JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

PROPERTY REGISTRATION USING BLOCKCHAIN TECHNOLOGY

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ABSTRACT:

The property record system is one of the most important parts of the governance system that keeps records of property ownership. The existing system has various problems and loopholes that lead to corruption and conflict. This requires the bulk of valuable government resources from judicial and law enforcement agencies to address these issues. Blockchain technology has the potential to combat these loopholes and solve problems associated with property notation systems. The project planned a secure and trustworthy framework for sacrificing blockchain systems for national historical records. The proposed framework uses rational contractual concepts at various stages of written deeds and provides relevant rules for prior agreement. A blockchain is an electronic ledger associated with digital records, events, or transactions, cryptographically hashed and controlled over a distributed or shared network of participants using a cluster consensus protocol. This analysis aims to develop a secure and stable property management model and property registration system that supports blockchain technology. This will eliminate the weaknesses that occur with current property registration and management practices. Property management and registration systems using blockchain technology have been implemented in African countries, Estonia, Georgia, and Central American countries. It's still early days, but we already know its challenges and strengths. The overall challenge for each country is the lack of awareness of blockchain technology in society and the difficulty of registering titles that are still at odds.

Keywords : Property registration, blockchain, ethereum, smart contract, sellers, buyers.

INTRODUCTION:

A property register may be a system of recording the main property claims of many government agencies, a system of keeping records of property ownership. However, local units have many problems and loopholes in their existing system, leading to corruption and conflict. We tend to abuse blockchain technology to identify these issues. Blockchain is being deployed to combat

these loopholes, revealing problems associated with the property registry system, such as falsification of records and transactions of identical properties to a single buyer. The property registry system refers to the system of recording key property claims of many government agencies. Record keeping is used to prove claims, avoid fraud, and ensure a smooth transition if necessary. Entries in the recent property register encounter obstacles in verifying property titles and lead to or should lead to fraud. According to a survey conducted by Planetbank, about 70 people are caring for people without property titles. Property rights are a necessary perspective for the social and economic resilience of populations. A secure and up-to-date property register helps governments with many aspects of aggregation, service delivery and governance. Planet Bank is actively working in this direction, supporting the expanding property registry systems in many countries and sponsoring conferences as the property registry modernizes. Many government agencies are looking for secure, reliable, and tamper-proof digital property registry systems. There are multiple stakeholder groups involved in how to create an advanced system, facing different threats and hoping for numerous reviews with a gradual balance to create an environment of mutual trust. However, the very units that work together to handle business have little trust in each other.Blockchains are useful when some data is shared between multiple systems or platforms.

LITERATURE SURVEY:

BLOCKCHAIN-BASED PROPERTY REGISTRY: PANACEA, ILLUSION OR SOMETHING IN BETWEEN?

Many of the principles of good governance in property management can or should be met when it comes to blockchain technology. Element transparency and efficiency, and transaction history (chain of ownership) are available. You can also store unique identifiers (package numbers, (legal and natural) person identification numbers). Transaction validity can be checked if transaction rules are implemented. In the current well-functioning property registry system, this is usually done manually by checking deeds.

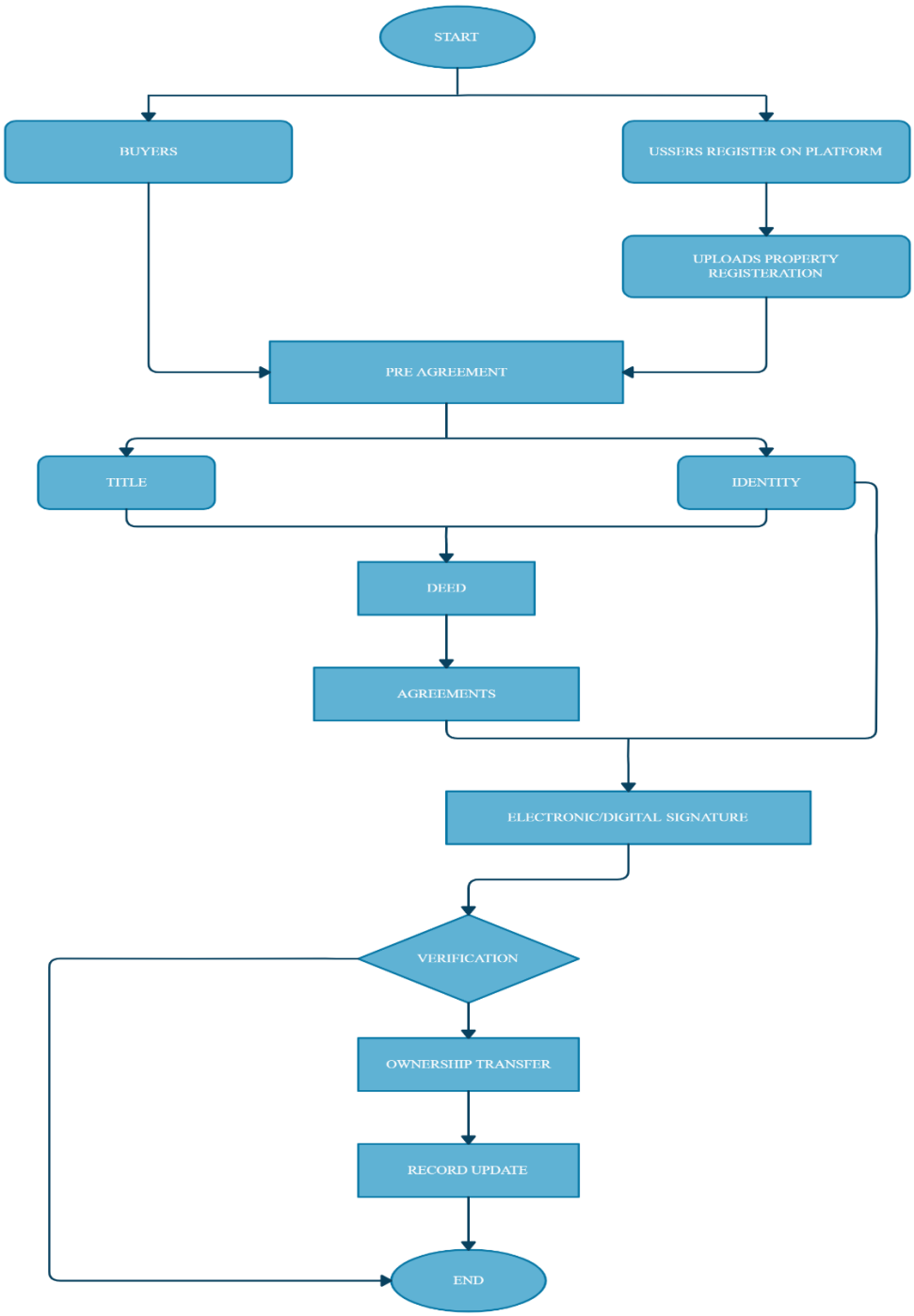
Blockchain-based framework for secure and reliable property registry system

This paper reviewed current procedures and issues within the old property-based account system. A typical system is vulnerable to various types of intrusions at every stage, impacting cost accounting indirectly in the form of paper resources, extensive record keeping requirements, and security issues with these records. The planned system requires far less staff and is highly reliable, making it very economical. This paper also envisioned an associate degree formula for interim contracts between customers and merchandisers.

Design of Property Administration and Title Registration Model supported Blockchain Technology

The study recommends the following: The original planned model should be applied to the ILMIS infrastructure. This enhances security and protects property registry entries from internal and external attacks. The technology has a diode in digital currency and continues to penetrate alternative socio-economic sectors such as agriculture, health and electricity. It's not the right regulation, but people use this technology negatively.

PROPOSED SYSTEM:



First, when a user registers themselves and submits a specification, pre-agreed algorithm rule is executed. In pre agreement, the seller and the customer sign his pre-agreement title agreement which includes signature, seller ID, buyer ID, seller ID, remittance amount and payment status.The deed of title is then sent before the sales requisition contract. To create written account trust within the system, blockchain can be used to solve the drawback of double spending. The system should set a lock on the exact country title and not activate any other group actions. You will receive the same sales ID until it is approved or rejected. In addition, property and tax collectionis verified and verified, property report and property ID are also verified. Also, client and marketer history is verified and ownership is transferred upon verification and records are updated as well.

The system has two main blocks as Blockchain Network & Smart Contract Engine. The smart contract engine contains memory for storing deeds or valid contracts. It is connected to the User Module and User Interface and has two categorized users. A UN agency customer wants to buy property and a UN agency seller wants to sell property. User details are also held in his Good Contract Engine, his details such as name, address, phone number and email. A user registers his username for exploitation. The blockchain verifies transaction documents and provides security to the method. The blockchain will also provide a relevant interface for the public to access knowledge.

Framework used:

Property registry system using blockchain could be -react-js project. (React could be a free ASCII text file front-end JavaScript library for building user interfaces or UI parts

Most technologies and tools that measure squares involved)

• **MongoDB:** MongoDB is a It is presented as what is called NoSQL information. This means that you can outline the predefined structure of incoming knowledge and follow it further if you want a completely different document. So this is basically a dynamic

scheme.

• **Node js:** Node JS is a tool primarily used in JavaScript to write server-side scripts

This project tends to use scoped units Main Algorithm Program Pairs

• **Pre-agreement Algorithm Program**

• **AES Algorithm Program**

The pre-agreed algorithm program used in can be a good pre-agreed contract. If the vendor id is null, get the vendor id, get the name and character, then return the sale id. Otherwise, if the client id is null, you can get the client id, name and characters and return the client id. Otherwise, get the title id and tax id on this property id and return the owner's tax rate, public key and payment status respectively. Then, if the Payment Status or Buyer/Seller or Title ID is null, the Deed ID can accept the ID. A contract ID can have a tax ID and a deed ID, and a preliminary contract can also have a contract ID, a buyer ID, a seller ID, and a hash value (thus further confirming that the method has not been manipulated). Then it tends to come back to pre-contract**.**

AES Algorithm Program This contains a series of related operations, among which is the permutation (permutation) of the input by a given output, and the shuffling (permutation) of bits. AES does all calculations using bytes instead of bits. Therefore, AES treats 128 bits of plaintext blocks as 16 bytes. AES is sometimes an encryption algorithm program intended to protect electronic knowledge. A regular block cipher that encrypts and decrypts information. Encoding converts knowledge into an unintelligible form called cipher text. Decoding converts the information into its original format known as plaintext. AES encryption is a mathematically parsimonious and elaborate encryption algorithm program, but its strength lies in its many key length choices. AES offers a choice of 128-bit, 192-bit, or 256-bit keys. The produces keys that are exponentially stronger than the 56-bit keys of the DES. AES is more secure than RSA of the same bit size. AES is a symmetric encoding. But AES has never been cracked and, contrary to all beliefs and arguments, it is safe against brute force attacks. However, the key size used for encoding must be large enough so that the cannot be cracked.

CONCLUSIONS

Existing systems are vulnerable to various types of manipulation at every stage and have cost accounting implications such as the form of paper resources, the requirement to keep large records, and the security issues of these records. are also indirectly affected. Blockchain has the potential to combat any problem. This project proposed a framework for a secure and reliable property register system that addresses the critical issues of falsification and duplicate issuance, and enables near-real-time updating of property registers. The proposed system is very economical as it requires less manpower and is highly reliable. We also proposed an algorithm for pre-agreement between buyers and sellers. We are currently focusing on getting rid of middlemen. But to use blockchain effectively, we can also use physical parameters such as geolocation, latitude and longitude to identify countries. This further improves transaction accuracy and prevents fraudulent transactions from being processed. Implementing this at scale is also one of our future goals.

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