

# Perspect for Adoption of Blockchain Platform to Reform Digital Transaction

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*Abstract*— This paper depicted the adoption of a blockchain platform to reform digital transactions based on a “Peer-To-Peer digital transaction System”. The digital transaction for the One-to-One model may allow online payments to be sent directly from one person or node to another without going through a third-party financial institution. Bitcoin was the first realization of this concept i.e cryptocurrencies are the label that is used to describe all networks and mediums of exchange that use cryptography to secure transactions-as those systems where the trusted transactions are channeled through a centralized manner. Blockchain technology is applied to any digital asset transaction online. The impact and revolution of blockchain in the financial industry and demonstrate the main characteristics of such technology. Then present some critical challenges as well as ethical issues about using blockchain technology. The implementation of blockchain for the financial organization to define the right way for banks to explore it, In order to have a good understanding of the industry, a qualitative method was adopted. Many of the benefits that can be achieved using blockchain technology already exist, and governments, international organizations and industry should be facilitating their implementation. Blockchain innovations by creating a technology bank and fund, ensuring the security of its citizens to explore the policy implications of payment tokens (so-called “cryptocurrencies”). is the most appropriate way to apply tax rules to online transactions. Blockchain technology is observed in applications for both financial and non-financial areas that traditionally relied on a third trusted online entity to validate and safeguard digital entities. The research has explained that the future of cryptocurrencies can be bright if some institutional-formal conditions are met due to the fact that the successful evolution of e-money requires building safety payments through three criteria—standardization, compatibility, and innovation. The blockchain is followed by a distributed ledger technology in the form of a distributed transactional database, secured by cryptography, and governed by a consensus concept. A blockchain is essentially a record of digital events This paper investigates the use of blockchains in the financial sector. This research has the objective to find out how blockchains are applied to the financial sector conditions to transactions online. In India, many of the authentication procedures based on the equipment possessed by the consumers are used to the introduction of the blockchain in the authentication part is prominent. first, the move to introduce a closed (private) distributed ledger that does not go through the RBI is accelerating in payments between banks. second, consumer needs and technological developments are changing. blockchain technologies avoid trusted third parties and safeguard against a single point of failure and other issues. In this special issue, we present early research results that investigate the positive implications of blockchain for

modern organizations, While blockchain technology is commonly considered potentially disruptive in various regards, there is a lack of understanding of where and how blockchain technology is effectively applicable. This issue has risen to critical sound that analysis the technology as over-hyped. Against this backdrop, this study adopts an established research framework to structure the insights of the current body of research on blockchain technology. The review shows that research has predominantly focused on technological questions of design and features while neglecting application, value creation, and governance.

**Keywords:** Blockchain, Financial industry, Ethical challenges, Blockchain adoption, Recommendation for Blockchain adoption, Distributed ledger technology, Digitalization, Blockchain consensus mechanism, cryptographic

## I. INTRODUCTION

Blockchain platform has been introducing become popular due to the rise of bitcoin. But this technology is not limited to the financial area. A Blockchain originally means blocks linked by chains The idea of the digital transaction i.e cryptocurrency was established in a trusted protocol, which was dependent on a set of rules for the integrity of data transfer in distributed computations across billions of computers all over the world without the need for authentication provided by a trusted third party, such as a bank, MasterCard, Visa, or even PayPal. This idea to reform the digital transaction of many individuals in the computing financial world, including governments, a large number of multinational firms and business houses, as well as commercial firms. The trusted protocol is embedded in the blockchain architecture of the globally distributed ledger. Although many ledgers have subsequently been developed, the blockchain platform has the largest one for online digital transactions distributed across all nodes. and how blockchain promotes transactions as (fig-a). A blockchain platform is essentially a distributed database of records or public ledger of all transactions that have been executed and shared among participating body. Each transaction in the public ledger is verified by all existing participants in the system. and, once entered, information can never be illuminated. Adoption of the blockchain platform contains a certain and verifiable record of every single transaction ever made. This allows participating entities to know for certain that a digital event happened by creating an irrefutable record in a public ledger.

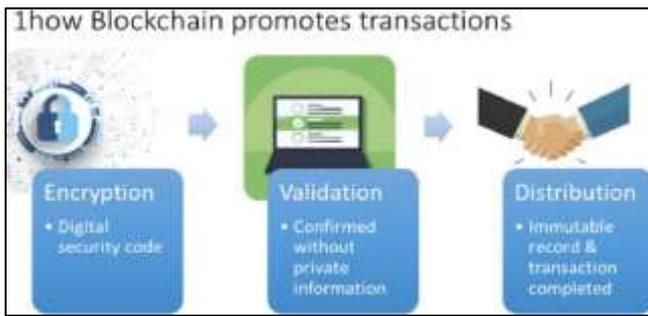


Fig. a:

The idea examines to reform of digital transactions by blockchain platform in accordance with these investments. The concept of the blockchain technology platform and its potential to change banking services through facilitating global money remittance, smart contracts, automated banking ledgers, and digital assets. The public ledger is validated by the existing participants in the system. In its generic form, the issue for the adoption of blockchain technology to reform digital transactions refers to a fully distributed system for digital transaction capturing and storing entities, immutable, linear event log of transactions between networked. This has the same as a distributed ledger i.e consensually kept, updated, and validated by the parties involved in all the transactions within a network. These types of networks, blockchain technology enforces transparency and guarantees eventual, system-wide consensus on the validity of an entire history of transactions. recently blockchain technology can not only process monetary digital transactions but can also ensure that transactions comply with programmable rules it allows even all parties who do not fully trust each other to conduct and reliably control mutual digital transactions over the network without involved in the services of any reliable third parties. Blockchain and smart contracts can work together to trigger payments when a preprogrammed condition of a contractual agreement is triggered. Smart Contracts are really the killer application of the cryptocurrency world. Smart contracts are contracts that are automatically enforced by computer protocols. By adopting blockchain technology it has become much convenient to register, verify and execute Smart Contracts. mostly Open-source companies such as Ethereum and Codius are enabling Smart Contracts using blockchain technology. For digital transaction, many companies which operate on bitcoin and blockchain technologies are supporting Smart Contracts.

#### A. Issues for adoption of Blockchain Platform to reform digital transaction in Financial Areas

This is very expensive a public financial sector i.e banks and stock exchanges must work to attract investors. The stock exchanges listed company shares for the secondary market to function securely with trades settling and clearing in a timely manner. It is possible for stock exchange organizations to directly issue the shares by the adoption of the blockchain platform. These shares can then be purchased and sold in a secondary market that sits on top of the blockchain. Here are examples: NASDAQ Equity.

Adoption for The blockchain platform to reform the digital transaction of the business model and technical characteristics of traditional banks. For adoption and apply blockchain technology for international financial giants and

local commercial banks is as follows: First, it reduces costs and value transfers. Financial sectors often need to invest a lot of assets or amount in a centralized database, since terminal maintenance and purchase costs may high. On the other hand, many bookkeeping and settlement work add to the labor costs and human operation risk. Blockchain technology can solve these problems, since the use of a decentralized ledger and Blockchain's automation can build a model with low costs and transparency, without spending Second, it can control risks more efficient Commercial and banks emphasize the monitoring and tracking of loan use, but the actual operation is not so reliable and effective. Additionally, global regulation of capital circulation can make it more challenging. The multi-centered feature of Blockchain technology treats each user as a node in the Blockchain, enabling direct one-to-one party digital transactions between borrowers and lenders, eliminating the need for credit guarantees by banks as intermediaries. The credit risk, brought by information asymmetry, is considerably reduced and the efficiency of fund management is improved. at last, it seeks innovative ways to profit. many industries opt concept of are investing in Blockchain technology startups or working with startups, including banks, as well as investment instruments. In the present scenario, banks need to seek innovative profit models to develop financial products and open markets.

## II. METHODOLOGY

This movement investigates the financial sector and related services adoption for the blockchain platform in the current market. A blockchain platform is a distributed ledger concept in which all the members participating in the network share digital transaction entities between the two parties. means that maintains a continuously growing list of data records that are hardened against tampering and revision, even by operators of the data store's nodes by a blockchain platform. To validate the digital transaction entity information, the form of collecting transactions that occurred for a minimum of 10(ten) minutes is called a block, and, it is called a blockchain in which the blocks are sequentially connected. The blockchain is a ledger in which the digital transactions of entities that have occurred are available in chronological order, and it is a public ledger open to every one party. The digital transaction information of entities of all parties over the network collectively record, verify and store so that they can secure the reliability of transaction records without being notified by a trusted third party (TTP) like a bank or an administrative agency. It is also a very secure technology because it updates all the ledgers that are kept by each member every time a new transaction occurs as shown in figure (fig-b). as adoption blockchain platform The digital transition information cannot be hacked easily because it is counterfeit only when more than fifty-five percent of the participants are synchronized by recording transaction information details on the dispersal active ledger.



Fig. b:

The framework of the Blockchain platform should be developed to manage, evaluate and integrate recommendations from expert interviewees fully. The current recommendations based on expert interviewees and their years of experience in adapting, using, and investigating Blockchain. The recommendations to provide an improvement on accessibility, adoption, and efficient use of Blockchain platform to overcome knowledge-hiding sense. In summary, in the current impacts on the entrepreneurial finance landscape, the main three factors include technological, organizational, and people (TOP). Technological factors include high-end computational powers, sufficient energy supplies, smart algorithms, analytics, security, and privacy. Organizational factors include good financial management and align the organization's activities. People factors include the well-trained teams and its management to overcome impacts due to knowledge hiding, but develop the organization into a culture of incremental knowledge-sharing and mutual collaboration. The factor "focus on product development, quality assurance, reputation and community building" is the result of effectively exercising these three factors. First, the product should have excellent quality to the quality process. Second, the organization can develop a culture to use incremental knowledge sharing to gain their positions in the market. A strong community can eventually be established when the teams can develop better collaboration and develop good client relationships. A TOP Blockchain adoption framework will require as the next phase of research, to recommend how the organization can develop and manage Blockchain adoption. In the case of the adoption of a Blockchain platform to reform digital transactions despite the TOE, the framework has been popular, environmental factors are less suitable as economic uncertainties, knowledge-hiding can happen.

Blockchain can bring disruptive changes to banks and financial services, Banks and others organizations that adopt Blockchain platforms to reform the digital transaction should manage technology, change of culture, and employees working on Blockchain. The study has identified that banks and organizations that adopt Blockchain platforms to reform digital transactions have positive aims and objectives. Blockchain can offer dynamic changes to the organization since it can attract more attention and investment opportunities from financial services are willing to scale up the level of services. The impacts offered by Blockchain platform adoption can also be destructive as follows. First, the adoption of the blockchain platform to reform the digital

transaction changed the ways that employees work and communicate within the organization. Second, the changes in Blockchain adoption can be rapid, employees are required to learn new skills and knowledge, It is also difficult to get professional help since other "experts" are still learning new knowledge themselves. Third, not all organizations have been entirely ready for Blockchain adoption. As due to affective, behavioral, and cognitive evaluations of their behaviors. Recently, the adoption of the blockchain is being studied in various fields and the study showed that to cope with various security threats, we propose an inexpensive and secure smart grid system authentication method using a blockchain, which verifies to authenticate the components of the smart grid. It is necessary to reorganize the current centralized regulation system to be able to adopt distributed ledger system. In addition, a significant number of legal issues such as physical data storage location, legal intervention grounds of regulatory authority, or common protocol and governance of the blockchain exist. In the case of financial institutions, As due to there is a limit to introduce a public blockchain it is more likely to introduce a consortium or a private blockchain

### III. RESULT

This research has shown the adoption of blockchain technology to reform the digital transaction has the potential to replace traditional payment methods and the financial sector, changes in the application areas of blockchains are seen as settlement and remittance, securities, and smart contracts. Blockchain technology may be introducing a new topology of enhanced digital transaction trust and information transparency, resulting in more trusted campaigns. Blockchain technology, which is a closed-type distributed ledger, so its adoption plays an important role to reform digital payment in the future.

### IV. CONCLUSION

This research has shown the adoption of blockchain technology to reform the digital transaction has the potential to replace traditional payment methods and the financial sector, changes in the application areas of blockchains are seen as settlement and remittance, securities, and smart contracts. Blockchain technology may be introducing a new topology of enhanced digital transaction trust and information transparency, resulting in more trusted campaigns. Blockchain technology, which is a closed-type distributed ledger, so its adoption plays an important role to reform digital payment in the future. The benefits of adoption of the Blockchain platform to minimizing the perceived risks. Our future work will focus on this development of such a Blockchain adoption framework, focusing on technological, organizational, and people (TOP) factors that deal with successful Blockchain adoption and allowing Blockchain to serve different types of business activities and services well. We will also investigate how to maximize Blockchain adoption in the post of COVID-19 period and recommend strategies and best practices for businesses and individuals. Blockchain also requires the support of complex mathematics running behind high-end computational power. This also needs intelligent algorithms to run behind the scene reliably every second and also ensuring a high level of security and

privacy is very important. personal identifier removal, a combination of passwords and biometric authentication, plus specialized access control, High-end encryption algorithms, can all together make Blockchain a safer environment for work. The government and relevant departments should formulate policies to enable the public. The illegal use of Blockchain is strictly prevented engage in money laundering, terrorist financing, and even capital control activities.

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