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BLOCKCHAIN VS BANKS

Blockchains are incredibly popular nowadays. It is an especially promising and revolutionary technology because it helps reduce risk, stamps out fraud and brings transparency in a scalable way for a myriad uses. Banks and decentralized blockchains are vastly different. To see how a bank differs from blockchain, let's compare the banking system to Bitcoin's implementation of blockchain.

Firstly, let's speak about transaction fees. Bank fees vary based on the method of payment. Card payment fees vary based on the card and are not paid by the user directly. They are paid per transaction by stores through payment processors. Checks cost between \$1 and \$30 and domestic wire transactions can cost as much as \$25 while international ones cost as much as \$45. Bitcoin also has variable fees which range from \$0 to \$50 but users have the ability to determine how much of a fee they are willing to pay. This creates an open marketplace where if the user sets their fee too low their transaction may not be processed.

Next come the know your customer rules. Bank accounts and other banking products require "Know Your Customer" (KYC) procedures. This means banks legally are required to record a customer's identification prior to opening an account; whereas anyone can participate in Bitcoins network with no identification.

Thirdly, we would like to mention the privacy and security. Bank account information is stored on the bank's private servers and held by the client. Bank account privacy and security is limited to how secure the bank's servers are and how well the individual user secures their own information. If the bank's servers were to be compromised then the individual's account would be as well. Yet Bitcoin can be as private as the user wishes. All Bitcoin is traceable but it is impossible to establish who has ownership of Bitcoin if it was purchased anonymously. If Bitcoin is purchased on a KYC exchange then the Bitcoin is directly tied to the holder of the customers' exchange account. The larger the Bitcoin network grows the more secure it gets [1].

Now, let's talk about how Blockchain can disrupt Banking. Blockchain technology provides a way for untrusted parties to come to agreement on the state of a database, without using a middleman. By providing a ledger that nobody administers, a blockchain could provide specific financial services like payments or securitization without the need for a bank.

Further, blockchain allows for the use of tools like "smart contracts," self-executing contracts based on the blockchain, which could potentially automate manual processes from compliance and claims processing to distributing the contents of a will.

Blockchain technology has a massive opportunity to disrupt the banking industry by disintermediating the key services that banks provide. Let's consider some of them now [2].

First come Payments. By establishing a decentralized ledger for payments (e.g. Bitcoin), blockchain technology could facilitate faster payments at lower fees than banks. Blockchain technology offers a secure and cheap way of sending payments that cuts down on the need for verification from third parties and beats processing times for traditional bank transfers. 90% of members of the European Payments Council believe blockchain technology will fundamentally change the industry by 2025.

Second come the Clearance and Settlement Systems. Distributed ledgers can reduce operational costs and bring us closer to real-time transactions between financial institutions. Distributed ledger technology could allow transactions to be settled directly and keep track of transactions better than existing protocols like SWIFT.

Next are Securities. By tokenizing traditional securities such as stocks, bonds, and alternative assets and placing them on public blockchains, blockchain technology could create more efficient, interoperable capital markets. Blockchain tech removes the middleman in asset rights transfers, lowering asset exchange fees, giving access to wider global markets, and reducing the instability of the traditional securities market. Moving securities on blockchains could save \$17B to \$24B per year in global trade processing costs.

Fourth comes the Trade Finance industry. By replacing the cumbersome, paper-heavy bills of lading process in the trade finance industry, blockchain technology can create more transparency, security, and trust among trade parties globally.

Last but not least come the Customer and Fraud Prevention. By storing customer information on decentralized blocks, blockchain technology can make it easier and safer to share information between financial institutions. Blockchains can store customer information on different blocks, which could help prevent attacks on customer information. Blockchain technology for KYC purposes can bring down costs for the banking sector by up to \$160M annually [3].

In conclusion, it is important to note that the applications of blockchain in the banking sector may not be implemented immediately, but they are definitely in the pipeline. Work is still to be done on blockchain technology as its trail blazes an array of industries. One thing is certain – blockchain is disrupting the global financial industry as we know it.

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