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Obstacles Facing Firms Trying to Implement Block Chain Solutions

A blockchain is a record-keeping technology associated with the cryptocurrency or bitcoin. The blockchain is simply a chain or blocks linked using the cryptography, but not in the traditional manner. It is the digital database of information stored in which blocks are referred to as pieces of information and chain is the database (Crosby, Pattanayak, Verma, & Kalyanaraman, 2016). Blocks store all the information of the transactions and its participants and distinguish information from the other blocks. The system works when the different transaction occurs and each one of them is recorded and stored in a block. The blockchain technology is still a leading buzzword in the tech world and it is estimated that this technology will transform many financial sectors including the law, real state and healthcare. This technology is currently a hype like all other technologies, which go through this stage. There are several challenges that occur in the way of adoption to modern technologies and it takes a lot of time to get rid of all. The blockchain technology is no different from the others; it is also facing numerous challenges in its adoption despite its acceptance as one of the developing technologies. Many people have discovered different vulnerabilities in its application.

One of the top challenges that occur in the adoption of blockchain technology is a matter of security and privacy. Security of data remains at the heart of challenges in the adoption of blockchain. A Chinese security company was the first, which identified the weakness linked with blockchain technology (“360 Discovered an Epic BlockChain Vulnerability in EOS and All Transaction Can Be Manipulated | 360 Total Security Blog,” n.d.). The company reported that there are potential defects and issues in the system which can make data vulnerable to different privacy threats. It further investigated and proved the existence of a security hole. Since everything in the blockchain technology is connected and interlinked, there can be a huge impact of denial of service attack, which is often considered as minimal in case of other security attacks. This research and many other related studies make cybersecurity one of the main concerns in the acceptance of blockchain. The data and information is a thing of utmost importance in an organization, by implementing blockchain, without the surety of a secure shield, there is the likelihood that organizations will make the sensitive data of their customers open to the outside attacks and theft. The solution to this is often given in the form of private and federated blockchain with more layers of the protocol to enhance data security.

It is argued that the blockchain technology comes with many flaws in its technological design (Zheng, Xie, Dai, & Wang, 2016). In order to name some of them, coding flaw or loophole. These flaws and loopholes can result in the attack of hackers. The bitcoin was considered as one of the cutting edge technologies but later inefficiency in its design was exposed. It was tried to cover thorough Ethereum, which allows its developers to implement dApps and many of such dApps have been developed, however, they are not considered enough to cover the flaws. The blockchain technology is also often connected with the criminal personal owing to the fact that the nature of work keeps the identity of the user hidden; this is the primary way in which it opens doors for the black market. Bitcoin can be used as a common currency to deal in the black market and this bad name associated with it results in low acceptability of it as a system. It can be a great way for the criminals to make use of digital currency to buy illegal equipment and make illegal payments and therefore better and improved implementation of blockchain seeks its criminal cessation of criminal connection.

Another challenge is of laws and regulations, since it will be used as a mean of transaction many products will be dependent on this. Until then there are so specific and clear rules and regulations associated with this technology so there is nothing to be followed and which restricts and regulates the users. In addition, according to Salehpour Legal Consulting, there will be more issues and complications in the resolution of disputes associated with respect to the transactions occurring on a decentralized system such as blockchain because different transactions can subject to the laws and jurisdiction of different countries. The outcome of this is the mess of laws and regulations due to different nodes located in different locations. Fewer laws and regulations not only creates legal complexities but also results in a lack of security which hinders an organization to adopt blockchain as a system of recording information. There is a need for government and the regulatory sectors to create laws and regulations, which could assist resolve any legal disputes associated with the blockchain. In addition, there is a need for the formation of strict laws and rules to assure safety and security in case of any mishap and unreasonable event for user protection.

In addition, to these issues, there is a need for right and adequate skills to manage the new technology. This factor makes it hard for the organization to find the right personnel having enough skills and abilities to use the system. In the case of relatively new and evolving technology, there are few people available who understand the technology and have skills to support it. In addition, the demand of this qualified staff is also huge, people with high demand seeks high salaries and right people will make an organization bear huge costs, generally blockchain already causes the huge cost to companies (Dorri, Kanhere, & Jurdak, 2016). Like any other new technology, it will need training time-to-time training of people to keep up with the emerging technology. It is also estimated that blockchain will be comparatively slow in processing the transactions and the need for encryption will make it slower in order to keep the security and privacy at the first concern. If competing for a transaction will take several hours then it will create trouble for the users and the customers of the organization, which will be implementing the technology. In addition, since the technology of blockchain follows the infrastructure or Bitcoin and utilizes the Proof of Work, that is not considered as great as it looks. It will require mining to solve complex problems and it will make the system consume more energy.

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