

## The Speed of YAY:

### How Crypto is Transforming The Way We Pay

To demystify the evolution of financial transactions and the transformative role of blockchain, it's essential to delve into the mechanics of traditional banking and payment systems before contrasting these with the innovative blockchain approach. This exploration reveals not just the pain points of conventional methods but also the promise held by blockchain technology for speedier, more cost-effective transactions.

#### Traditional Banking and Payment Systems: A Closer Look

At the heart of traditional banking systems lies the banking core, a robust software platform that processes daily banking transactions and posts updates to accounts and other financial records. Core banking systems are developed by financial technology companies like FIS, Fiserv, and Jack Henry, serving as the backbone for deposit, loan, and credit processing. These systems are meticulously engineered to handle the complexities of modern banking, from maintaining customer accounts to processing payments, ensuring compliance, and managing risk.

Payments in this traditional setup navigate through a network of intermediaries, including banks, clearinghouses, and payment processors. This journey, governed by intricate rules and regulations, involves several steps: initiation, authentication, authorization, clearing, and settlement. Each step is a potential delay point, often taking days for a transaction to fully settle.

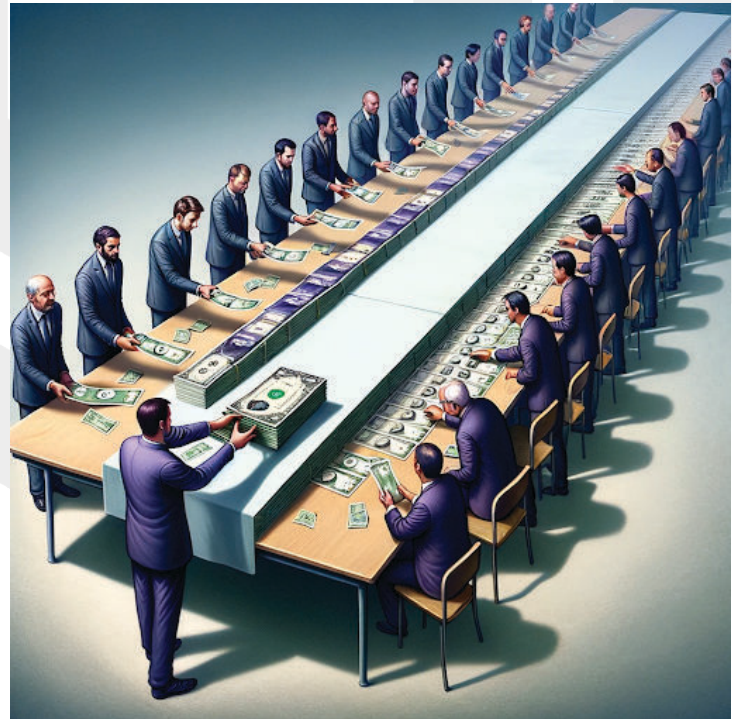
The reliance on centralized entities for verification and processing introduces not only time lags but also transaction fees, which can accumulate, especially in cross-border transactions.

The software driving these traditional payment rails, while advanced, operates on infrastructure designed for batch processing, not real-time transactions. Despite innovations and updates, many underlying systems still reflect older, pre-digital era frameworks, leading to inefficiencies and bottlenecks in processing payments quickly.

#### Blockchain and Peer-to-Peer Payments: A New Paradigm

Blockchain technology introduces a paradigm shift with its decentralized ledger system. Here, transactions are recorded across a network of computers, eliminating the need for central intermediaries. This peer-to-peer (P2P) model facilitates instantaneous transactions and settlement, as transactions are verified by consensus among participants in the blockchain network. The decentralized nature of blockchain not only speeds up transactions but also reduces costs by cutting out middlemen.

Smart contracts further enhance the blockchain ecosystem by enabling rules-based transactions. These self-executing contracts with the terms of the agreement directly written into code automate and enforce contract execution, allowing for complex, regulated transactions to be completed without human inter-



vention. This capability is particularly revolutionary in fields requiring stringent compliance, as smart contracts can be programmed to meet regulatory requirements automatically.

### The Impact of Blockchain Technology

The implications of blockchain's efficiency are profound. For consumers, it means faster remittances at lower costs, making it easier to send money across borders without hefty fees. For small business owners, blockchain's real-time settlement translates into improved cash flow and quicker access to funds, allowing them to reinvest in their businesses more rapidly.

### A Comprehensive Understanding

Understanding the intricacies of both traditional and blockchain payment systems sheds light on the pain points of slow, expensive transactions that consumers and businesses face. While the technicalities of banking cores, software-driven payment rails, and smart contracts may seem daunting, they are central to grasping why financial transactions have historically been sluggish and costly. Blockchain technology, with its promise of speed and efficiency, offers a solution that could reshape the financial landscape.



This deep dive into the workings of payment systems, though perhaps more detailed than expected, aims to educate on the critical advancements in financial technology. By illuminating the root causes of common transactional frustrations and highlighting the benefits of blockchain, the narrative reassures that while the journey to better financial transactions has been complex, the future looks promising thanks to technological innovation.