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Impact of Block Chain Technology In Human Resource Functions

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**Abstract:-

Blockchain is the term used for a digital, decentralized ledger that is used by various organizations and is used to track all kinds of information. It can be accessed individually or in a network. It eliminates the "trusted third party' in transactions thus removing unnecessary intermediaries which in result eliminates usage fees and puts the process directly in the hands of the sender and receiver of information , creating a cleaner , simpler , convergent and independent approach of data , deliverance and process efficiency . This paper focus on the application of Blockchain in various industries and how Blockchain as a technology is used in HR functions and would also discuss the pitfalls on Blockchain.

Keywords : Bitcoin, Ledger, Blockchain, Convergent, HR, Financial, Performance

**Introduction:-

A Blockchain is defined as a Peer to Peer distributed Ledger forged by consensus, combined with a system for smart contracts. The idea of Blockchain technology was brought to popularity by the use of crypto currency- Bitcoin. It records data in Digital Ledger Transactions which are distributed over the Network thus making it incorruptible. Blockchain is not just limited to the financial system; instead, it is great solution for almost any platform or product that requires trust.

Terms Used:-

Peer to Peer Network-

A Peer to Peer network is a distributed application architecture that consists of computing devices connected to each other, without a central server, working independently with the data sharing. In contrast to a centralized network Peer to Peer network is more secure as there is no single (centralized) point of failure. Ex- Bittorrent

Distributed Ledger Technology-

DLT is a data structure which is spread across different computing devices and distribute records across all the users. It consists of 3 components-

1-Data Model- It is the current state of ledger.

2-Language of Transactions- which changes ledger state

3-Protocol- it is used to build consensus.

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Consensus-

Consensus is a process of ensuring that all the different users in a Blockchain come to an agreement regarding the current state of Blockchain. There are several consensus mechanisms like-Bitcoin uses Proof of Work.

Smart Contracts-

Smart Contracts are pre Requisite conditions which are needed to be fulfilled for transactions to happen in a Blockchain.

Building trust with Blockchain:-

Blockchain builds trust through its 5 attributes-

1-Distributed-Its distributed ledger is shared and updated with every incoming transaction among the nodes connected to the Blockchain.

2-Secure-There is no unauthorized access to Blockchain made possible through Permissions and Cryptography.

3-Transparent-Since every node of participant in Blockchain has a copy of the Blockchain data, they have access to all transaction data, thus making it verified at every node.

4-Consensus based-All Relevant network participants must agree that a transaction is valid.

5-Smart Contracts which are executed based on certain conditions.

Blockchain used in other industries

**BlockChain in HR:-

Blockchain is gaining momentum since the start of the year, and is predicted that over 50 percent of the large enterprises will adopt it. It has now turned to HR sector, where departments are embracing the technology with open arms. There are various segments used in HR which are involved with Blockchain. Various Blockchain ready HR companies like-Peoplewave, Vertalo, Job.com, etc. are evolving nowadays.

So, let’s examine the ways blockchain is poised to change the way HR is conducted and managed:

1-In Recruitment:-

Recruiting is a complex practice, involving various layers and measures that job candidates and employers go through. Throughout this process, both employees and employers share a lot of sensitive data like personal id’s , Birth certificates etc. and while this process of data transfer is done , job candidates are trusting that potential employers handle it with care and

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recruiters assume that all data that is provided to them is accurate. Failure by either party can withhold the entire process.

To eliminate these concerns, job seekers could potentially leverage blockchain technology to create one, immutable chain of personal records and information when applying for jobs. This can be accessed by employers while evaluating candidates, keeping in view past work experience, contact information and other personal data needed.

This use of blockchain technology would vastly improve the candidate experience, enabling job seekers to create a singular account of their experience and information that could be used across all job applications, which further would eliminate the time and concerns associated with manually sourcing this information. It would help to reduce the time spent on conducting background checks, reducing fraud, and build more trust in the recruitment system.

2-Blockchain in Compensation:-

Blockchain along with data mining techniques will be a boon for compensation department where benefits, events or payments can be processed without much hassle. At every stage like at the end of probation, increment at year end, bonuses at festivals, blockchain will automatically trigger for increase in salary.

3-Blockchain in Compliance & Auditing:-

Since the data stored in Blockchain already accurate and validated, audit checks for compliance would be easy to conduct and readily visible to those authorized.

4-Blockchain in Performance Evaluation

Managing employee competencies has been another aspect of performance management that continues to bedevil HR , since it takes ages for them to get the credentials validated of a employee. With Blockchain, however, it can all change, given that the credentials acquired over the world wide web could be stored as blocks and culled together via an authenticated and orchestrated set of web services to update the employees credentials, certifications, and skills enhancements in the organization's skills repository in real time and the same can be captured on the employee record. Also, in cases of mergers or takeovers, all this information about the employees can be collated and published via competency dashboards to the incoming management as evidence of their competency history.

****Potential Pitfalls of Blockchain in HR:-**

As a technology platform, blockchain can store vital information, from birth certificates to tax returns, which most people may be hesitant to input on an unknown interface. Also not all employers are familiar with such platforms and because of privacy and the lack of user-friendliness; it is more likely that only a tiny minority will transfer their data to the blockchain. Thus the use of blockchain is growing but companies are still reluctant to adopt the technology, primarily due to it still being relatively new.

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****Conclusion:-**

Blockchain is a new name in the world of technologies but it is definitely the one to last. Even in the early stages, the technology has gained huge popularity, more and more areas of applications are being discovered and tested with way we live today. The major applications are so far seen in logistics, fashion, food processing, manufacturing and capital payments industry. HR benefits from blockchain by identifying the problems and areas of inefficiency in their current operations. Mapping the right employees to the right jobs at the right time is the mantra of HR department rather than just using instincts.

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