

# Transactions In Banking Sector Using BlockChain Technology

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# Transactions in Banking Sector using Blockchain Technology

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Abstract— Blockchain technology provides another secure and inexpensive way to send payments that eliminates the need for third-party authentication and exceeds the normal bank transfer processing times. The structure of our financial infrastructure is closely linked to the fact that central bank transfers take three days to repair. It's not just harassing the customer. Global money laundering is a major problem for banks. Basic money transfers today have to go through a complex network of intermediaries, from communication banks to asset storage services, before reaching any type of environment. Banking can be safer, more reliable, more efficient, more transparent, and more flexible thanks to blockchain technology. Due to security concerns, the bank is a very popular blockchain app. Banking institutions can use emerging technologies to promote faster payments and cheaper processing costs by providing a spatial distribution channel (e.g., crypto) for payments. Banks may bring a new level of service, bring new products to market, and eventually compete with new fintech startups by providing stronger security and lower billing costs.

*Keywords*—Decentralized, Immutable, Auditable, Traceable, Transparent.

#### I. INTRODUCTION

In its relationship to global change, technology has always been at the forefront of disrupting the current situation and bringing a new perspective. Technological change often ends up being embroiled in policy cuts when it comes to industries related to public domain and is introduced with great difficulty during promotion. One of the many potential benefits of blockchain in banks is its speed. It is more than just good performance; and it is about a new level of transparency and safety. In this thesis, we delve deeper into the meaning of the preceding case as we apply it to the Indian setting and presentation issues. The primary goal of this study is to determine whether or not to include blockchain technology is an effective solution. We will look at the capabilities of blockchain technology that make it a viable solution to today's problems, and then discuss the findings of the operating system tests used.

# II. WHAT IS BLOCKCHAIN?

Blockchain is a separate electronic layout built on a P2P path that can be freely exchanged between different users, each time stamped and connected past to create an unaltered transaction record. Information becomes another block within the series whenever a transaction set is added (hence, name). Blockchain can only be changed by agreement between system members, and cannot be deleted until new data is added [2]. it is a onetime writing, multi-compilation technology, which makes it a reliable and legible record of everything that is done.

# III. WHAT ARE THE BENEFITS OF USING BLOCKCHAIN?

## 1) Accelerating the Process

The mediators involved in the transaction process include information that cannot be accessed or permitted to operate locally in order to perform banking transactions. The distributed A-site will be created by a blockchain transaction recording platform to allow everyone to record and access information without the central authority involved. would you like to sign it, take notaries to get a rubber stamp and give the State documents full of title deeds.

The road seems lazy and very old. However, it can improve the process by generating a digital theme with a blockchain network recording function.

The blockchain ability to verify authenticity allows homeowners to legally transfer land to a buyer without the need to check third-party transactions..

## 2) Reducing Fraud Cases

Financial transactions are complicated for a number of reasons, including the need for collateral, the required period of compensation, currency price conflicts, foreign exchange mediation, and so on. Fraudsters prefer multistep processes, especially those that require human interaction. Information can be transmitted in real time via a blockchain, and the ledger can only be changed if all parties agree. This can reduce fraud time, costs and opportunities. And there is little chance that the party will not be compensated if the term of the term is reduced.

### 3) Bringing Transparency with Smart Contracts

Smart contracts are systems that work when certain conditions are met and stored in a blockchain. They are usually used to automatically execute a contract so that all parties can be assured of an immediate conclusion, without the need for any consultants or wasting time. They can also make their own work flow, starting the next step when certain conditions are satisfied.

#### IV. TOOLS REQUIRED

A. Postman:

We will be using Postman to write the script needed to verify schema map editing.

Postman is a lightweight tool to work with Web Services.

B. Node.js:

Node.js is an open source and cross-platform JavaScript template.

Node is a JavaScript program run by a non-compliant event built on the Chrome V8 JavaScript engine. Designed to build measurable network applications.

A. Blockchain Technology.

#### V. OBJECTIVE

The purpose of this paper is to provide an overview of blockchain technology and its benefits, with a focus on how it can be used in the Indian banking sector. This paper discusses many barriers and the global vision for blockchain technology in the banking industry.

Blockchain technology is an open, distributed platform that accurately records and permanently transactions between two parties. A blockchain is made up of individual data blocks that include a sequential transaction sequence. Without the need for a central or intermediate authority, all stakeholders can share a digital book on a computer network. As a result, blockchain transactions are processed very quickly.

One of the many potential benefits of blockchain in banks is its speed. It is more than just good performance; and it is about a new level of transparency and safety.

Considering the unique features of the blockchain, it is only natural that the financial industry will be at the forefront of its implementation.

Consider why banks were set up in the first place. Banking institutions were established to bring people together and to facilitate all forms of trade and business. The blockchain, on the other hand, is a tool that can do the same thing worldwide. Moreover, it is safe and transparent.

Blockchain has the potential to change the way people do business around the world. It has the potential to increase commercial efficiency by substituting handwritten and paperbased processes into more precise and automated. Because it is fragmented and cannot be a single group, a social blockchain can be an excellent tool for collaboration. That is why blockchain is more than just a technology that supports cryptocurrencies like Bitcoin and Ethereum.

## VII. IMPLEMENTATION OF BLOCKCHAIN FOR TRANSACTIONS



Following are the steps involved in making of this project:

- 1. Study of Blockchain Technology in detail.
- 2. Detailed study of all the properties benefits and disadvantages of Blockchain in Land Registration.
- 3. Designing of the app to work according to our idea.
- 4. Writing some code to develop blocks so that it can store data related to land records.
- 5. Launching each node in the network by sending API requests using postman.
- 6. Setting up node to solve proof of work to mine a block.
- 7. Sharing of information stored in the block created to all the nodes in the network.
- 8. Broadcasting nodes to setup a network and broadcasting transaction to each node.

9. 9. Write specific codes to make the web browser show all transactions made using blockchain.

We have the opportunity to solve all these problems through blockchain. The creative solution incorporates many important technological advantages, such as the permanent history of practical records, so that no one can challenge authenticity; records are permanently connected to the system so that no one can deceive or mislead his or her record; at any time, any organization can see these records. It is strong and reassuring

#### RESULT

Cryptocurrency serves as an exchange method that uses encryption to protect transactions and regulate the production of new currency units. Bitcoin, Ethereum, Ripple, Litecoin, and other cryptocurrencies are among the most popular.

Cryptocurrencies help prevent identity theft by allowing users to control their transactions. It protects the seller from fraud because the transaction cannot be reversed once completed, and they have no personal information on it. It also allows users to send and receive money anytime, anywhere in the world, without the involvement of central authorities. All participants can see what is being done because it is instantly verified. In addition, the cost of converting fiat money is very small.

Digital currencies, on the other hand, are limited. The demand for digital currency is growing by the day, despite the fact that there is a limited supply. As a result, there is a great deal of risk and fluctuations in digital currency. Users of tangible funds have also been alerted by the State Bank of India from time to time regarding potential financial, operational, legal, customer protection, and security issues. Because cryptocurrencies do not have real value, currency owners may be exposed to significant price fluctuations and liquidity risks. In the case of digital currency trading, meeting the requirements of Anti-Money Laundering (AML) / Combating Terrorist Financing (CFT) is problematic. Confidential concerns about digital currency systems have prevented many financial system actors from using them for the benefit of themselves or their clients.





This analysis and debate aims to provide a complete understanding of the impact of blockchain technology on the financial system. The banking business has many exciting opportunities due to blockchain innovation. Certain barriers need to be addressed in the financial business in order to have real results. In any case, keep in mind that the financial industry will need to follow new security rules in order to implement this innovation. To protect individuals and organizations, safety precautions must be taken. The financial industry is inextricably linked with large amounts of data. As a result, due to the security of this large amount of data, qualified professionals should control and direct the entire cycle.

Blockchain innovations continue to emerge, and a variety of new blockchain brands have emerged all the time. At the moment, it is clear that the market is dominated by a group of large, unfamiliar companies in the computer industry, dominated by four major ones, Amazon, Facebook, Google, and Apple. In any case, the fact is that no one controls blockchain rights. As a result, any new startup who should use the blockchain in their strategy can do so without difficulty and without difficulty. Despite the fact that the blockchain was originally intended as a data storage platform for cryptographic currencies, it has now been proven to be the most complex in the financial industry. It is certain that if the financial industry does not start using these technologies properly, it will make them obsolete.

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