

Banking on Block Chain Technology

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Abstract- Big data is becoming more prevalent in the banking industry as a result of blockchain's disruption. In recent years, research and development efforts across several areas have focused more on blockchain. However, there is a gap in academic investigation and research into big data that has been blockchain-ed for the financial industry, and this gap is envisioned to have a significant negative effect on the adoption and growth of blockchain technology for the industry. Banking-related advancements have the potential to have a disruptive impact on the global economy. Although there is indications that some financial companies have established blockchain - based singly or in larger clusters, we believe that there is a great need for in-depth studies and development into a multitude of facets of blockchain banking in order to overcome the barriers preventing its adoption in payment systems globally.

Keywords: kyc, fast transaction time, security reduced price, exchange rate stability, safety

1. INTRODUCTION:

The study showed how bit coins, a sort of currency that can be used to conduct digital transactions anywhere in the globe, function. Huge technological advances have been made in the last ten years. It is very resistant to data manipulation. The banking industry and blockchain now have a complicated relationship given that blockchain can offer real-time access, consensus verification, and unalterable data to bankers (Smith, 2018a). Blockchain technology has the ability to reduce transaction and processing costs, but as more fintech businesses arise and have the chance to launch banks at lower prices, competition is also expected to grow (Iskandar, 2017). A study by Rega (2017), which examined European banks discovered a warm relation between digitalization (fintech) and cash holdings. By implementing blockchain technology, the banking industry will be able to contend with fintechs and develop novel company models that utilise the technology.



1.1: Banking Possibilities with Blockchain Improved Client Understanding

The avoidance of the use of financial assets and amenities for unlawful purposes, such as money laundering and terrorism, depends in large part on KYC. According to Thomson Reuters (2016), banking firms must spend between large amount yearly to maintain KYC, which places a big economic hardship on banks. As a result, the present operations of KYC are costly, ineffective, and contribute to a bad customer experience for banks. Walker (2018). Blockchain reduces duplication by allowing other banks to access the independent client verification performed by one bank on behalf of another bank (Marr, 2017). Blockchain-enabled standardisation of starting account information of a customer, further attesting to regulatory. KYC controls are more important than ever because of the potential for bribery and terrorism funding brought on by the partition of cryptocurrencies.

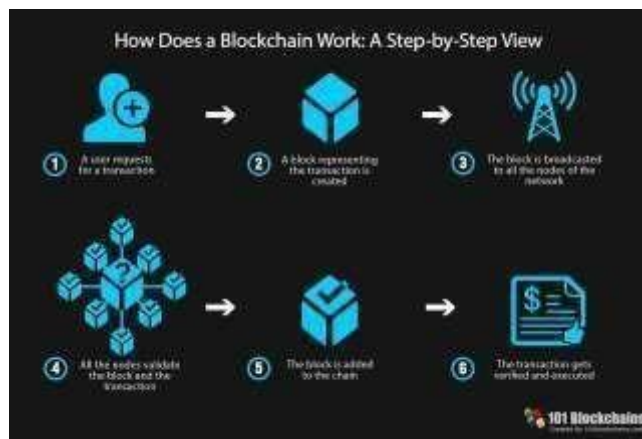
1.2: Fast Transaction Times

Utilisation of digital wallet to be rapid. By providing direct transaction across individuals and firms, as well as the capacity to look into a single transaction data that is updated by consensus and maintained unbreakable through cryptography, blockchain technology can help banks reduce the time it takes for transactions to settle by increasing the level of certainty it offers (Lang, 2017a). In fact, the blockchain technology can settlement timeframes down to few moments, and warns us about the possibility of processing bank transactions around-the-clock). By allowing consumers and sellers to interact in foreign exchange in real time and by doing away with the need for middlemen to conduct transactions, regionalize accelerates transactions even further. However, Several funding requirements are outlined by rural credit standards and usual banking practises, which lead to substantial delays while concluding a single payment. Adopting a common awareness of the true nature of transactions in realtime, blockchain facilitates more reliable connection between export markets, streamlining in terms of time reduction and resource endowments spent on administrative tasks. speeds would be achieved through blockchain. For instance, Marr (2018) points out

that because blockchain transactions are distributed, complex, and based on encryption as compared to conventional trading platforms, they typically take long period to process., necessitating greater engineering advancements and processing speeds.

1.3 Increased Security

Security is the top priority for the financial sector. Incorporating Blockchain is a crucial component of the future of digital banking since it may boost security. Since fresh information uploaded Blockchain can offer security improvements for accounting transactions, reducing the ability to manipulate the data, since knowledge cannot be modified and is effectively shared by many groups. It points out that any changes to information inside a block may be kept and analyzed in the interest of avoiding theft and exploitation. More importantly, real-time communication and updates on suspected scams are made possible by blockchain technology (Patel, 2018). Blockchain is also having an influence on the preconditions of trust, including assurance, sincerity, dependability, duty, and stability. Another benefit of the blockchain's global ledger's openness is that it will make it easier for regulators to review financial transactions (Tapscott and Tapscott, 2016). In addition to the data security offered by the encrypted connections of blockchain, blockchain also functions as a trust network, limiting access to consumer data to sources who are known to be reliable (Patel, 2018). By regulating the size of a ledger and providing confidentiality through "public key infrastructure," blockchain can also simultaneously achieve security and privacy (Schou-Zibell and Phair, 2018).



2: Costs and Standardization Needs Blockchain-ed Issues in Banking:

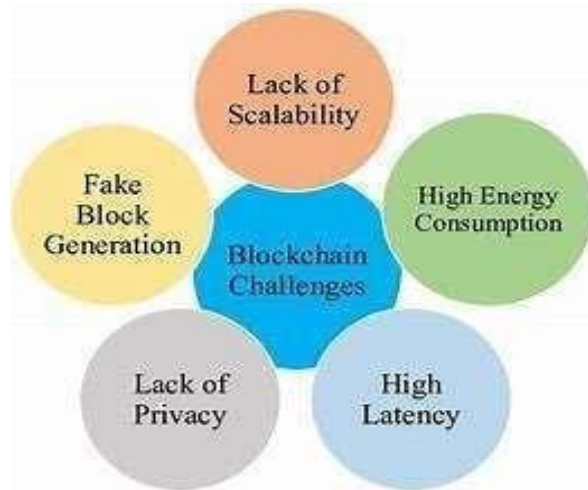
system requires standardisation across banks if the financial sector an expensive endeavour, developing a blockchain-enabled is to benefit from it.

For instance, for KYC knowledge to be meaningfully shared within the financial system, a consistent policy on consumer authentication and confirmation is necessary. According to Clarence Smith (2018), banks are reluctant to fully rely on outside data verifications; as a result, it is doubtful that all banks would implement KYC based registries.

The energy expenditure necessary to power blockchain algorithms is another issue. Galeon (2017) noted that, using Bitcoin as an example, the energy needed to mine one bitcoin is greater than what many nations use in a year.

2.1 Exchange Rate Stability

Bitcoin is not widely accepted by banks as a form of payment (Hillsberg, 2018). A major obstacle to the implementation of blockchain payments in banks is the stability of the fundamental currency, especially considering how volatile the bitcoin market is. In order to prevent price variations from causing either the buyer or the seller to lose out on a trade, currency stability is essential (Lund, 2018). Lund (2018) proposes a "stable coin" in place of conventional cryptocurrencies, It essentially functions as a store of value, a means of exchange, and a basis for accounting for blockchain activity. It has low price volatility since it is tied to an underpinning fiat currency.



2.2 Safety

A security opportunity and a threat are presented by the deployment of blockchain in banking. A high standard of security is demanded in banking, which has no secret. In the past, banks' primary worry was safeguarding the cash they had deposited in high street banks and their safes. With the shift to internet banking, then came the possibilities of dangers, providing an opportunity in cyber security professionals and raising expenses for banks. Banks are apprehensive about letting their financial data lie outside of their protective firewall because recent cyberattacks caused losses in the banking sector of USD 100 million. (Hillsberg, \s2018) As a security measure, workers can review detailed records in the blockchain, but since activities are irreversible, individual data capture mistakes can be extremely troublesome. Since transactions may be visible across network nodes and generate meta data that enables pattern detection, data privacy is still a risk with blockchain technology. Another safety concern cryptocurrency brings is anonymity. Because they are harder to levy and potentially aid thieves in bank fraud thanks to blockchain technology, such untraceable transactions would put the financial sector and regulator in jeopardy

2.3 Scalability

Everyone acknowledges that cryptocurrency currently has a relatively limited capacity for exchanges. One of the major issues with blockchain technology, in fact, is its restricted scalability (SchouZibell and Phair, 2018). The real scalability of blockchains is another point of contention. According to Thew (2018) and Caplen (2018), respectively, bitcoin can only handle 7 TPS on its blockchain at the moment, while Visa can process 4500 transactions per second. Furthermore, due to scalability limitations for high numbers of transactions, several Central Banks, such as De Nederlandsche Bank, consider that the present financial payment infrastructure somehow doesn't suit open database technology. These difficulties suggest that blockchain is more suitable for commercial financial services than for mainstream market application

CONCLUSION

By revolutionising the systems that run them, blockchains have the potential to improve and change banks' reputation information and payment clearing operations. Moreover, blockchain applications support "multi-centre, minimally collateralized" possibilities, which will strengthen the financial sector's efficiency.

It is crucial to remember that every modern funding innovation has always sparked vigorous debate over problems of legislation, productivity, and protection. These challenges, however, will eventually be overcome, and the technological, governmental, and other issues with blockchain technology are not going to stop history. As a result, it is quite conceivable that blockchain technology will someday be integrated into the financial sector

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