Block (Chain) Money: MULTI TRANSACTION & BLACK MONEY MONITORING WITH SECURED CLOUD DATA STORAGE WITH BIG DATA ANALYSIS USING BLOCKCHAIN

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Abstract—**A challenge in such scenarios is that cloud vendors may offer varying and possibly incompatible ways to isolate and interconnect virtual machines located in different cloud networks. Our approach is tenant driven in the sense that the tenant provides its connectivity mechanism. We are implementing Blockchain concept in this project. We implement both Public and Private cloud data storage, Private is for sensitive data storage and public cloud normal data storage. We implement this concept for banking system, to identify overall user behaviour with personal identification. Integration of all his / her transactions like Banking, Land Registrations, Gold Purchase or any cash transactions more than Rs. 20k is accounted and monitored.**

Keywords—Blockchain, Big data, Cloud computing, Cryptography

I. INTRODUCTION

Black money is defined as the illegal money on which income and other taxes have not been paid. The black money is used by criminals, smugglers, hoarders, tax evaders and other anti-social evaders of our country. The total amount of black money which is deposited by the Indian evaders in foreign banks is unknown. Can technology support to avoid or eliminate such illegal activities? The mixture or combination of Blockchain technology, cloud computing and big data could provide a solution for the above mentioned issues. This also discusses the policies required to limit degradation and limit pollution of black money system[1]

Blockchain is the most trusted and powerful technology which connects the world through a peer to peer based technology. Blockchain was initially developed for the purpose of bitcoin[2]. After bitcoin emerged, the new cryptocurrency "Ethereum", was developed[3]. Ethereum is not only used for the purpose of transaction but, it is also used to transfer files securely in a decentralized network. Blockchain technology is poised to change nearly every facet of our digital lives, from the way we send money to the way we heat our homes[4].

● Big data is a field that treats of ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing application software.
Cloud computing makes computer system resources, especially storage and computing power, available on demand without direct active management by the user. The term is generally used to describe data centers available to many users over the Internet.

The structure of paper is as follows: Section II demonstrates implemented technologies used in

the system. Section III discusses the implementation of the proposed system, finally Section IV provides the conclusion of the system.

II. IMPLEMENTED TECHNOLOGIES

A. Blockchain

The blockchain is an undeniably ingenious invention – the brainchild of a person or group of people known by the pseudonym, Satoshi Nakamoto. But since then, it has evolved into something greater, and the main question every single person is asking is: What is Blockchain?
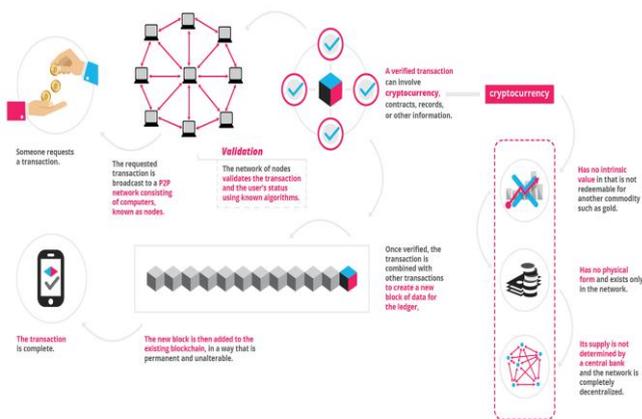

Fig.1.Working of Blockchain.

By allowing digital information to be distributed but not copied, blockchain technology created the backbone of a new type of internet. Originally devised for the digital currency, Bitcoin, (Buy Bitcoin) the tech community is now finding other potential uses for the technology.

Bitcoin has been called "digital gold," and for a good reason. To date, the total value of the currency is close to $112 billion US. And blockchains can make other types of digital value. Like the internet (or your car), you don't need to know how the blockchain works to use it. However, having a basic knowledge of this new technology shows why it's considered revolutionary.

A. Cloud computing

Cloud computing is a fast-growing technology that has established itself in the next generation of IT industry and business. Cloud computing promises reliable software, hardware, and IaaS delivered over the Internet and remote data centers[6]. Cloud services have become a powerful architecture to perform complex large-scale computing tasks and span a range of IT functions from storage and computation to database and application services. The need to store, process, and analyze large amounts of datasets has driven many organizations and individuals to adopt cloud computing . A large s seasonality like black Friday for retail, or marketing events like sponsoring a popular TV event. These events can have huge economic impact to organizations if they are serviced poorly.

The hybrid cloud provides the opportunity to serve the base load with in-house services and rent for a short period a multiple of the resources to service the extreme demand. This requires a great deal of operational ability in the organization to seamlessly scale between the private and public cloud. Tools for hybrid or private cloud deployments exist like Eucalyptus for Amazon Web Services. On the long-term the additional expense of the hybrid approach often is not justifiable since cloud providers offer major

A. Big Data

Big Data is also data but with a huge size. Big Data is a term used to describe a collection of data that is huge in size and yet growing exponentially with time. In short such data is so large and complex that none of the traditional data management tools are able to store it or process it efficiently. The issues challenge the effectiveness of traditional data mining-based tax evasion detection methods[4] and many more.

Any data that can be stored, accessed and processed in the form of fixed format is termed as a 'structured' data. Over the period of time, talent in computer science has achieved greater success in developing techniques for working with such kind of data (where the format is well known in advance) and also deriving value out of it. However, nowadays, we are foreseeing issues when a size of such data grows to a huge extent, typical sizes are being in the rage of multiple zettabytes.

Any data with unknown form or the structure is classified as unstructured data. In addition to the size being huge, unstructured data poses multiple challenges in terms of its processing for deriving value out of it. A typical example of unstructured data is a heterogeneous data source containing a combination of simple text files, images, videos etc. Now day organizations have wealth of data available with them but unfortunately, they don't know how to derive value out of it since this data is in its raw form or unstructured format.

Semi-structured data can contain both the forms of data. We can see semi-structured data as a structured in form but it is actually not defined with e.g. a table definition in relational DBMS. Example of semi-structured data is a data represented in an XML file.

III. MODULE IMPLEMENTATION

A. *User registration*

In this module we are going to create a User application by which the User is allowed to access the data from the Server. Here first the User wants to create an account and then only they are allowed to access the Network. Once the User create an account, they are to login into their account and request the Job from the Server. Based on the User's request, the service Provider will process the User requested Job and respond to them. All the User details will be stored in the Database.

B. Bank server

Bank Service Provider will contain information about the user in their Data Storage. Also the Bank Service provider will maintain the all the User information to authenticate when they want to login into their account. The User information will be stored in the Database of the Bank Service Provider. To communicate with the Client and with the other modules of the Company server, the Bank Server will establish connection between them. For this Purpose we are going to create a User Interface Frame

C. *Land registration and gold purchase*

In this module we implement land registration and purchased details to be monitor . Here, user name, land documents, price and selling price land. And also we monitor the gold purchase of every user and all other property details will be monitored based on user' Id.

D. *Cloud deployment*

User will upload their data to the cloud server and request for a particular file is send to cloud server. To deploy our system we use dropbox cloud storage to store our details. Here we store sensitive and normal information on private and public cloud server respectively.

E . *Blockchain deployment*

A block is a container data structure. The average size of a block seems to be 1MB (source). Here every certificates number will be created as a block. For every block an hash code will generate for security. Here we store all transaction information like land purchase, gold purchase and all other purchasing details will stored on blockchain. For every transaction we a block will create with hash code to refer

the other block. Transaction detail will be more secure on blockchain

Big data analysis and Black money notification
Throughout all transaction here we monitor proper payment of tax payment. Because, more number of forgeries were made on purchasing of land, people shows a fake price for land purchase and gold purchase. So , in this module we get the details of purchasing rate more than 20K . If user purchasing rate is increased more than 20K, system will alert the income tax notification to the user. Using aadhar number we can monitor all bank transaction also.

IV. CONCLUSION

Thus the paper infer that we provide a tracking system while purchasing gold or any asset above 20k. Now a days forgeries level is increasing in smarter way so to provide security we track the money using blockchain technology.

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