding ; Smart Contract ; Ethereum

People's data is valuable and sensitive, and blockchain can significantly change how it is seen. All transactions are time- and date-stamped and are logged irreversibly. Smart contracts can even automate transactions, boosting your productivity and speeding up the process even further. After pre-specified conditions are met, the transaction or process moves on to the next stage. Smart contracts eliminate the need for human intervention and the reliance on third parties to verify that contract requirements have been satisfied. The issue of transparency and security is very paramount in any organization, especially in organizations providing crowdfunding platforms, therefore the intention to provide a reliable, secured, transparent and decentralized solution is achieved by developing a blockchain-based crowdfunding web application. This crowdfunding application is not just like any other application which just allows people to invest their money, but this platform also gives an assurance to the backers that returns will be guaranteed. The application will also provide transparency between the backers and the start-ups so that the backers can stay updated on the progress of the project work of the respective start-ups that they invested their money in. Money will be refunded to the backers in case the project is aborted in between.This will be a multi-user application with three different types of users: Admin, Backers, and Start-up. Admin can approve start-ups for listing. Start-ups can view the status of approval of their projects and funds raised in real-time. Backers can view the progress of the projects that they are funding as well as the general information about other projects listed on the application.

Blockchain-Based Smart Contract Design for Crowdfunding of Electrical Vehicle Charging Station Setup

Author(s): Thukral, Manish Kumar;
Publisher: Springer in 2021
Keywords: Electrical vehicles; Blockchain; Ethereum; Crowdfunding; Society of automotive engineers

Electrical vehicle (EV) technology is envisioned as a state of art technology in time to come. One main reason for paramount research interest in this field is that EVs are considered best alternative to counter environmental pollution caused by conventional vehicles. Although many renowned companies like Tesla, Nissan have launched their EVs, still there is hesitation among common masses in buying it. It has been found that in countries specially like India, lack of charging stations is the main reason for people not transiting to EVs as a prime mode of transportation. In this direction, government of India has taken visionary steps by launching schemes like FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles). Through such scheme, government is funding and giving subsidies to set up charging stations. In order to give pace to collect enough funds, the new emerging concept of crowdfunding can be very useful. In presented research work, a blockchain-based smart contract has been designed on Ethereum platform for EV charging station setup crowdfunding. The designed smart contract has been coded in solidity language. It has been implemented and tested on REMIX IDE Ethereum platform.

Digital disbursements over crowdfunding platform for start-ups in India with blockchain technology: a conceptual framework

Author(s): Upadhyay, Chandra Kant; Pandiya, Bhartrihari; Tewari, Vijayshri;
Publisher: Inderscience Publishers (IEL) in 2021
Keywords: crowdfunding; blockchain technology; fintech; entrepreneurship; India

The purpose of this paper is to connect the concepts of crowdfunding with entrepreneurship and how blockchain technologies can be introduced for the safety of the business and speedy transactions. The source of raising funds usually for business start-ups has expanded with most businesses using crowdfunding platforms to raise funds as it is economical and straightforward in nature. A model has been framed which describes an approach by which a start-up can connect to crowdfunding for its initial finances. A systematic and comprehensive literature review was undertaken to study the research done till now. To understand the current scenario the trend and future of this concept, Google Trends was used putting keywords. The various stakeholders in the transaction like investors, entrepreneurs, customers, and crowdfunding platforms are interconnected for timely and safe transactions. The conceptual framework proposed which provides a solution to the problems linked to crowdfunding through the use of blockchain.

Blockchain based Resource Tokenization for Crowdfunding of Wireless Network Investment

Author(s): Sevindik, Volkan;
Publisher: IEEE in 2021
Keywords: Resource tokenization ; crowdfunding ; proof of load ; resource pricing ; terminal diversity model ; distributed ledger ; consensus algorithms ; blockchain ; 5G

This paper presents novel blockchain based resource tokenization method to crowdfund wireless network deployment. Crowdfunding is a method of financing certain projects with the funds collected from individuals. The method presented in this paper finances the wireless network deployment projects by tokenizing proposed novel wireless resource units, and selling these units to investors. A new Data Tonnage Unit Per User (DTUPU) resource unit is introduced with a new pricing scheme depending on a load of a base station. A novel Proof of Load (PoLO) consensus algorithm is proposed which is used to verify load of a base station. Traffic Diversity Factor (TDF) and User Difference Factor (UDF) are proposed to determine the value of a base station and a cluster of base stations.

A Framework for Crowdfunding Platform Using Ethereum Blockchain Technology

Author(s): Mutharasu, Jatin Manav; Pandey, Utshav; Rethick, B; Kulkarni, Bhavika; Pawar, Mohandas;

Publisher: Springer in 2022

Keywords: Blockchain; Crowdfunding; Ethereum; dApp; Smart contract; Ledger

Crowdfunding involves collecting money from a great many people to subsidize a single project. It makes use of extensive networks of people to bring in investments to the project. Rewards-based crowdfunding offers investors rewards based on the amount of money donated. Traditional Crowdfunding platforms involve intermediaries and result in processing fees levied on all transactions. This results in subsided capital for the beneficiary. Using a blockchain-based approach eliminates the demand for intermediaries hence mitigating the processing fee levied. A blockchain is fundamentally secure, decentralized, auditable, and transparent in nature. This provides a trusted atmosphere where investors and beneficiaries can work together in a genuine and controlled fashion. There have also been cases where the project was fraudulent. Such contretemps intimidate potential investors. Blockchain-based crowdfunding can mitigate such occurrences using smart contracts. It can hence be inferred that a blockchain-based approach to crowdfunding is propitious.

Tokenomics: A new opportunity in the Real Estate business? A qualitative approach to crowdfunding and blockchain interaction

Author(s): Fabio, Creta; Tenca, Francesca Enrica;

Keywords: real estate crowdfunding; blockchain; tokenomics; tokenization

The article discuss how platforms administrators operating within the ecosystem of real estate crowdfunding could implement technology innovations such as blockchains or the use of digital tokens, and list the benefits that could be obtained by real estate sector. We introduce an exploratory analysis of multiple case-studies, consisting of twelve businesses that manage real estate crowdfunding platforms. The information gathered through interviews gives an idea of how the shared opinion of professionals in the trade is identified with factors and variables that impact on the opening of this alternative finance segment towards technology innovations that may bring radical changes to the real estate industry. In terms of implications, this is one of the first studies exploring the adoption of innovative technologies by real estate crowdfunding platforms and, as far as we know, it is the first to analyse the impact of tokenization.

Blockchain Integrated Crowdfunding Platform for Enhanced Secure Transactions

Author(s): Priya, Shubhangi; Srivastava, Garima; Kumar, Sachin;
Publisher: IEEE in 2021
Keywords: crowdfunding ; smart contract ; campaign ; PoA ; consensus

Building a project starts with innovation and idea but funding is a part that decides the evolution of the project from idea to product. During the last decade funding campaign and project via crowdfunding has become a common theme. With the COVID situation, it has become a necessity for NGOs, campaigns, projects, start-ups to consider the concept of crowdfunding and build seed funds through it, therefore organizations are trying to create a safe, secure, and fraud-proof gateway for people to get funds and as well as provide funds, which is hard in the current time of pandemic and technical advancements. It has become quite easy to fall into a trap and lose your hard-earned funds with cybercrimes as identity fraud, theft of financial data, and internet fraud. This work is an attempt to create a secure, efficient, and viable tool for crowdfunding. The solution proposed has Blockchain integrated to build trust among the funders and those raising these funds, with its characteristics as decentralized, irrefutable, distributed ledgers, consensus, and faster settlement. The proposed model has been built on the smart contract protocol, created for crowdfunding transactions, campaigns for the proposed model was implemented on remix ide, this will create a campaign for those in need of funds and for donors to donate funds to these campaigns. The campaign master has the right to reject or accept requests thus creating fraud and a tamper-proof environment. The model has been subjected to positive & negative unit and integration tests on mocha, the efficiency of the model obtained is at par with existing solutions with an added edge on security via smart contract protocols.

The Comparison of the Crowdfunding and Blockchain Based Funding Method (Initial Coin Offering-ICO) as Fund Collection Tool: Current Situation Analysis

Author(s): VERG_L_, Gizem; _AH_N, Eyyüp Ensari;

Internet and information technologies which are developed depending on internet, have succeeded to change the way human needs are met. This change has taken place in different areas, from the use of the internet in shopping to the development of fund collection methods. This development which has led to serious changes in the definition of money, has made the use of crypto coins in digital environments debatable in academic and business circles. The main factor underlying this change lies in the embracement of transactions without intermediaries. In recent years, the transaction cost of both individuals and businesses are high. In addition to this, especially enterprises, in reaching new sources of funding, endure serious costs. This study includes a summary of Crowdfunding and Initial Coin Offering as a blockchain based funding methods. In addition, the emergence of these systems, implementation styles, comparisons and legal regulations made for effective usage of the systems in Turkey and in the world are included in details. Keywords: Crowdfunding, Blockchain, Initial Coin Offering JEL Codes: E42, G24, K22.

A hierarchical structure model of success factors for (blockchain-based) crowdfunding

Author(s): Hartmann, Felix; Wang, Xiaofeng; Lunesu, Maria Ilaria;
Publisher: Routledge in 2019

Blockchain-based crowdfunding is an emerging economic phenomenon and a state-of-the-art strategy to finance ventures. The number of blockchain-based crowdfunding campaigns has increased drastically in the last few years. However, there is a lack of understanding of the success factors of such campaigns that would enable new ventures or entrepreneurs to design their blockchain-based fundraising initiatives properly and facilitate potential investors to seek main signals and drivers of outstanding projects. To fill the knowledge gap, we investigated what the success factors are for blockchain-based crowdfunding campaign and how they are related to each other in this chapter. We have applied a mixed-method approach, including an analysis of three key evaluation websites of blockchain-based crowdfunding campaigns and construction of an interpretive structural model based on experts? knowledge. The results of the study are a list of success factors of blockchain-based crowdfunding campaigns from both literature and practice and a hierarchical model of the relationships among these factors. The contribution of our study is a more extensive and structured understanding of what can lead to the success of blockchain-based crowdfunding campaigns.

Yes, We Can! Blockchain Based Crowdfunding and Crowdworking

Author(s): Billert, Matthias;

Keywords: blockchain-based smart contracts; crowdfunding; crowdworking; design science

In the current process of crowdfunding and crowdworking, many criteria-based conditions must be considered on different platforms. Assignments must be initiated for each platform, which costs time, money and resources. In order to counteract these challenges and reduce transactions, we developed a blockchain-based platform using a design-oriented approach. This platform accompanies the process from requirements to self-executing, event- and condition-controlled contracts in a partially automated manner. Based on the literature of crowdfunding, crowdworking and blockchain-based smart contracts, we derived requirements for a platform creation. While we contribute to the literature by eliciting design-oriented requirements, we show practical implications by building a blockchain-based platform concept for facilitating a more efficient combined crowdfunding and crowdworking process by reducing transactions.

Applying Ethereum Smart Contracts to Blockchain-Based Crowdfunding System to Increase Trust and Information Symmetry

Author(s): Nik Ahmad, Nik Azlina; Syed Abdul Rahman, Syed Abdul Halim;
Keywords: blockchain; crowdfunding; Ethereum; information symmetry; smart contracts; trust attributes

Crowdfunding is one of the most popular method to collect capital. However, various concerns and obstacles still need to be overcome in order to entirely gain benefit from crowdfunding. The information asymmetry is one of the crowdfunding problems where stakeholders receive different information. In response to this problem, this study aims to increase contributors? trust by providing more transparent transactions and reduce the information asymmetry through blockchain implementation in crowdfunding platform. This study reviewed the effects of blockchain implementation in crowdfunding system using Ethereum smart contract. To study the results, a blockchain-based crowdfunding system was developed. The results of this study include comparison between crowdfunding system that implemented blockchain and traditional crowdfunding system in terms of transparency of transactions, immutability of data, CRUD operations, speed of transactions and degree of information symmetry. Trust attributes were also assessed against the developed system. Overall result showed that implementation of blockchain in crowdfunding system provide higher transparency which can reduce the information asymmetry and increase stakeholder's trust to contribute and raise money via crowdfunding platform.

Crowdfunding Non-fungible Tokens on the Blockchain

Author(s): Basu, Sean; Basu, Kimaya; Austin, Thomas H;
Publisher: Springer in 2021
Keywords: Blockchain; Non-fungible; tokens Crowdfunding; Storage

Non-fungible tokens (NFTs) have been used as a way of rewarding content creators. Artists publish their works on the blockchain as NFTs, which they can then sell. The buyer of an NFT then holds ownership of a unique digital asset, which can be resold in much the same way that real-world art collectors might trade paintings. However, while a deal of effort has been spent on selling works of art on the blockchain, very little attention has been paid to using the blockchain as a means of fundraising to help finance the artist's work in the first place. Additionally, while blockchains like Ethereum are ideal for smaller works of art, additional support is needed when the artwork is larger than is feasible to store on the blockchain.
In this paper, we propose a fundraising mechanism that will help artists to gain financial support for their initiatives, and where the backers can receive a share of the profits in exchange for their support. We discuss our prototype implementation using the SpartanGold framework. We then discuss how this system could be expanded to support large NFTs with the 0Chain blockchain, and describe how we could provide support for ongoing storage of these NFTs.

Creating value in equity crowdfunding platforms using blockchain technology

Author(s): Nunes, Rui; Alturas, Bráulio; Fernandes, Adriana L;
Publisher: IEEE in 2021
Keywords: equity crowdfunding ; blockchain ; distributed ledger technology ; smart contracts

Crowdfunding platforms are increasingly used as a means of attracting investment, donations or loans to finance projects, companies, organizations and causes. In equity crowdfunding, the investor acquires a stake in a company or project and is remunerated according to its success. This article aims to demonstrate how Distribuited Ledger Technology (Blockchain) can help mitigate some of the problems associated with equity crowdfunding platforms or even add features and capabilities, making them more appealing to fundraisers and investors. Through the design and modeling of an equity crowdfunding platform that uses a deconcentrated ledger to record the transactions that took place there, with the capacity to load and execute smart contracts, it was possible to verify that blockchain technology can create value in this type of platform, being able to mitigate or even solve some of the problems associated with this type of crowdfunding.

Toward eHealth with Blockchain: Success Factors for Crowdfunding with ICOs

Author(s): Tönnissen, Stefan; Teuteberg, Frank;
Publisher: Springer in 2021

Blockchain is seen as having high potential for the healthcare industry. In addition to the technological properties of the blockchain, crowd funding via Initial Coin Offerings (ICOs) has also become a significant way of financing for start-ups in the healthcare industry. These ICOs are significantly different from familiar funding channels and therefore require intensive consideration of the factors relevant to success. Numerous papers have explored the success factors, but without considering the specifics of the healthcare industry. We fill this research gap and, based on hypotheses and a quantitative analysis of freely available data, show the factors relevant to the healthcare industry for a successful ICO. As a result, we show clear differences to the previously known success factors for ICOs and thus prove that the success factors of ICOs require an industry-specific consideration. Start-ups receive valuable advice on how to design a successful ICO. For the scientific community, there are starting points for further research into the success of ICOs.

Comparing Far Right and Jihadi Use of Crowdfunding, Cryptocurrencies, and Blockchain Technology: Accessibility, Geography, Ideology

Author(s): Warreth, Shahed;

Previous academic research and policy work has focused predominantly on terrorist, i.e. jihadi, financing, while far right financing has predominately received the attention of journalists and media outlets. To date, no work has been done that compare s and contrast s how the far right and jihadi groups utilise crowdfunding, cryptocurrencies, and blockchain technology. This dissertation seeks to shed light on how both ideologies use them, as well as the advantages and disadvantages of this use to each . It fin ds that far right groups are far more successful than jihadi groups in their use of these methods and technologies. This is due to three factors: the accessibility and proliferation of online crowdfunding platforms, and integration of cryptocurrencies and blockchain; the impact of geographical location and legislative constraints on accessibility; and the influence of ideology. Both the ideological and geographical conditions are much more favourable to the far right, therefore leading to reduced accessibil ity and uptake by jihadis. Academic literature, news articles, think tank reports, and government documents were consulted to discuss the definitions of extremism, terrorism, and crowdfunding, as well as instances of far right and jihadi financing. Such so urces are also used to provide an overview of cryptocurrencies and blockchain technology.

Fraud-Resistant Crowdfunding System Using Ethereum Blockchain

Author(s): Panda, Sandeep Kumar;
Publisher: CRC Press in 2020

The blockchain is a distributed, decentralized, and immutable database system built on top of peer-to-peer (P2P) network through which digital assets can be transferred securely from all over the world. After the successful implementation of blockchain in Bitcoin, many applications and platforms evolved for the development of blockchain technology. Ethereum is one of the most widely used blockchain platforms for developing the Dapps. This chapter presents the specifics of functioning, drawbacks, and problems in the current crowdfunding platforms such as Kickstarter. Using Ethereum and the concept of smart contracts, the crowdfunding platforms can be implemented in a secure and profound way without being afraid of the fraudulent spending of the money raised through the funding. In this chapter, all the details and the technicalities in the implementation of the crowdfunding platform through Ethereum blockchain network are elucidated in a scholarly manner.

Crowdfunding, Cryptocurrency, and Capital: Alternative Sources of Business Capital for Black Entrepreneurs

Author(s): Howard, Tiffiany;

Publisher: Center for Policy Analysis and Research in 2019

Having access to capital is essential to the success of every business, and its ability to keep pace with its competitors. Historically, banks have featured prominently as the primary lender to businesses. Bank investors provide new businesses with startup capital, and support established businesses with capital to grow and expand their companies2. According to a study by the U.S. Department of Commerce Minority Business Development Agency,3 black owned businesses continue to encounter barriers when it comes to accessing capital. Internal and external factors have been cited, but three causes have been highlighted as the key obstacles: 1) the credit worthiness of black-owned business owners; 2) institutional racism and discrimination; and 3) the lack of social capital and relational networks.4 Despite these impediments, technological innovation now offers black entrepreneurs more opportunities than ever before to attract investors. Crowdfunding and crowdsourcing platforms, such as Kickstarter, Fundable, GoFundMe, Indiegogo and AngelList are now viable alternatives for black owned businesses to pursue in order to raise startup funds. Similarly, cryptocurrency, such as Bitcoin, has expanded investment opportunities for African American entrepreneurs by allowing international entities to invest in U.S. based companies. This policy brief examines the traditional barriers that African American businesses encounter when seeking access to business capital, and how black entrepreneurs can use innovations in technology to overcome these barriers, and start and grow their businesses.

Decentralized Crowdfunding Platform Using Ethereum Blockchain Technology

Author(s): Jadye, Siddhesh; Chattopadhyay, Swarup; Khodankar, Yash; Patil, Nita;
Keywords: Blockchain; Crowdfunding; e-Voting; Ethereum; Cryptocurrency

In today's world, blockchain-based systems are in demand across various industries, because of its secure, trusted, and decentralised network as well as for being more efficient than the traditional methods. However, the traditional ways these days are facing a lot of issues and challenges because of the complex and less secure network. Blockchain network integration overcomes the problems faced by traditional methods across industries. The Blockchain integrated network provides benefits such as increased security, increased transparency, increased efficiency and decreased chances of fraud. Although the blockchain-based systems provide various benefits, due to lack of knowledge about this technology, the implementation rate is low. In this work, we have highlighted the distinction between the traditional crowdfunding platform as well as blockchain network-based crowdfunding platform and the benefits of implementing blockchain network in other sectors. This work highlights the issues and challenges faced by the industries, as mentioned earlier, by using the traditional methods as well as the solutions to the problems provided by the blockchain network-based systems to those industries. This work helps the people to understand the benefits of blockchain network-based systems in their respective industries as well as execute it to improve the transparency, efficiency, and security of the system altogether.

Blockchain-Based Crowdfunding: A Trust Building Model

Author(s): Gada, Sayyam; Dhuri, Akash; Jain, Denish; Bansod, Smita; Toradmalle, Dhanashree;
Publisher: IEEE in 2021
Keywords: Blockchain ; Ethereum ; Smart Contract ; Solidity ; Crowdfunding ; Digital Identity

Blockchain-based crowdfunding is one of the new, upcoming alternatives to the traditional centralized approach to crowdfunding. Traditional crowdfunding platforms are vulnerable to data leaks, high transaction and platform fees, and rampant frauds which happens due to the anonymity of user?s identity i.e., users cannot be identified when they commit cybercrimes. As blockchain is immutable and decentralized, it can reduce the possibility of data breaches. This brings in transparency as there is no central authority over the blockchain-based crowdfunding system. This paper attempts to solve these existing issues with the aid of a digital identity management system with an underlying Blockchain system. By implementing blockchain in a digital identity management system, malicious users can be identified and action can be taken against them. This paper explores donation-based crowdfunding using Ethereum as a framework and has been tested on the Rinkeby Test Network. This system can conduct several crowdfunding campaigns simultaneously. This paper explains the smart contract written in Solidity language in detail.

Crowdfunding, Crypto-Currency, Blockchain, Financial Dealings: Review of Business Planning, Challenges and Issues

Author(s): Ullah, Nazim;

Keywords: Financial innovation; business planning; challenges and issues

Corporate sustainability has moved from exploitation to exploration, from corporate environmental management to sustainable entrepreneurship, and from efficiency to innovation. The purpose of the study is to review global entrepreneurship, innovation and Sustainability - theory and practice, entrepreneurship micro ? enterprise idea/ project and critical reflection of entrepreneurial theories, concepts and techniques. The study reviews a number literature from different journals ranging from 1994-2016. Based on the review, crow-funding and crypto-currency are the new innovation in the business world and used for financial dealings. Innovative idea should be based on emergency and urgent demand like mask and PPE all over the world. Furthermore, in addition to technology, competition is vital as it ensures that competing businesses provide the target market with quality goods and services.

Tracking the digital evolution of entrepreneurial finance: the interplay between crowdfunding, blockchain technologies, cryptocurrencies, and initial coin offerings

Author(s): Bogusz, Claire Ingram; Laurell, Christofer; Sandström, Christian;
Publisher: IEEE in 2020
Keywords: Blockchain ; crowdfunding ; cryptocurrencies ; initial coin offerings (ICOs) ; social media analytics (SMA)

A vibrant development is currently taking place in entrepreneurial finance due to the field's digital evolution over recent years. This article aims to assess the interplay between four of the key phenomena that has fuelled this development, namely crowdfunding, blockchain technologies, cryptocurrencies, and initial coin offerings (ICOs). By making use of social media analytics, public discussions on social media concerning crowdfunding, blockchain technologies, cryptocurrencies, and ICOs have been systematically tracked in social media over three time periods between the May 6, 2017, and October 2, 2018. In doing so, a total of 197 770 captured posts across social media platforms have been collected and analyzed. The results illustrate that discussions on blockchain technologies dominated the interplay in the first analyzed time period, that discussions on cryptocurrencies and ICOs dominated the interplay in the second analyzed time period, while discussions concerning blockchain technologies, cryptocurrencies, and ICOs highly converge in the third time period. By illustrating this shift over the analyzed time periods and by offering a systematic exploration of key characteristics of the interplay at hand, this article adds to previous literature on entrepreneurial finance by providing an empirical contribution which details the coevolution of these phenomena in recent years.

Blockchain-based crowdfunding

Author(s): Baber, Hasnan;
Publisher: Springer in 2020

Crowdfunding has disrupted the way of financing and allowed the startups to raise funds without much hustle and bureaucracy. In the existing model, Pool of people contribute small amounts of money towards a project or cause and expect some financial or non-financial returns. A crowdfunding platform takes a commission and matches the needs and expectations of funders and fundraisers. Blockchain technology is a decentralized ledger, more efficient, safe and tamper-proof system of nodes in connection. Introduction of blockchain in crowdfunding will make it more reliable, transparent, trusted, decentralized, cost-efficient and convenient. A crowdfunding platform which was acting as an intermediary before will only provide the technology and name is its own crypto-currency which will act as a medium of transaction and exchange. Fundraisers will generate their own currency and everyone on the network will be notified about the project. Funders will buy this crypto-currency to claim its share in the project and can withdraw any time by selling the currency and losing the share in a project or transferring it to another project. Blockchain can further improve this unique and contemporary way of raising funds by making out more reliable and transparent.

The application of blockchain technology in crowdfunding: towards financial inclusion via technology

Author(s): Muneeza, Aishath; Arshad, Nur Aishah; Arifin, Asma Tajul;
Keywords: Blockchain Technology; Crowdfunding; Financial Inclusion; Islamic Finance and Banking; Islamic Crowdfunding;

The emergence of innovative digital financial technologies, namely blockchain and crowdfunding, indicates new ways to reach the poor and economically vulnerable groups. This paper contributes to the emerging literature on financial technology by presenting the case of crowdfunding in financial inclusion. The rationale behind this inquiry is to demonstrate the relevance of crowdfunding to financial inclusion, and how might blockchain technology fuel the development of crowdfunding. This paper also constitutes one of the first attempts to analyse crowdfunding in Malaysia and Shariah-compliant crowdfunding. In this paper, a desk research is conducted where journal articles, books, magazines, newspapers, industry reports published on the subject matter are reviewed critically. To analyse the development of crowdfunding in Malaysia, 6 crowdfunding platforms are examined. The outcome of this research suggests that crowdfunding is a viable means to promote financial inclusion, and blockchain technology could help mitigate the current issues faced by platform operators.

Disruption of financial intermediation by FinTech: a review on crowdfunding and blockchain

Author(s): Cai, Cynthia Weiyi;
Publisher: Wiley Online Library in 2018
Keywords: Blockchain; Crowdfunding; Financial intermediation; FinTech

Based on a systematic review of influential publications among 402 paperspublished between 2010 and 2018, this paper identifies gaps in Economics andFinance research regarding two applications of FinTech: crowdfunding andblockchain. Analysing these records shows that (i) current research on FinTechis fragmented with limited theoretical grounding; (ii) crowdfunding andblockchain can be regarded as two innovations that may disrupt traditionalfinancial intermediation but in different ways; (iii) crowdfunding platformssubstitute for traditional financial intermediaries and serve as a new interme-diary, without eliminating the need for intermediation; (iv) similar tocrowdfunding, blockchain also creates new intermediaries; and (v) the trustelement inherent in blockchain enables blockchain to eliminate the need forintermediaries in some financial areas but not all.

Analysis and outlook of applications of blockchain technology to equity crowdfunding in China

Author(s): Zhu, Huasheng; Zhou, Zach Zhizhong;
Publisher: Springer in 2016
Keywords: Blockchain; Equity crowdfunding; Equity registration and transaction; Voting of Shareholders; Regulation of equity crowdfunding

Equity crowdfunding via the Internet is a new channel of raising money for startups. It features low barriers to entry, low cost, and high speed, and thus encourages innovation. In recent years, equity crowdfunding in China has experienced some developments. However, some problems remain unsolved in practice. Blockchain is a decentralized and distributed ledger technology to ensure data security, transparency, and integrity. Because it cannot be tampered with or forged, the technology is deemed to have great potential in the finance industry. This study examines current problems in the practice of equity crowdfunding in China. Based on the analysis of the characteristics of blockchain technology, this study further explores its practical applications in equity crowdfunding. 1) Blockchain technology may be a secure, efficient, low-cost solution for the registration of stocks and shares of a firm financed by crowdfunding; 2) Blockchain technology simplifies the transaction and transfer of crowdfunding equities, and thus facilitates their circulation; 3) Blockchain technology enables peer to peer transactions between investors and entrepreneurs, and solves the problems of regulatory compliance and security of fund management; Blockchain technology can be used to develop a voting system for crowdfunders, which enables them to be involved in corporate governance. This helps protect the rights and interests of small investors; 5) Blockchain technology helps regulators know about market conditions, and supports regulatory activities such as managing investors and fighting money laundering.

Equity crowdfunding based on the blockchain??A Delphi study

Author(s): Heieck, Felix; Ermakova, Tatiana; Fabian, Benjamin; Lessmann, Stefan;
Keywords: Blockchain; Crowdfunding; Equity; Bitcoin

Purpose: Decentralized, blockchain-based equity crowdfunding has potential to close the equity-funding gap faced by startups. The present paper investigates the driving forces of equity crowdfunding and the impact of the blockchain.
Design: In a two-round, expert-based Delphi survey, ten market-driving forces within equity crowdfunding are identified and ranked according to how they influence equity crowdfunding, and in turn, how they are influenced by blockchain technology.
Findings: Savings and financial benefits, facilitation of the financing process, satisfaction of intrinsic and social needs, outreach of projects and products, costs from equity funding, and financial provision were found to have a positive effect, whereas risks from equity crowdfunding, educational gap, investor protection, and monitoring problems and asymmetric information were found to have a negative impact on equity funding.
Research limitations: Any Delphi study depends on the selection and interactive votings of experts.
Practical implications: Experts assessed that the blockchain has a positive influence on all of those forces, also to a certain extent counteracting negative effects. This indicates that Equity Crowdfunding Based on the Blockchain can be viable approach for financing startups if the counteracting effects are sufficiently mitigated.
Originality: Blockchain-based equity crowdfunding has the potential of becoming disruptive.

Real Estate Crowdfunding for Public Housing on the Blockchain

Author(s): Mohamed, Hazik;
Publisher: Springer in 2021
Keywords: Digitalization; Distributed ownership; Peer-to-peer; Risk-sharing; Tokenization

The rise of frontier digital technologies for financial services, like peer-to-peer (P2P) crowdfunding, indicates new ways to access alternative financing over traditional financing. This research contributes to the nascent literature on digital finance in real estate crowdfunding, and its potential of being applied to public housing. The idea of such a platform on the blockchain is this paper's second conceptual innovation. The rationale is to illustrate the significance of crowdfunding to alternative financing, and how blockchain technology might improve the weaknesses of crowdfunding. The real estate industry needs to embrace new solutions, capable of dealing with its traditional problems and to increase efficiency, sustainability, accountability and prevent market failures within the economy. In this new market environment, we review real estate crowdfunding acceptance in the US, Europe and Asia as well as conceptualize tech-enhanced platform that adopts the blockchain to improve the crowdfunding process for real estate public housing. This can be achieved by exploring new peer-to-peer (P2P) opportunities with better management of information and reduction in origination costs.

Research on the Application Model of Public Welfare Crowdfunding Based on Blockchain Technology

Author(s): Fan, Ye; Ao, Chen; Jingren, Liang;

Publisher: IEEE in 2021

Keywords: Blockchain technology ; Public welfare crowdfunding ; Application model

With the improvement of China's economic level and science and technology, the public welfare crowdfunding industry is booming, and at the same time, it has gradually exposed many existing shortcomings in the industry. Aiming at the current pain points in the field of public welfare crowdfunding, based on the open consensus, decentralization, and non-tamperable technical characteristics of the blockchain and its available points in the field of public welfare crowdfunding, this article introduces the concept of "public welfare points", innovatively A new application mode of public welfare crowdfunding with reasonable incentive operation mechanism is proposed.

Developing Public-Private Partnership Model with Blockchain-Based Crowdfunding Concept for Port City Project

Author(s): Berawi, Mohammed Ali; Reyes, Gabriel; Sari, Mustika; Saroji, Gunawan;
Keywords: Port-city; Crowdfunding; PPP; financing scheme; Blockchain

Port-city development is believed as a strategy to increase regional economic growth by improving the welfare of coastal communities, particularly in the archipelagic countries. However, this development needs huge investment to construct both its physical and social infrastructure components. Therefore, the participation of the private sector in the financing aspect is encouraged to improve the project viability and enhance the performance of the capital budget. This research aims to develop an alternative public-private partnership (PPP) model that can attract the interest of both institutional and individual private investors, by proposing financing model that incorporate the crowdfunding method. To achieve its objective, this research adopts both qualitative and quantitative methods conducted in three stages, by firstly carrying out desk study and benchmarking to develop the crowdfunding-based PPP financing scheme, and followed by life-cycle cost (LCC) analysis in the next stage, to examine the financial feasibility of the proposed scheme by taking into account the initial cost, operation & maintenance, and revenue. Lastly, along with an institutional scheme considering the sharing of investment and responsibilities between private companies and individual crowdfunders, this research also formulates the workflow of the transactions conducted in the crowdfunding framework built in the Blockchain platform. The results of this study show that the crowdfunding-based PPP model is feasible to be developed in the investment of landed housing projects of the port-city development, with 15.54% of the internal rate of return obtained from the implementation of the proposed financing mechanism.

Secured Crowdfunding Platform Using Blockchain

Author(s): Sahu, Megha; Gangaramani, Ashish; Bharambe, Asha;
Publisher: Springer in 2021
Keywords: Smart contract; Backer; Campaign; Campaign creator/manager; Rinkeby network; Metamask

Crowdfunding is a platform can be used to collect small amount from large number of people. In Traditional platform it is not easy to track the usage of the fund. Hence campaign creator can use money for their own need.This paper proposes a solution on how to prevent such fraud in crowdfunding platforms using blockchain and smart contracts. The main aim of this solution is to propose a solution that can reduce those effects. The important feature of Blockchain is that it maintains transparency among the nodes in the network. We are proposing a solution keeping this feature in mind to implement campaign as smart contracts designed for crowdfunding websites where campaign managers will need to get approval based for their requirements from backers. The proposed solution has been implemented using Ethereum and tested on Rinkeby Network.

THE USE OF BLOCKCHAIN IN CROWDFUNDING

Author(s): Nauryzbaev, OA; Zhusupova, A;
Keywords: Crowdfunding; Blockchain; banking system; fund-raising; platforms; private & public blockchain

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.

Can Blockchain Technology-based Crowdfunding advance the Social Value Creation

Author(s): Hoang, Thinh Gia; Nguyen, Giang Ngo Tinh; Van Nguyen, Anh;
Publisher: Academy of Management Briarcliff Manor, NY 10510 in 2021

This paper explores the hands-on applications of blockchain technology in social crowdfunding platforms (SCPs). The emergence of blockchain technology in financial world promise a promising solution for the current difficulties, and facilitate the development of SCPs. By conducting a qualitative research, we shed the lights on how blockchain technology can be employed to facilitate the social value creation of crowdfunding. To the end, we identified facilitators of the social value creation process through blockchain technology such as reducing operational costs, increasing trust and transparency, and facilitating a broader crowdfunding community, and the barriers of this application in terms of development costs and legal requirements.

Decentralized Application for Charity Organization Crowdfunding using Smart Contract and Blockchain

Author(s): Lee, Winson; Rahim, Nordiana;

Keywords: lockchain; crowdfunding; data protection; ethereum; smart contract

There are limitations as to the current centralization of crowdfunding web applications that are found online. The first problem found in this project is the issue of integrity involving important assets such as transactional records in crowdfunding. The second issue is the issue of traceability whereby modifications in the assets should be traceable with evidence. Lastly, the issue of third-party dependency and no point-to-point transfer. This project aims to develop, design, and evaluate the crowdfunding web application system based on blockchain using smart contract. The scope of the project is open to all registered users who want to use the website for crowdfunding purpose. The expected result of this project is allowing individuals to register their accounts and start the process of crowdfunding by transferring their cryptocurrency online.

Limpid and Unperturbed Decentralized Application for crowdfunding using Blockchain Technology

Author(s): Athreya, A Manoj; SM, Nagarajath; HL, Gururaj;

Keywords: CROWDFUNDING; BLOCKCHAIN; SMART CONTRACTS; PEER-TO-PEER NETWORK; INTERNET

Crowdfunding as the name relates its raising of funds from a vast number of sources. This can be an individual or an organization that merely wants to contribute for a noble cause. In layman terms, it can be referred to as funding given by an anonymous crowd with a belief that they are helping a section of the society to fight and overcome their monetary problems. This is being achieved via the Internet where people or groups raise funds to help others during a natural catastrophe or some community-oriented social projects, entrepreneurial ventures, travel, medical expenses and many more. The present-day scenario is such that once people transfer money into a particular venture no one knows what happens to the money generated. As a solution, one needs to track down the flow of money and thereby maintaining appropriate transparency. We propose an approach through this paper, of a decentralized system built using Blockchain Technology where once the investor funds money to a venture the transactions will be captured. If in case, the endeavor initiated accumulates the money within the stipulated time then it is utilized or else the money is returned back to the investor. This platform will eliminate the middlemen completely. It is transparent and more secure and thus acts as a huge savior for the people in need. A decentralized approach to crowdfunding forfeits all fees for the investor, gives the receiver more share of the project, and allows for a peer-to-peer relationship between the investor and receiver.
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Blockchain, marketplace lending and crowdfunding: emerging issues and opportunities in fin tech

Author(s): Greene, Edward F; Amico, Jeffrey M; Bala, Surya;
Publisher: Edward Elgar Publishing in 2018

The financial sector appears to be on the verge of a significant transformation. Traditional market participants such as banks, investment advisors and institutional investors are beginning to face disruptive pressure from a wide array of advances in financial technology, or 'fin tech'. New forms of competition have emerged, seeking to address perceived inefficiencies in various core business lines of the financial system, including lending money, raising capital and transmitting money between individuals. As this transformation plays out, regulators will need to adapt existing regulatory structures or create new ones to keep up. In particular, they must find the proper balance between protecting consumers from abuse while also allowing these new technologies to modernize and improve financial markets. This chapter focuses on three of these recent developments in closer detail: marketplace lending, crowdfunding and blockchain technology. While the applications differ, all three rely on a common model: eliminating the role of traditional intermediaries and thus enabling market participants to connect and transact with each other directly. This form of ?dis-intermediation? promises speed and efficiency, as processes like approving loan applications, raising capital and transferring money can now take mere seconds (or less) instead of days or weeks. At the same time, it also creates risk for consumers, as highly regulated entities such as banks stand to be replaced by software applications and peer-topeer networks that largely sit outside of existing regulatory frameworks. Regulators must carefully develop policies that maximize the benefits of these technologies for consumers while mitigating their costs.

Crowdfunding & Cryptocurrency-A New Conduit to Film Finance

Author(s): Hamilton, J Christopher;
Publisher: HeinOnline in 2020

Despite the normal volatility in the film industry, it remains as robust as ever and is projected to grow to $47.9 billion dollars by 2022, slightly outpacing the U.S. economy. Prior to the latest wave of media consolidation, seven major studios controlled four-fifths of the film industry's revenue in 2017. Superhero films and other costly genres represent a large portion of that revenue, which have dominated the marketplace. This over-indexing in the production of genre films is a result of the major studios trying to generate massive audiences by producing tent pole pictures. The combined industry box office revenue in 2018 was almost 3.3 billion, largely due to the success of genre films. However, these types of revenues do not cultivate much of an appetite in the industry for funding arthouse films. Nor does this trend of massive budgets bode well for the inevitability bursting the spending bubble or a mega picture flop.

The increased fragmentation of viewing audiences, the shrinking theatrical windows, and the exploitation of the indie film market by streaming services like Netflix, has shifted the economics of the film business. From the arthouse moviemaker to the major studio producer or film financier/venture capitalist, everyone is looking for new diversified investors to help mitigate their risk and stabilize their investments through strategic co-financing models. That is why many in the entertainment business see the emergence of crowdfunding and cryptocurrency as the answer to some of these film financing dilemmas. Through changes in equity crowdfunding legislation combined with new technological advances like blockchain, producers may be able to effectively hedge their costly investments, while generating a more expansive investor pool to fund the dearth of arthouse pictures.

These high-tech innovations, new business models and legislative advancements promise to overcome the longstanding barriers to progressive changes in the film industry like combating inefficient and unfair business practices and the exclusivity of film investments as an asset class limited to the wealthy and well-connected. There are still lots of regulatory, technological and credibility hurdles to surmount before crowdfunding with cryptocurrency becomes a viable or practical industry-wide solution for raising capital. But there's strong evidence that the latter might be a real possibility sooner than we think. Equity crowdfunding coupled with cryptocurrency through blockchain will be the key to unlocking that future capital. So, whether cryptocurrency through blockchain helps connect unbanked communities to the global economy, supplant Byzantine bureaucracies in film financing or just guarantees fair dealing in a business transaction with potentially dubious investors, it will certainly live up to its moniker as the internet 2.0 for Hollywood. Revolutionizing film finance is now more important than ever as the Covid- 19 tsunami envelopes the entertainment business and our global economy.

Equity crowdfunding with blockchain

Author(s): Aba, A; Virgo, J; Sorell, M;
Publisher: Tallinn University of Technology in 2017
Keywords: Blockchain; smart contracts; cryptocurrency; Ethereum; equity crowdfunding; distributed ledger; bitcoin; fintech

bitcoin?s underlying technology, the blockchain, or the distributed consensus ledger, has allowed mutually distrustful parties to securely transact virtual currency stored on a decentralised database with minimal time expense and nancial friction, e ectively eliminating the need for a trusted intermediary. the realisation that this technology can be more broadly applied to other digital assets led to the advent of smart contracts; an agreement whose execution is both automated and enforced by the cryptographic consensus of the distributed ledger. this revelation bares significant ramifications for the financial services industry. in particular, blockchain technology presents an opportunity for emerging companies to undercut the large industry incumbents who have enormous amounts of capital tied up in traditional methods of transacting and storing nan- cial information. however, before blockchain can be integrated into existing businesses, the risks of the technology need to be explored and further understood. for instance, the recent security breach of an ethereum block- chain application, ?the dao?, in july 2016 saw the equivalent of usd$50 million in cryptocurrency at stake1, highlighting the pertinence of research into blockchain. this case reminded investors that, whilst theoretically sound, exploits in the underlying technology are still possible, and a single such security vulnerability can expose all the users of an entire blockchain network. considering cryptocurrencies and blockchain applications are expect to become the new fabric of trade and commerce, this uncertainty is alarming. through our research into applications of blockchain within crowdfunding, we hope to further under- standing of how the technology may be realistically and securely integrated into existing businesses, and society more broadly.

Potential impacts of blockchain based equity crowdfunding on the economic feasibility of offshore wind energy investment

Author(s): Cali, Umit; Stekli, Joseph;
Publisher: American Institute of Physics in 2020

This paper explores the potential to reduce the levelized cost of electricity (LCOE) of offshore wind technology through the use of digitalized f inancial innovations made possible by Distributed Ledger Technology (DLT). Specifically, this paper proposed a novel application of DLT to crowdsource project finance for clean energy projects. An introduction to DLT technology and some of its potential applications is provided f irst. Next, the potential to move from a more centralized, top-down energy system to a more decentralized, two-way transactive energy system enabled by DLT is discussed. Within this new energy system framework, the idea of crowd-sourced equity funding of the capital cost of renewable energy is introduced. The impact of crowdfunded equity on the LCOE is then explored via the creation of a theoretical offshore wind installation off the coast of New Jersey. An existing offshore wind capital cost model is modified for use in the U.S., and an existing wind annual energy production model is utilized to provide inputs into a LCOE model. Finally, the potential impacts that DLT based crowdfunded equity may have on cost of debt, debt tenor, and debt-to-equity ratio are also input into the LCOE model in order to examine the range of potential impacts it may have on offshore wind LCOE.

Application of blockchain technology in crowdfunding to fuel the rise of the rest globally

Author(s): Muneeza, Aishath; Mustapha, Zakariya;

Keywords: Blockchain Technology; Crowdfunding; Islamic Finance

Technology has advanced with the spread of internet services. Statistics by the United States have estimated that internet facilities have been made available to over a third of the total world population and, in the same vein, access to mobile phones has been rendered to about 85 percent of the population. Crowdfunding finds widespread support via internet platforms and is gaining momentum as a means to empower people and businesses hitherto unable to access banking or access limited facilities therefrom. Today, it has become a mechanism for raising funds to build multi-billion-dollar industries. It is said that the difficulties encountered while struggling to source funds by newly-formed businesses following the 2018 global financial meltdown led to the emergence of crowdfunding. The objective of this research is to present a discourse on how crowdfunding can be facilitated leveraging on blockchain technology. This is a qualitative research where data from literature on the subject matter is analysed and conclusions derived. Outcome of this research revealed that integrating blockchain technology with crowdfunding is possible and benefits all parties involved in the transaction. This integration reduces transaction cost and, from governance perspective, provides certainty and trust to the system and mitigates risk for the parties.