Blockchain in HR management

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Abstract

Blockchain is one of the most recent trends that has come up with a uniqueness of its own. It is a technology that can have a huge impact on HR. Other than HR, it has a wide variety of fields where it has already proved to be of great importance. It is a decentralized and distributed form of a ledger which can not only record business transactions, but also all types information like data about loans, property rights, data related to transaction of any asset etc. It is decentralized that means it can be accessed from all kind of networks but it can't be manipulated which makes it really transparent and even secure. In this paper authors have made an effort to discuss about the various fields where blockchain is used and most importantly, about the characteristics and benefits of blockchain that makes it really important for Human resources management department in organizations.

Keywords: Blockchain, Cryptographic, Bitcoin.

Introduction

Blockchain is basically a decentralized technology, or a digital ledger system that has the capability to store data of any kind and not only financial transaction. It is one of the key technologies that secures bitcoin (a digital currency supported by cryptographic methods) is a distributed, publicly available, and immutable ledger.

As we are the 21st century, we rely largely on the technologies which poses a great threat of identity theft or personal information piracy. But blockchain is a kind of technology which can be accessed from all types of networks i.e. its transparent but it has a unique characteristic of anonymity. Block chain technology possesses the technical features including decentralization, distrust, agent elimination, chronology, anonymity, group maintenance, opening sourcing, being programmable, dispersed, unchangeable encrypted data, safety, and reliability. Unlike other open ledger systems, it is really safe and convenient.

If the features of the blockchain are kept in mind and used in HR management it will be really fruitful for the business organization I many ways, for example, recruiting can be done in a simplified way, the work of the employee can be well assessed, amount of leaves the employee is taking can be recorded easily.

Objectives of Research

- ❖ To suggest an effective technology for HR management.
- ❖ To understand the benefits of implementing blockchain technology in HR management of an organization

Research Methodology

All the information provided here are collected from secondary sources like journal articles, websites, magazines and other periodicals.

Review of Literature

(BIG DATA: A Twenty-First Century Arms Race,2017) One of the key technologies that secures bitcoin (a digital currency supported by cryptographic methods) is a distributed, publicly available, and immutable ledger commonly referred to as a blockchain. It is a collection of transactions grouped together and posted into ledger. Each group is termed as blocks and each block is connected to each other, thus justifies the name blockchain. Blockchains of a particular user has the data base of all the transactions that the user has made and can be traced back to know all the information about the transaction made. Even buying or selling of an asset or any transaction related to any asset can also be recorded and it also contains all the attributes of that assets, which can be used later to trace back the owner of the asset I case of any theft .Normally this feature can't be found in other ledger technologies. Nowadays, bitcoin is used in blockchain to avoid the double spend issue-the problem was that anyone could use same amount to digital currency in sane place and at the same time. Use of bitcoin blockchains in many organizations has made it easy by eliminating the trusted third party while enrolling information about physical assets which had to be present previously.

(Block chain: Cryptographic method in fourth industrial revolution,2018) Due to lack of competition or change in the market, sometimes there arises a huge public demand in supply chain market. And, this is a concern for the supply chain managers. In order to manage these demands they came up with some trust mechanisms and centralized enterprises but as it had a lot of disadvantages it couldn't go long. Then the blockchains came into play. Decentralised trust-based transactions along with coordination and cooperation can be achieved with the help pf blockchain technology. blockchain can be used not only as accounting system but also it can be used to handle problems like random public demand. Researchers believe that the supply chain managers must keep in mind about the use of block chain when used in synergy.

(Riia O'Donnell,2017) Impact of blockchain on HR can be limitless. In companies the recruitment process takes a lot of time and sometimes the company has to outsource recruiters and lots of resources needs to be allocated for this particular task. But if blockchain is used then then the process will be time convenient as it would take less time to verify all kinds of documents. Secondly, the academic credentials and certifications of a can be verified or some great credentials can be found which had been overlooked by other business organizations. Again, the performance of a candidate previously or job experience can easily be accessed with the help of blockchain as once recorded it can't be changed even if the system gets hacked or the candidate's previous company closes. And if an employee is a foreigner then blockchain facilitates a speedy processing of the payrolls and with less expense.

(Marie Fincher,2019) Blockchain is primarily made to record data and by doing this I may also facilitate in:

- *Encourage payments for gig workers*
  Gig or contract workers have to wait for a manual verification but if we use blockchain to record their invoice then it can be done more conveniently.
- *Helps in attendance and accuracy in time*

In many companies there are biometric systems for attendance and they record the time at the same time. Later, this information can be use in an easier way to adjust the leave of an employee or know the number of days he was late and from that the management can work accordingly.

- *Payment of salary using cryptocurrency*
  It is the most function of blockchain to manage financial transactions. If the company pays the salaries to the employees the work can be done it a more convenient way.

(Ashik Ahmed,2018) Blockchain can revolutionize the way of doing business. It is capable of making old school resumes of a candidate and career networking websites like LinkedIn. Instead of a student writing that, blockchain technology can prepare CV or resume for him. This would simplify the process of recruitment up to a great extent. Secondly, the taxation methods of contract workers are much complex which can be done easily using blockchain. Blockchain technology will go through all the transactions recorded in it then it calculates the tax that he needs to pay.

Blockchain in HR Management

Blockchain is not only used to formulate financial transactions but also the features of the blockchain can be well utilised in HR department which comes up with hell lot of advantages. Its transparency as well as security makes it different from the other technologies and hence it is used globally. And if it is used in HR as well it enables to do a lot of tasks in a really convenient manner.

The various ways where blockchain can impact HR is as follows:

- It has a great impact on recruiting in an organization. Normally, while recruiting, companies have to hire HR recruiters from outside, they require a lot of time and other resources of the company is needed to be allocated. The recruiters have to verify each and every candidate's documents like degree, identification documents, certifications etc. before recruiting him/her.
  But now with the help of blockchain it need not be verified manually and all the information about the candidate is already stored in blockchain. This saves a lot of time and hence less resources of the company are used. So, it is a really convenient and economic process.
- By the use of blockchain, when every information about a candidate is recorded then there is no question of frauds of degrees. The credentials and certifications while acquiring those degrees can be checked and from there it would be evident if it's a fraud. Blockchain is decentralized but it is really secure, information in it can't be manipulated.
- The blockchain technology is also useful in attendance of employees and time. In biometric attendance system, it is the blockchain technology that is being used. For example, it gives the information about the time the employee has entered the workplace and how many days has he taken leave. And that information can be used by the management.
- Before recruiting a candidate, with the help of blockchain a candidate's performance in his/her last job can be checked. This also helps in understanding how passionate is the candidate regarding their work. These methods can help the employers can understand the personality of the candidates and select accordingly.
- And the most fundamental function of blockchain, it helps in the use of bitcoin. In a company the employees can be given their salary using cryptocurrency in blockchain and it is a really secure way of payment.

Blockchain has a wide range of uses in HR Management, only a number of them are listed above.

Comportments by which blockchain reshapes value exchange

There are four ways in which the blockchain changes the characteristics of the value exchange that has been listed below:

- It eliminates the trusted third party to sit between the supplier and customer in the middle of transactions like estate agents, travel agents, banks and so on. For example, if in Uber the customer could directly book by talking to the driver, here Uber is the third party and in above given situation the Uber has no role to play. Similarly, this is how blockchain eliminates the third party.
- The blockchain technology is really secure as it comes up with an immutable proof that some kind of transaction has taken place. It is designed in such a way that once the information is recorded it can't be altered or changed under any circumstances which makes it really trust worthy technology.
- Blockchain is associated with a concept known as smart contract. In this, the business transaction is recorded by taking the transaction in words and codify it. In other words, the information that is to be recorded can be converted to computer codes and stored and replicated on the system and supervised by the network of computers that run the blockchain.
- The blockchain technology does not require any bills, receipts, reconciliation or other components of a transaction, because of which there is no need of back office in blockchain. When there is no requirement of back office, it saves a lot of money which accounts to almost 4 trillion USD globally.

Conclusion

From this paper, we come to know about the huge impact that blockchain can have on human resource department in organisations. The capabilities and the advantages of the technology is something which can't be forgotten. Blockchain technology can not only be used in recording transactions, it corporate in HR department. It makes the processes in HR much more simplified, economic, efficient and also time convenient. Blockchain being decentralised, secure, immutable and transparent is most widely accepted globally. And if this technology is implemented globally in HR then it will a revolution in the total corporate world.

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