



THE RISE OF BLOCKCHAIN-BASED LENDING TECHNOLOGY

Abstract

The financial services sector is at the cusp of a digital revolution. In the lending space, blockchain technology provides the much-needed requirement for transparency, speed, efficiency, security, and immutable transactional records, while streamlining workflows with permission controls. While there are plenty of opportunities, businesses must collaborate with governments and regulatory bodies to ensure that the financial services industry can leverage blockchain technology to its fullest potential and harness the benefits for both lenders and borrowers.



Introduction

As businesses need data and transactions to be transparent, secure, and seamlessly available to all stakeholders, they are increasingly turning to blockchain technology. In blockchain, transactions and digital assets are stored in an immutable and decentralised digital ledger that can be accessed by only authorised participants in the network. Companies are realising that blockchain applications go way beyond cryptocurrencies. Blockchain technology

has immense potential use in multiple sectors such as healthcare, insurance, real estate, agriculture and fintech, to name a few. According to an estimate by Gartner, it is expected that blockchain will add \$3.1 trillion in business value by 2030. Enterprises need to board the bus quickly to gain first mover advantage.

Given the need for high security, transparency, speed and efficiency, the financial services sector is set to undergo

a disruption with blockchain technology. The blockchain provides a single view of the truth, along with transparency for all members of the network, with every detail being visible. In the financial sector, the potential applications for blockchain are in the areas of blockchain-based currency, clearance and settlement systems, and lending. In this article, we will take a look at how blockchain technology can revolutionise lending.

Challenges in lending

The digitisation of businesses, the availability of cutting-edge technology and high customer expectations are adding pressure to traditional lending processes, which are burdened with legacy applications, bureaucratic hurdles, and slow administrative tasks due to insufficient automation. Processing loans requires multiple internal and external parties such as credit agencies. At the same

time, multiple systems need to be updated, rules and regulations need to be followed, and there is a lack of a consolidated view of the process. While banking and insurance executives acknowledge that digitisation is necessary, there are significant concerns about the current internet security norms. Banks and Financial Institutions (FI) are losing ground to new-age agile* fintech companies, who have far simpler

lending processes enabled by cutting-edge technology such as blockchain and analytics, and a diverse product portfolio. There is a pressing need for banks and FIs to collaborate with technology and security companies, relook at business processes and business architecture, and overhaul lending processes and technology.

How blockchain can transform traditional lending

New-age fintechs are already using blockchain technology to provide a diverse range of products and services. Banks and FIs can use blockchain to improve the efficiency of existing processes and provide for more inclusive and transparent transactions. This would be possible if the financial sector collaborates with governments and regulators to move towards a technology-enabled regulatory framework.

Banks and FIs can use blockchain technology to enable crypto-collateral or simply streamline the lending process to improve efficiency. Crypto-collateral is among one of the popularly used applications in the lending ecosystem. These applications use public blockchains. Publicly traded crypto assets such as bitcoins can be used as collaterals for loans. These are easily valued and verifiable. With crypto collaterals, lenders have access to a cross-border market that was previously inaccessible due to local laws,

valuation risks and foreclosure challenges. The liquidation of crypto assets follows a uniform pattern globally. Unlike physical assets such as real estate, there is no need for expensive credit checks.

Lending processes can be streamlined with the use of private blockchains. A private blockchain allows lenders more control over the participants in the network with access, authentication, and authorisation rules. It offers a single, consolidated, and real-time view of the lending transaction. Documents and transaction records can be stored on the blockchain, with visibility to necessary stakeholders. Once the approvals are done based on regulatory requirements, the data block becomes immutable. Any alterations can be done only with the agreement of all participants and is recorded on the blockchain. These iterations allow comparison to baseline in case of any discrepancies and provide a streamlined workflow with little possibility of fraud.

In lending approval processes that require multiple lenders, documentation requests and approvals can be streamlined, increasing speed and efficiency. This also reduces the duplication of documents. Furthermore, private blockchains can be used for all types of lending transactions, such as transfer of funds, disbursements, and payments. Every transaction between the lender and borrower can be recorded and can be used to track the status of a loan. This paves the way for information to be made available to prior lenders regarding current borrower transactions, thereby increasing transparency in the lending ecosystem, while at the same time, reducing debtor burden to notify lenders, or provide documentation as per agreements.



The decentralisation of finance (DeFi)

The lending ecosystem stands to benefit from a full-fledged implementation of blockchain technology. This can be achieved in various ways, either via banks and financial institutions, or a direct contract between the lender and borrower for a financial deal, with no requirement of a middleman.

Traditional finance is a centralised model, where there is a dependency on banks and other financial institutions (FIs) for lending, borrowing, and trading in compliance with rules and regulations. The consumer has little or almost no direct access to capital markets and financial services. Brokerages and fees need to be paid to these financial middlemen. Decentralised finance (DeFi)

challenges the traditional centralisation of finance, by enabling peer to peer transactions. Blockchain technology and cryptocurrencies such as BitCoin (BTC) and Ethereum (ETH) are enabling the decentralisation of finance. DeFi has varied applications in the financial sector such as payments, trading securities, lending and borrowing, e-wallets, yield harvesting, non-fungible tokens (NFTs), and flash loans.

Blockchain technology enables smart contracts which can be stored in the distributed ledger. The rights and obligations of the lender and the borrower can be stored as encoded transactions. Necessary details such as loan amount, rate of interest, proof of funds, payment

planning, and contract expiry date are specified in the smart contract. There is a simultaneous execution of the contract for both the parties at the same time, which ensures complete transparency and fulfilment of the obligations from both the lender and the borrower. The transaction is immutable and audit trails can be appended, which again, are visible to all authorised parties. Consumers can secure a loan using crypto assets, and smart contracts prevent any fraudulent behaviour of the lender or borrower. Lenders benefit with higher returns on their money due to the lack of middlemen.



As AI continues to grow, so will data annotation

The adoption of blockchain technology can prove to be a game-changer for lending. Banks and financial institutions have a stronghold on financial markets and are perceived as trusted entities by consumers. With crypto collaterals and private blockchains, they are in a position to transform traditional lending processes and provide completely new products and services while allowing speed, efficiency,

transparency and flexibility offered by the blockchain, while at the same time adhering to regulatory and compliance requirements. On the other hand, the decentralisation of finance is in a nascent stage, but will eventually offer consumers more freedom and flexibility.

While the lending ecosystem is poised for a revolution with blockchain technology, several legal and regulatory challenges

need to be surmounted. Partnering with regulators and government bodies will help the financial sector exploit blockchain technology while complying with rules and regulations, and undergo the essential digital transformation, resulting in a win-win for financial institutions and consumers.

*For organisations on the digital transformation journey, agility is key in responding to a rapidly changing technology and business landscape. Now more than ever, it is crucial to deliver and exceed organisational expectations with a robust digital mindset backed by innovation. Enabling businesses to sense, learn, respond, and evolve like living organisms will be imperative for business excellence. A comprehensive yet modular suite of services is doing precisely that. Equipping organisations with intuitive decision-making automatically at scale, actionable insights based on real-time solutions, anytime/anywhere experience, and in-depth data visibility across functions leading to hyper-productivity, [Live Enterprise](#) is building connected organisations that are innovating collaboratively for the future.

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