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Block chain Technology: Preventing Scams

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Abstract**—***since now days frauds have become common in many countries. These frauds are started affecting many organizations as per their businesses. Smaller organizations think that frauds won't affect their business and fail to take necessary steps to prevent their money and assets. Preventing frauds are important to every organization, it prevents from financial condition of any business, as well as name and fame of the organization. Larger frauds in any organization may affect their employees by losing their jobs, or even organization collapses. To prevent frauds blockchain technology is the best example and now days it's gaining in the market. This paper analyzes how to prevent frauds by using blockchain technology*.

Keywords – block chain, bit coin, crypto currency, Information technology, Scam.

I. INTRODUCTION

Blockchain technology is trustworthy and it consists of decentralized, immutable, fast and transparent ledger. Ledger is a collection of all transactions where new one gets inserted after the previous one and updates accordingly. If person one has 10 bitcoins and person two has 5 bitcoins and then transaction takes place where person one sends 5 bit coins to person 2, the ledger records the transaction and updates it. Now person one has 5 bitcoins and person two has 10 bitcoins. The ledger records every such type of transactions. Each block represents bunch of transactions and all blocks together create a chain of blocks.

In decentralized ledger there is no single person keeping the track. There are millions of people who keep the track. Every one confirms with each other at each blocks that they have similar transactions and conclusions. If a single person tries to temper the transaction the others will invalidate that person.

Once the transactions are recorded into the ledger it cannot be changed, means it's immutable.

Every transactions recorded in the ledger are transparent to all, means it's visible to everyone.

II. BLOCKCHAIN AND BITCOIN

Block chain was developed by the unknown inventor name Satoshi Nakamoto. Blockchain is the underlying technology and Bitcoin is the most popular application built on top of it. Without blockchain bitcoin wouldn't exist. Bitcoin is basically a digital currency or it can also be called as crypto currency which uses cryptography techniques to regulate. Bitcoin doesn't need banks to transfer or store the money, itis self-contained. It is also used to trade online for purchasing goods and transfer bit coins from one person to another.

Satoshi Nakamoto brought into existence Block chain soas to support Bitcoin – The Digital Currency. Blockchain devised the combination of P2P technology along with public- key cryptography to solve the double-spending problem. It is basically a block of chain or linear list of blocks that store data related to the transactions and operations of Bitcoin. There are a set of directives that are used for verifying the validity ofthe blocks to make sure that the data inside the block will neither be replicated nor altered in any way or made to disappear.
Blockchain Technology together comprises of the algorithms and computational infrastructure of creating, inserting and using the blocks.
Although Bitcoin and Blockchain were introduced around the same time, the applications and usability of Blockchain has exceeded Bitcoin and its applications. Blockchain has instilled a certain kind of belief in people that it can radically change many fields such as healthcare management, information technology, accounting, trade, finance, sales, etc.

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While Blockchain technology has emerged to have vast impacts and changes to our life, the amount of research done in this field is quitevast.

HOW CAN BLOCKCHAIN HELP NIRAV MODI TYPESCAMS?

What happened?
An employee of PNB bank issued a Letter of Undertakings incorrectly on behalf of companies associated with Nirav.
So he got loans in foreign countries without any security.
To import goods he never used this money rather he used to repay loans from other banks.
The SWIFT system is not integrated with PNB's Core system.

This is why the SWIFT messages sent by PNB were not supervised or even discovered by PNB officials for 7years.

HOW WAS IT DETECTED?

Cash margin was demanded as security against a recent Lou request and was been provided without any cash margins.
The bank then actually examined what's going wrong in the branch so they went through SWIFT trails, and that is when the scamemerged.

BLOCKCHAIN SOLUTION 1 - SMART CONTRACT

PNB bank employee sending out Letter of Undertaking without any permission
In blockchain, there are smart contracts which will not allow executing unless and until specified people have not confirmed. (MultiSignature)
For e.g., if I say that to sell my house, me and my parents have to agree. So the house won't get sold if ONLY I agree OR if ONLY my parents agree. The condition is that BOTH of us have toagree.

BLOCKCHAIN SOLUTION 2 - SMART CONTRACT

Bank issued Letter of undertaking without any security Herealsoconceptofsmartcontractscanfitin.Loancontract
Executed until and unless securities from the person who is taking the loan
are successfully deposited

BLOCKCHAIN SOLUTION 3 - DISTRIBUTED LEDGER

None of the transactions got logged on PNB's banking system:
In blockchain, there is only ONE decentralized ledgerwhich is true and trustworthy. There is no scope of manual error, foul playthere.

III. BLOCKCHAIN IMPACT ONAPPLICATIONS

3.1 Accounting:

The distributed ledger ensures adherence to the same standards worldwide. The automation of this transaction entry process will drive cost efficiencies. Both parties agree on the transaction with a 3rd party con- formation automatically so trust establishment isn't necessary. It also drives to move from double entry to multiple entry accounting.

3.2 Audit:

Blockchain can be used as a source of verification for reported transactions instead of asking clients for bank statements, etc. The automation of this verification process will drive cost efficiencies. Both parties agree on the transaction with a 3rd party confirmation automatically so trust establishment isn't necessary. Cryptographic hashing ensures that there isn't any "cooking". Sample based substantive testing can be replaced with testing the whole population of transactions within the period under observation. Instead of periodic assessments, audit firms will be in a position to perform continuous online assessments (perhaps automated). Asset management and tracking will be done through blockchain.

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IV. CONCLUSION

As mentioned in the paper how PNB bank's scam can be prevented by blockchain technology, so the frauds happening in any businesses can be prevented by blockchain. After pre- venting frauds it helps business keep running and financially strong.Andblockchaintechnologyistrustworthy;anybusiness can adopt iteasily.

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