



**Credit Research
Foundation**

PROVINCE

INTRODUCTION TO CRYPTOCURRENCY

MARCH 2023

AGENDA





Discuss recent crypto bankruptcy filings and examine the reasons behind them

Explore the concept of Bitcoin and how it works as a digital currency

Look at the possibilities of blockchain technology, including its potential applications in various industries

Understand the risks associated with cryptocurrency, including volatility, lack of regulation, and security issues

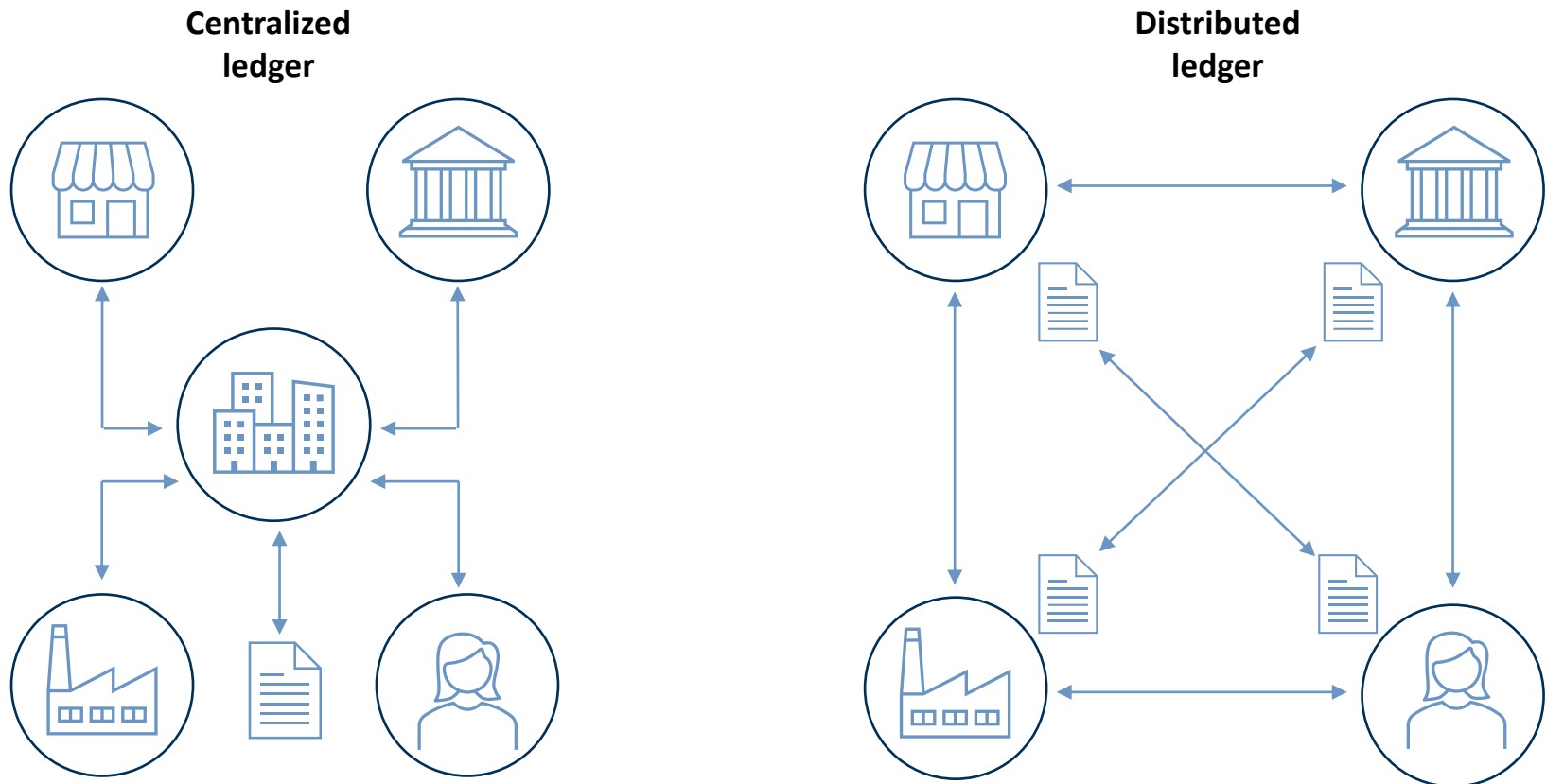
RECENT CRYPTOCURRENCY INDUSTRY FAILURES

			
<p>Founded in 2017 by Philip Eytan</p>	<p>Founded in 2017 by Alex Mashinsky, Daniel Leon, and Nuke Goldstein</p>	<p>Founded in 2017 by Zac Prince and Flori Marquez</p>	<p>Founded in 2019 by Sam Bankman-Fried, Gary Wang</p>
<p>Approximately \$4 billion in assets under management.</p>	<p>Approximately \$12 billion in assets under management.</p>	<p>Approximately \$15 billion in assets under management.</p>	<p>The Company reached a valuation of \$32 billion after raising \$400 million from investors.</p>
<p>Declared bankruptcy in July 2022.</p>	<p>Declared bankruptcy in July 2022.</p>	<p>Declared bankruptcy in November 2022.</p>	<p>Declared bankruptcy in November 2022.</p>
<ul style="list-style-type: none"> U.S. based cryptocurrency company that offered interest-bearing cryptocurrency accounts and a trading platform. 	<ul style="list-style-type: none"> U.S. based cryptocurrency lending company that allowed users to deposit digital assets and earn a percentage yield on them. Celsius clients could take loans by pledging their cryptocurrency assets as collateral. 	<ul style="list-style-type: none"> U.S. based cryptocurrency trading and lending platform It offers products including cryptocurrency-backed loans and an interest-bearing accounts that provides yields to investors who store their cryptocurrency on its platform. 	<ul style="list-style-type: none"> Founded in the Bahamas, a cryptocurrency exchange specializing in derivatives and leveraged products. Later, a US exchange was additionally founded in January 2020 to provide spot trading of digital assets and tokens to US residents.
<ul style="list-style-type: none"> Voyager Digital had a \$665 million unsecured loan outstanding to Three Arrows Capital. Upon Three Arrows Capital inability to pay back the loan, Voyager was forced to halt customer withdrawals and declare bankruptcy due to its inability to pay back customer funds. 	<ul style="list-style-type: none"> Celsius had \$167 million cash on hand against \$4.7 billion owed to users. Within their first day declaration, Celsius founder and CEO blamed their downfall on poor asset deployment decisions. 	<ul style="list-style-type: none"> BlockFi suffered significant losses from loans to failed crypto hedge fund Three Arrows Capital, which collapsed in May. FTX and BlockFi then became intertwined, with FTX striking a deal to lend to BlockFi. As FTX began to spiral, BlockFi suspended withdrawals. 	<ul style="list-style-type: none"> Given the uncertainty of the Company's financial situation, FTX's current debt and assets are unclear. The bulk of the FTX's assets were reported to be at the Alameda silo, which held \$13.5 billion in assets and \$5.1 billion in debt.

- **Cred Inc:** was a California-based financial services platform with many parallels to Celsius, BlockFi and Voyager. It filed for bankruptcy in 2020, as a result of theft, misappropriation of customer funds and faulty investment practices.
- **Case:** Cred, Inc. was a lender that allowed users to borrow funds using their cryptocurrency as collateral. It offered high yields to depositors by using their funds to generate interest through various financial instruments. One of these instruments involved lending deposits to a related party owned by the founder, called moKredit, which primarily extended unsecured micro-loans in China. Cred converted cryptocurrency from its customers into fiat currency and lent it to moKredit, which exposed Cred to fluctuations in cryptocurrency prices. This meant that Cred's customers were ultimately taking the credit risk of moKredit's micro-borrowers in China, rather than Cred
- **Outcome:** The Plan constituted a liquidating Chapter 11 plan for the Debtors and provides for distribution of the debtors' assets already liquidated or to be liquidated over time to holders of allowed claims through a trust that equaled \$170 million. The distribution process is ongoing, and it is unclear how much creditors will ultimately receive. Creditors are allowed to elect to receive their recovery in fiat or cryptocurrencies.

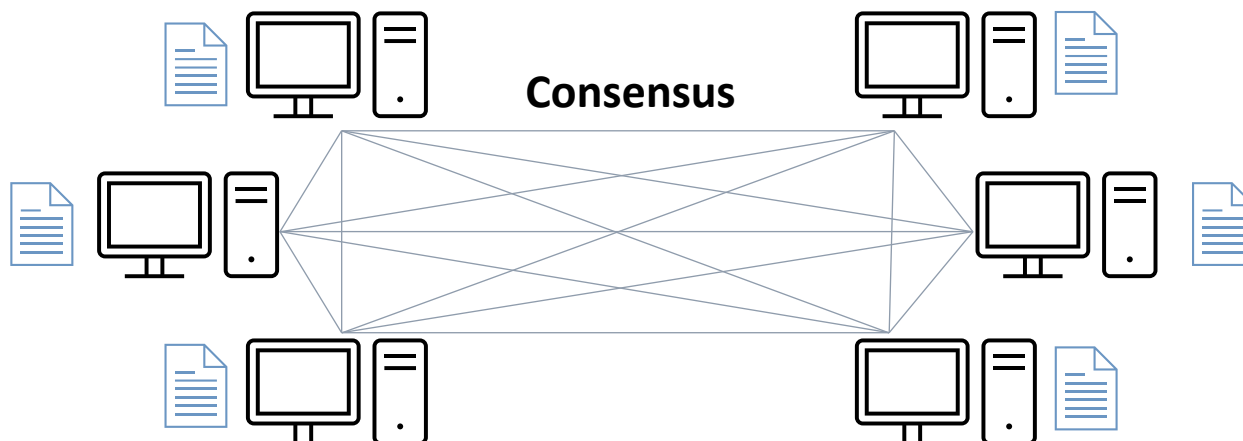
INTRODUCTION TO BLOCKCHAIN

- When it comes to software systems, there are two primary architectural models: centralized and distributed
 - In a centralized system, the network is built around a single central node that serves as the brain of the network
 - In a distributed system, there is no central control or coordination, and the network is connected peer-to-peer



DISTRIBUTED LEDGER TECHNOLOGY

- **Distributed Ledger Technology (DLT)** refers to the *process and related technologies that enable nodes in a network to securely propose, validate and record state changes (or updates) to a synchronized ledger that is distributed across the network's nodes*
- No party is able to authorize on the network without passing consensus agreement
- Such technology provides for each node to maintain a copy of the ledger, thus eliminating the need of a “one-true copy” or centralized authority allowing for:
 1. reducing complexity;
 2. improving end-to-end processing speed and thus availability of assets and funds;
 3. decreasing the need for reconciliation across multiple record-keeping infrastructures;
 4. increasing transparency and immutability in transaction record keeping;
 5. improving network resilience through distributed data management; and
 6. reducing operational and financial risks



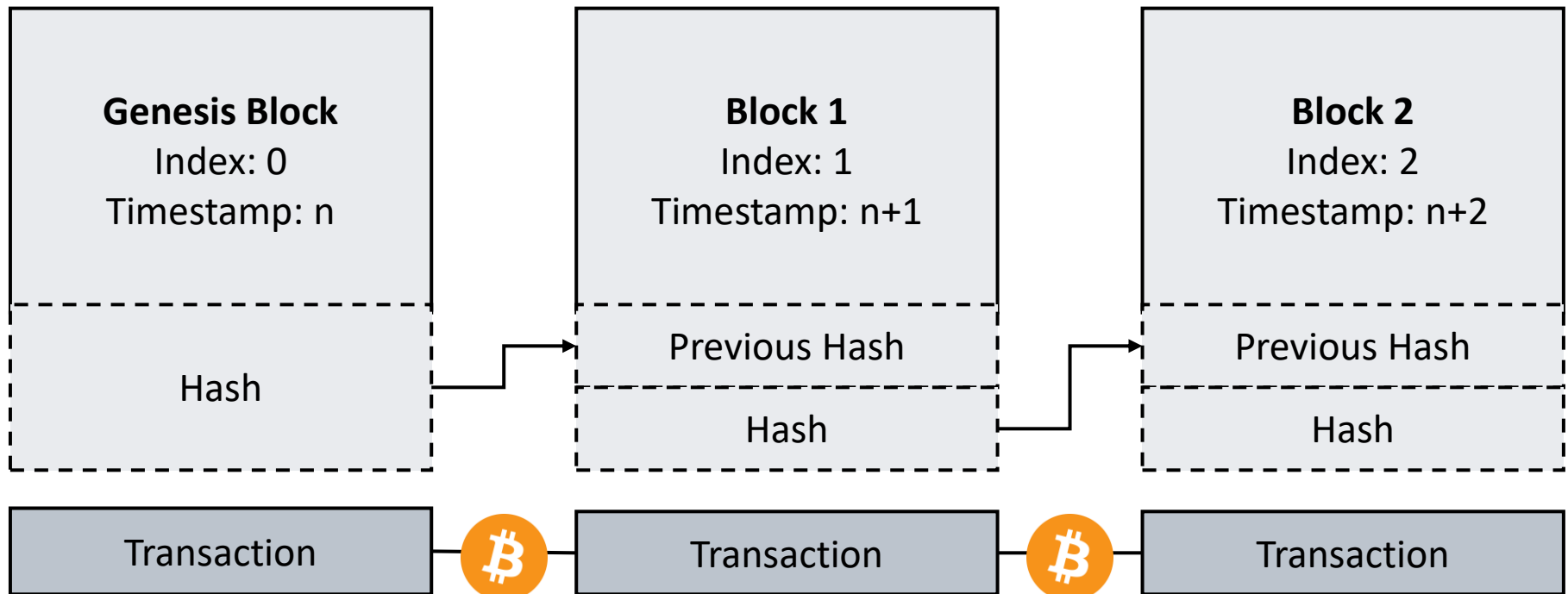
Source: Bank for International Settlements; the term Node refers to the computers participating in the network.; D Mills, K Wang, B Malone et al, “Distributed ledger technology in payments, clearing, and settlement”, Federal Reserve Board Finance and Economics Discussion Series, no 2016-095, December 2016, p 17

ADVANTAGES AND DISADVANTAGES OF DLT

Advantages	Disadvantages
<p>Higher Computing Power: dependent on the number of nodes participating in the network, the computing power of all connected computers is theoretically endless</p>	<p>Coordination / Communication overhead: as a decentralized network, coordination must be done by participants themselves and that requires communication both which cost effort and computing power that cannot be spent on genuine computing tasks</p>
<p>Cost Reduction: benefitting from economies of scale, the creating, maintaining and operating of a distributed system is much cheaper than that of a complex supercomputer</p>	<p>Dependencies on Networks: if there are no participating nodes, there is no network, or network with enough computing power to meet demand</p>
<p>Higher Reliability: not having a single point of failure, the network can maintain its integrity even when several nodes crash</p>	<p>Security Issues: being an open system, the network is subject to bad actors attempting to exploit or access information</p>
<p>Ability to Grow Naturally: fully reliant on its constituents, the computing power can grow simply because of new participants bringing nodes online</p>	

WHAT IS BLOCKCHAIN?

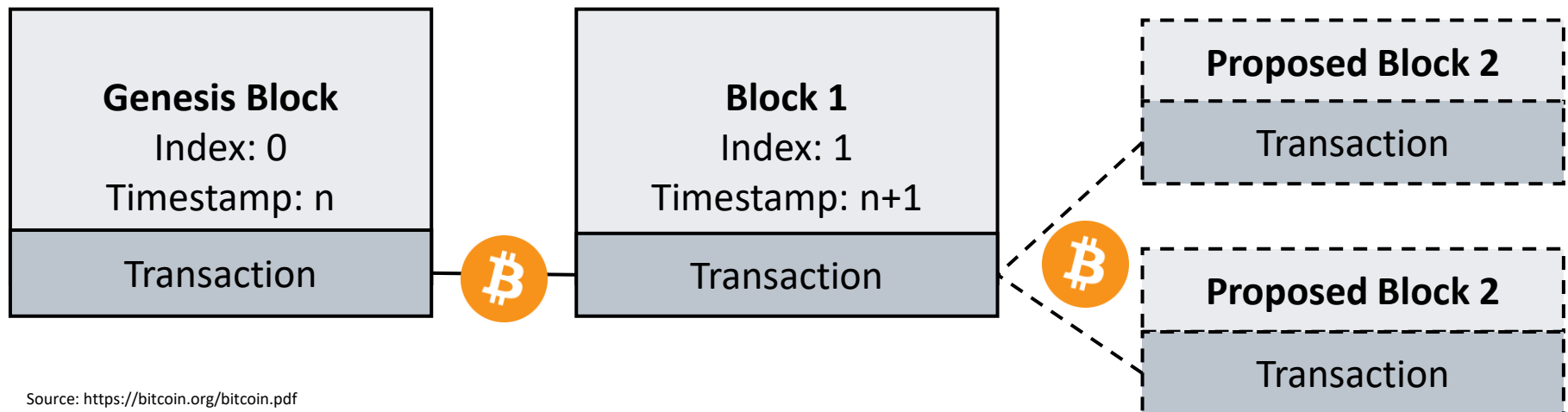
- In 2008, a person or collective, under the pseudonym Satoshi Nakamoto, published the Bitcoin whitepaper. It outlined the mechanics of a new **peer-to-peer solution for online transfers to be sent from one party to another without the need for known and trusted third parties – a blockchain**
- A form of DLT, Bitcoin created the ability to transfer ownership of an asset, recorded through sequentially hashing blocks of data that are linked together to form the ledger
 - Satoshi defines Bitcoin as *electronic coin as a chain of digital signatures. Each owner transfers the coin to the next by digitally signing a hash of the previous transaction and the public key of the next owner and adding these to the end of the coin. A payee can verify the signatures to verify the chain of ownership*



Source: <https://bitcoin.org/bitcoin.pdf>

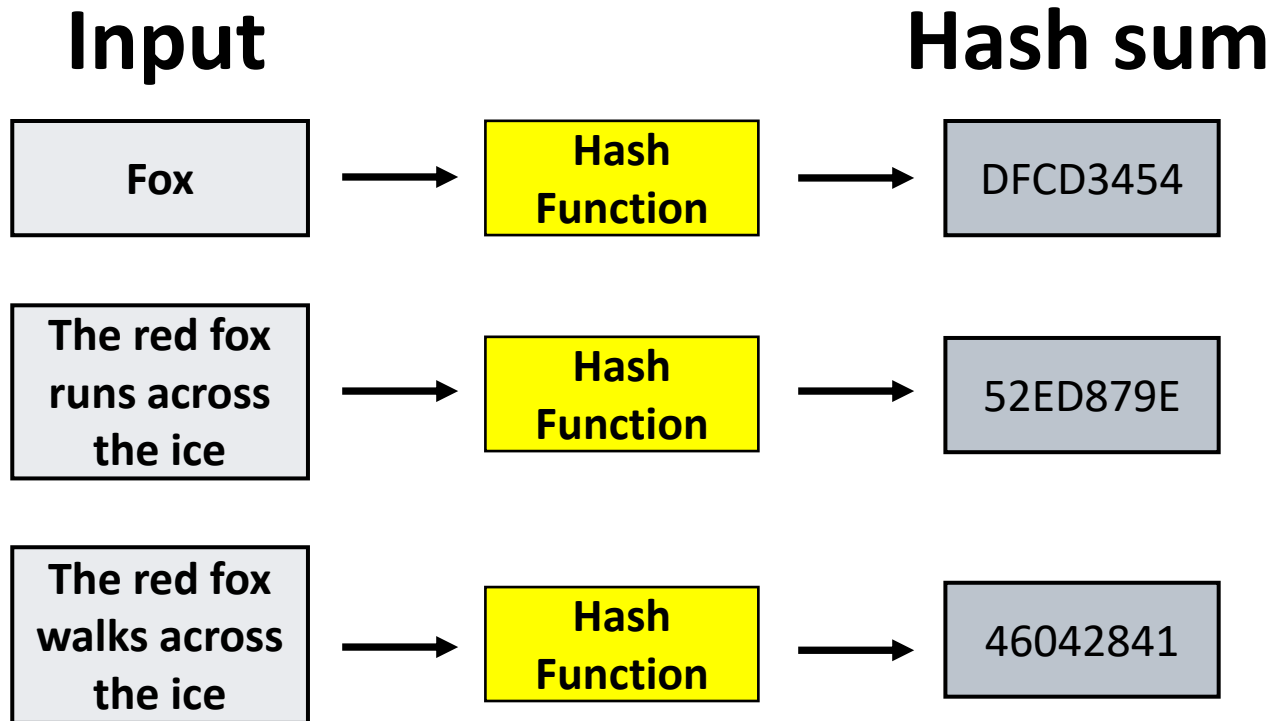
HOW AND WHY BITCOIN WORKS

- Satoshi identifies that in order for a blockchain to be work as intended, **there needs to be a way for the payee to know that the previous owner did not double spend**
 - The only way to confirm the absence of a transaction is to be aware of all transactions
 - To accomplish this without a trusted party, transactions must be publicly announced, and we need a system for participants to agree on a single history of the order in which they were received
 - The payee needs proof that at the time of each transaction, the majority of nodes agreed it was the first received
- **Bitcoin accomplishes this by utilizing a timestamp server**
 - A timestamp server works by taking a hash of a block of items to be timestamped and widely publishing the hash, such as in a newspaper
 - The timestamp proves that the data must have existed at the time, obviously, in order to get into the hash
 - Each timestamp includes the previous timestamp in its hash, forming a chain, with each additional timestamp reinforcing the ones before it



WHAT IS A HASH?

- A cryptographic hash is complex algorithm that performs a very basic task – transforming text of arbitrary length (an entire book, a document, a sentence, *a transactions timestamp*) into a fixed-length string of numbers that appears random
- A hash is considered the digital fingerprint and is how a block is determined to be true, which in turn determines who is the owner of the Bitcoin



MINERS, THE BOOKKEEPERS OF BITCOIN

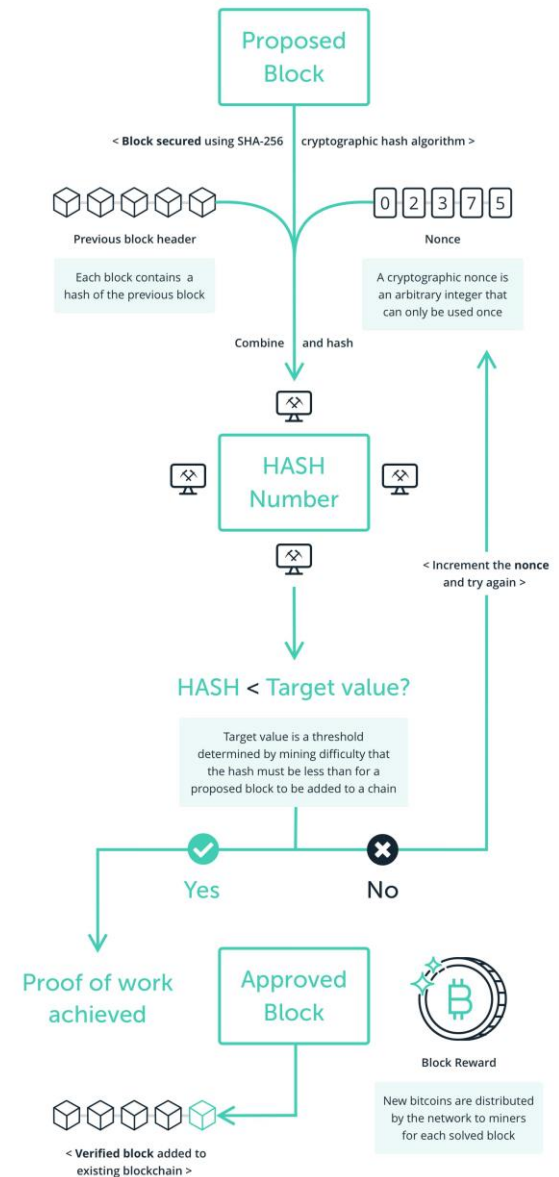
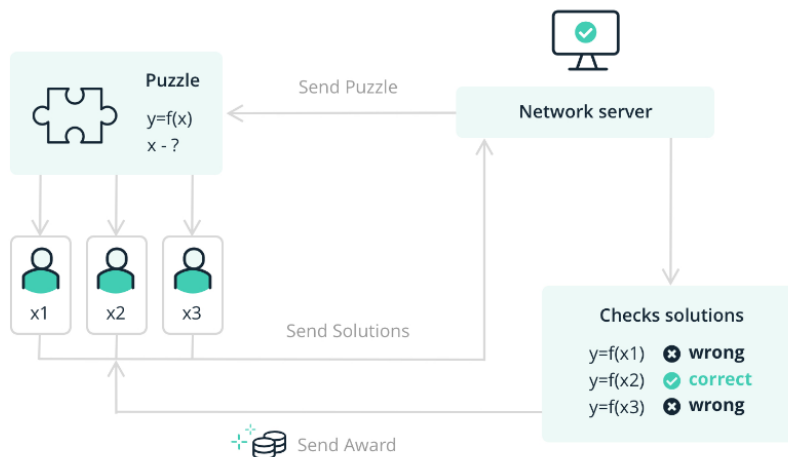
- The collection of participating nodes that make up the Bitcoin network are called Miners
- Miners verify that transactions are valid and update the blockchain with new blocks consisting of the latest transactions on a regular basis
- Approximately every 10 minutes a new block is added with the list of the latest transactions, although all miners are working to create the next block, only the fastest will be selected to have their specific version added to the blockchain
- Miners are incentivized in two ways:
 - Transaction fees, disbursed by the payer and to be credited to the account of the miner
 - Block rewards, earned through newly minted bitcoin, are reward to the miner that is responsible for creating the newest block

Bitcoin Halving Cycles

Cycle	Date	Block Number	Block Reward	BTC Issued
Launch	Jan-2009	0 (Genesis)	50 BTC	10,500,000 BTC
First	Nov-2012	210,000	25 BTC	5,252,000 BTC
Second	Jul-2016	420,000	12.5 BTC	2,625,000 BTC
Third	May-2020	630,000	6.25 BTC	1,312,500 BTC
Fourth	~ 2024	740,000	3.125 BTC	656,250 BTC
Fifth	~ 2028	850,000	1.5625 BTC	328,125 BTC
Sixth	~ 2032	1,060,000	0.78125 BTC	164,062.5 BTC
Seventh	~ 2036	1,270,000	0.390625 BTC	82,031.25 BTC

MINER'S PROOF-OF-WORK

- Bitcoin utilizes the *Proof-of-Work* consensus mechanism to determine the next block
- At any given time, each miner is actively engaged in creating the next block by resolving a difficult computational problem, with the first to solve it being rewarded
- The goal of a miner is to discover the hash of the in-process block they are trying to create that will have certain characteristics
- The first miner to compute a hash value that is lower than the target value of the next block is the winner
 - This requirement of the Bitcoin network has led to a race to create hardware capable of generating more hash per second
 - As an example, the miner who first discovered the hash for block #282,435 incremented over 500 million times to find the winning hash

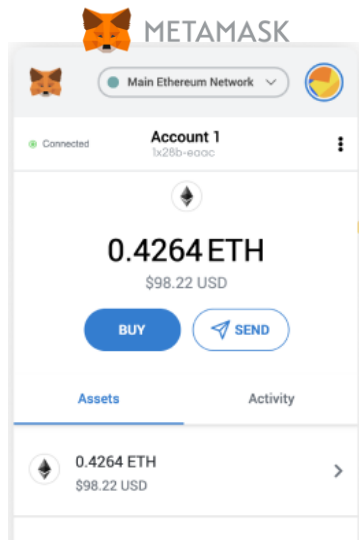


Source: <https://www.ledger.com/academy/blockchain/what-is-proof-of-work>; The Book of Satoshi, Phil Champagne

THE IMPORTANCE OF SELF CUSTODY

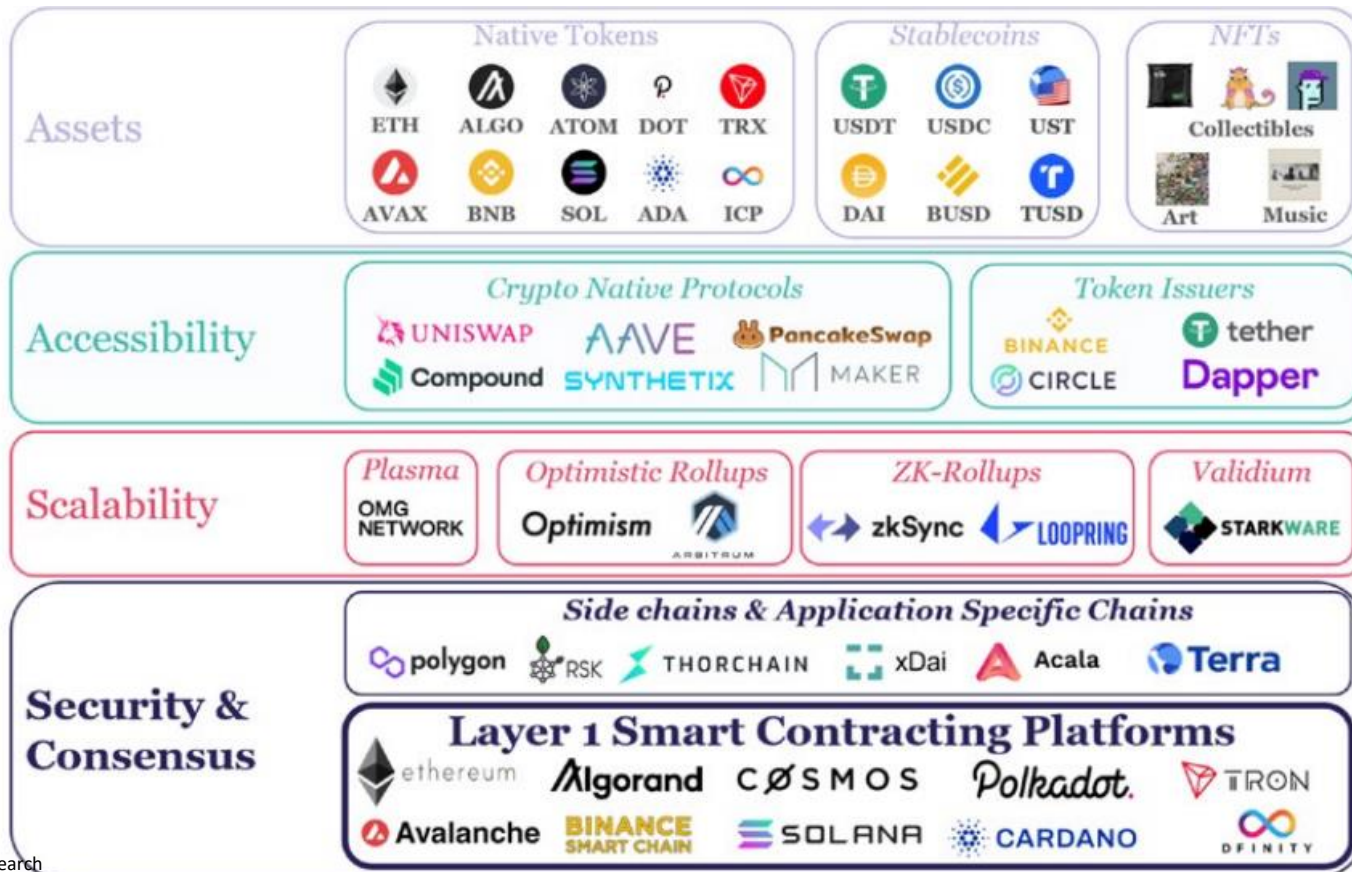
- Blockchain technology enabled the creation of non-custodial wallets, non-custodial wallets are digital or hardware wallets that allow you to store, manage, and use your cryptocurrency without relying on a third-party custodian
- Unlike custodial wallets, which are managed by exchanges or other service providers, non-custodial wallets give you full control over your private keys and allow you to directly interact with the blockchain

Criteria	Custodial	Non-Custodial
Access to Funds	Private keys are in control of the wallet provider	Only the user has control of the private keys
Recovery of Funds	Ordinary resetting of account password through provider	Impossible to recover funds if seed-phrase is lost
Security	Vulnerable to hacks, fraud, other third-party issues	Secure from cyber and third-party threats
Creating Accounts	Requires KYC for creating an account	No KYC required
User-Friendliness	Ordinary bank account interface	Technical know-how require but not complicated



GOING BEYOND BITCOIN




- While Bitcoin is regarded as the king, it is limited to acting as an open source, peer-to-peer version of electronic cash, e.g. a payment system
- New developments have led to the creation of **Layer 1 Smart Contracting Platforms**, these platforms operate through similar, but different, distributed ledger technology while also providing a **venue for deploying of smart contracts and decentralized applications**
- They serve as the base security / settlement layer of an emerging decentralized economy









Source: The Block Research

LAYER 1 SMART CONTRACTING PLATFORMS

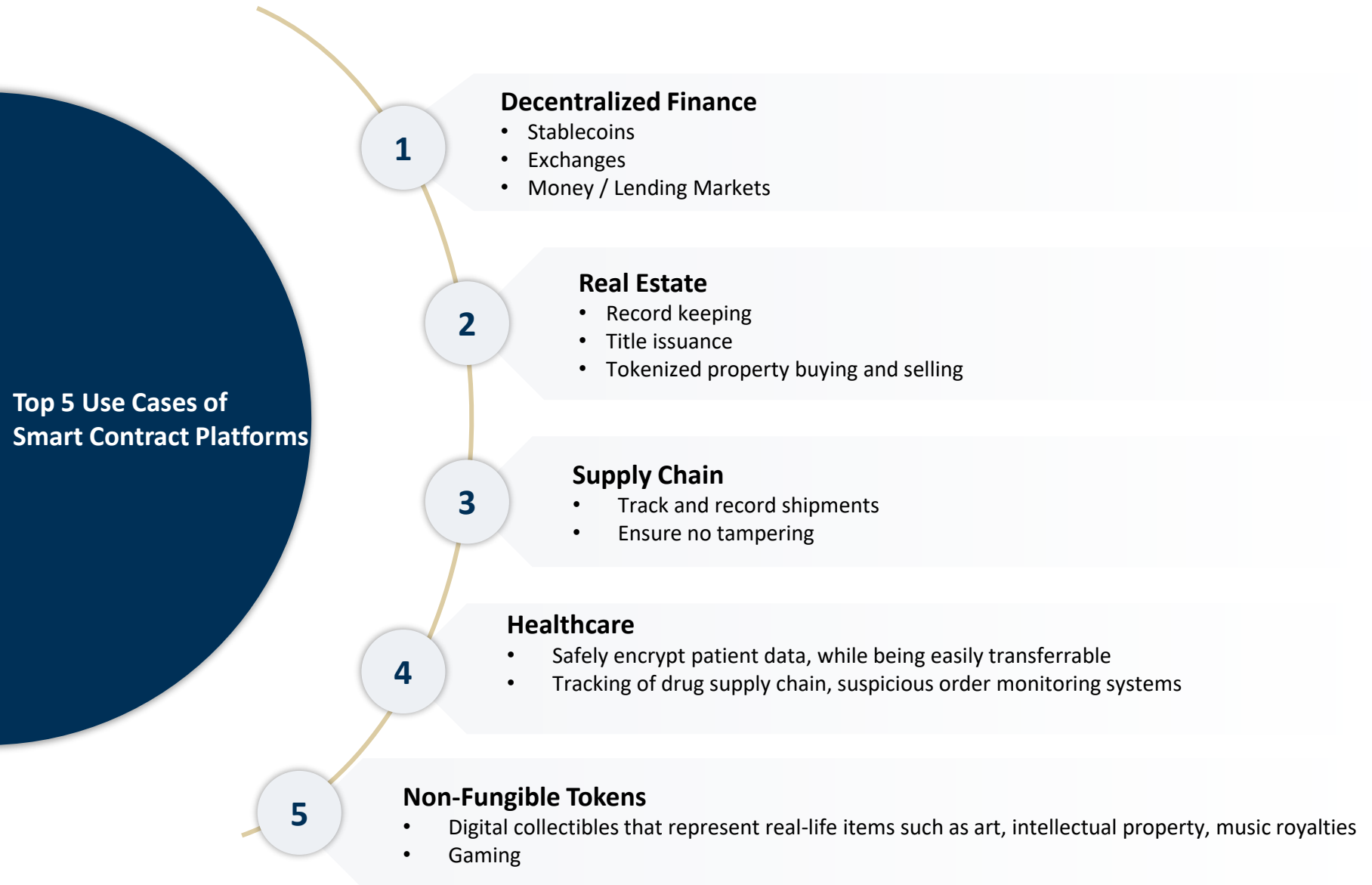
- What separates Bitcoin from the emerging Layer 1 Smart Contract Platforms, is the latter's ability to provide programable immutable contracts to perform certain actions
- Because of the additional computing power to run these networks, Proof-of-Work is not utilized instead other "proof" consensus mechanisms are, allowing for faster and more efficient networks

Mechanism	Competition	How to compete	Punishment for misbehavior
 Proof-of-Work (PoW)	Computational work	Perform computational work to solve mathematical puzzles first	Proposing an invalid block after solving the puzzle does not earn rewards and results in unrecovered energy costs
 Proof-of-Stake (PoS)	Financial Stake	Put financial stake at risk to gain a larger share of network rewards	If a node goes offline or signs invalid transactions, it risks losing the financial stake it put at risk through slashing and can be excluded from consensus
 Proof-of-Authority (PoA)	Reputation	Undergo authentication process to gain the right to participate in the network	If a node goes offline or signs invalid transactions, it can be excluded from consensus and face other penalties imposed by the consortium of approved validators

LAYER 1(S) MAKING ADVANCES

						
	Bitcoin	SOLANA	ethereum	BINANCE	Algorand	AVALANCHE
Consensus	PoW	PoH	PoS	PoA	PPoS	PoS
Theoretical TPS	7	65,000+	100,000+	100	46,000+	4,500+
Current TPS	7	2,603	--	100	27	4
Finality Time	60 min	2 secs	6-12 min	35 secs	2.5 secs	2 secs
Block Time	10 min	0.4 secs	12 secs	3 secs	4.5 secs	1-2 secs
Transaction Fee	\$3.47	\$0.00025	--	\$0.50	\$0.0019	\$0.05
Applications	--	500	3,000	544	55	358
Founding Year	2009	2018	2015	2019	2017	2019

USES CASES YOU SHOULD KNOW ABOUT

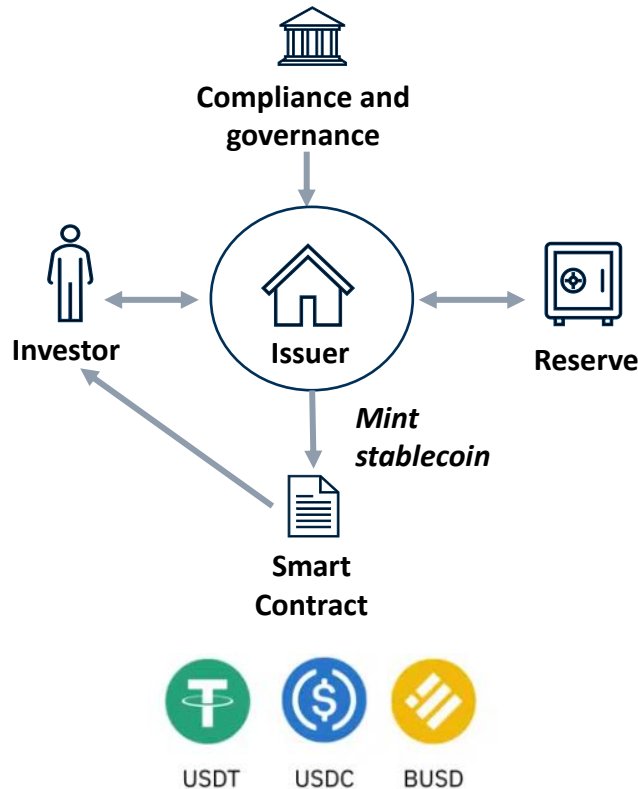


DECENTRALIZED FINANCE

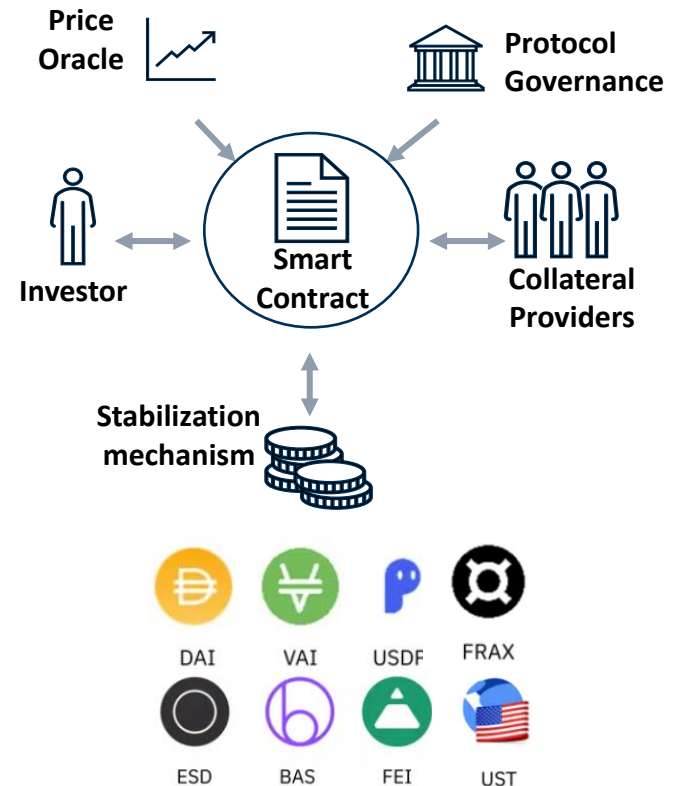
STABLECOINS

- Stablecoins are a type of digital currency that provides a reliable unit of exchange intended to maintain its value and reduce volatility. The most significant stablecoins are designed to be pegged to the US Dollar at a 1:1 ratio
- This feature of stablecoins makes them particularly appealing to individuals seeking to conduct transactions with ease and confidence afforded by the blockchain, while also providing an alternative store of value to their local currency

CENTRALIZED STABLECOINS



DECENTRALIZED STABLECOINS

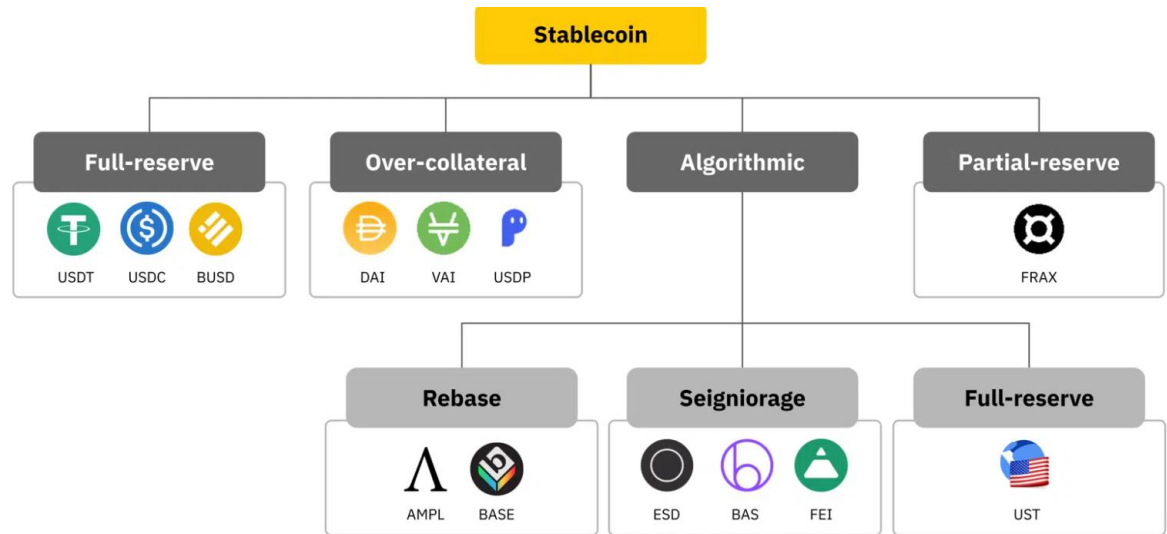


Source: <https://wifpr.wharton.upenn.edu/wp-content/uploads/2021/05/DeFi-Beyond-the-Hype.pdf>

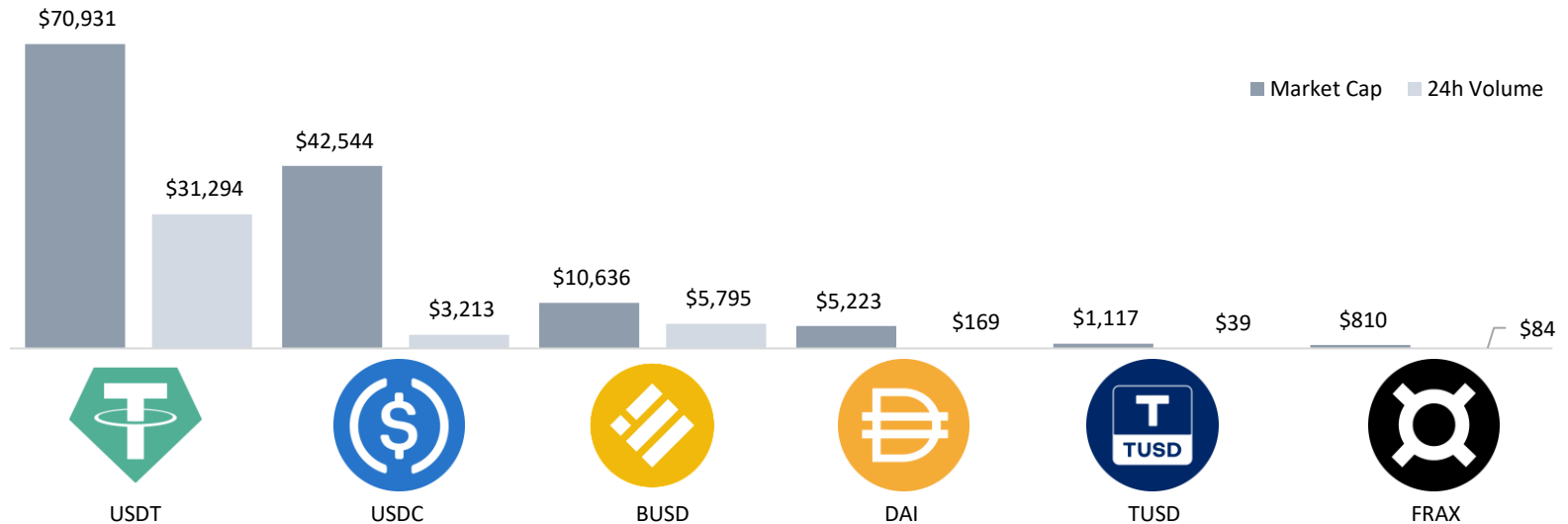
DECENTRALIZED FINANCE

STABLECOINS

- Many stablecoin models exist, with the most popular being the centralized, fully-reserved, USDT issued by Tether⁽¹⁾ and USDC issued by Circle
- There are other, decentralized, stablecoins that provide the opportunity to use novel approaches, such as over-collateralized DAI or partial-reserve FRAX



LARGEST STABLECOINS BY MARKET CAP (\$MM)



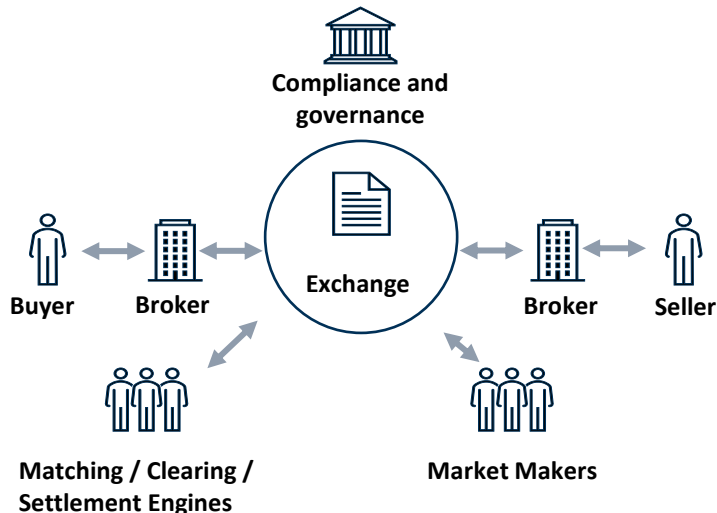
Source: <https://www.coinbureau.com/education/algorithmic-stablecoins/>; <https://coinmarketcap.com/view/stablecoin/>

1. Tether continues to face public scrutiny for not providing audited reserves

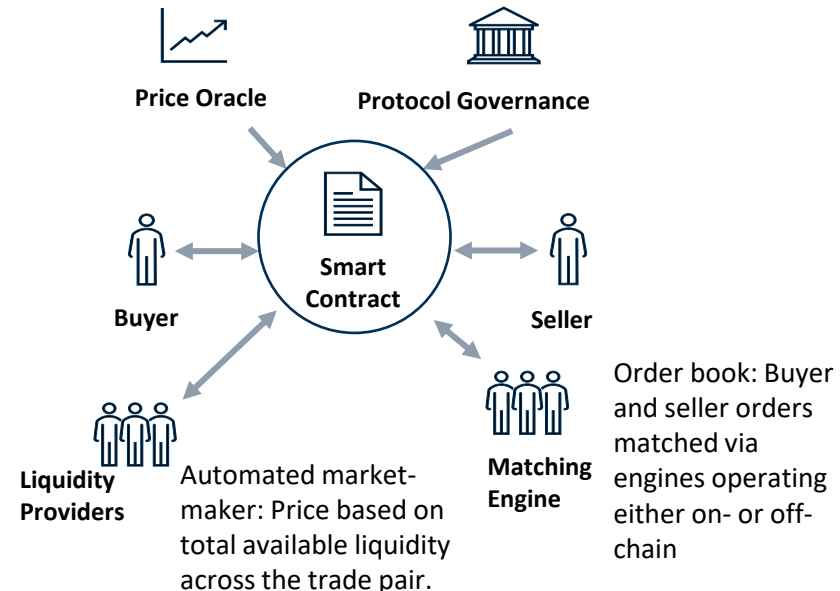
DECENTRALIZED FINANCE EXCHANGES

- Centralized exchanges, like Coinbase, require traders to trust an operator to safeguard user funds, provide accurate price information, match buyers and sellers to process trades, settle transactions, and engage in transaction monitoring
- DeFi exchanges, by contrast, decentralize key functions
 - They can be accessed programmatically with noncustodial wallets
 - Transactions are automatically processed by smart contracts on a peer-to-peer basis or against a pool of capital
 - Any holder of digital assets can lock up funds as liquidity for potential trades, earning a yield paid by traders
 - A trader is therefore dealing against liquidity pools supplied by market makers, rather than an order book of potential counterparties subject to a bid/ask spread

CENTRALIZED EXCHANGES



DECENTRALIZED EXCHANGE (DEX)

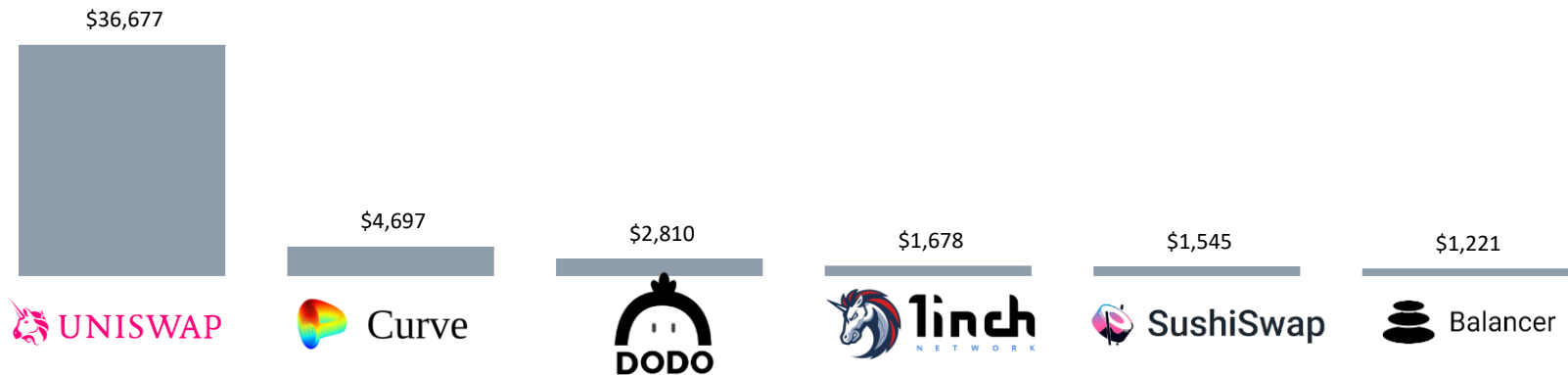


Source: <https://wifpr.wharton.upenn.edu/wp-content/uploads/2021/05/DeFi-Beyond-the-Hype.pdf>

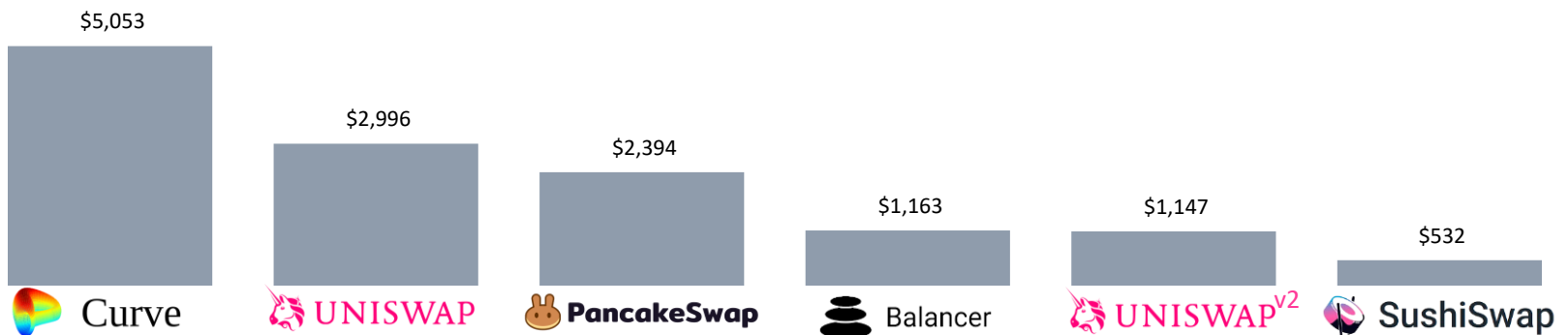
DECENTRALIZED FINANCE EXCHANGES

- The leading decentralized exchanges (DEXs) are capable of supporting staggering volumes of trade, ranging from hundreds of millions to billions of dollars per day, spread across hundreds of liquidity pair markets
- In fact, the top DEX platforms boast liquidity pools (Total Value Locked or TVL) worth several billion dollars, demonstrating the enormous popularity and trust placed in these platforms by traders and investors alike

FEBRUARY 2023 TRADING VOLUME BY EXCHANGE (\$MM)



TOTAL VALUE LOCKED ON EXCHANGES AS OF 2/28/2023 (\$MM)



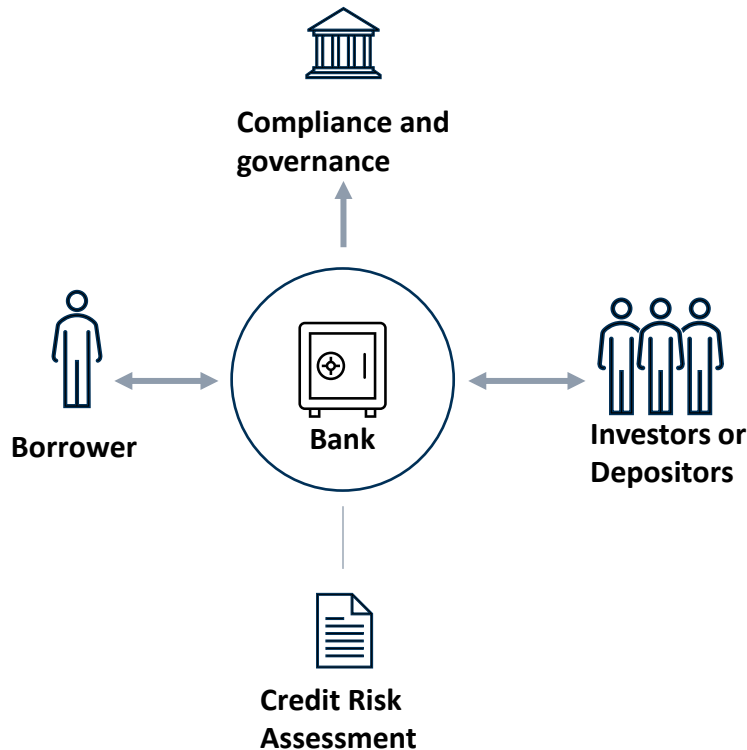
Source: <https://coinmarketcap.com/rankings/exchanges/dex/>; <https://defillama.com/protocols/Dexes>; <https://dune.com/queries/1847/3261>

DECENTRALIZED FINANCE

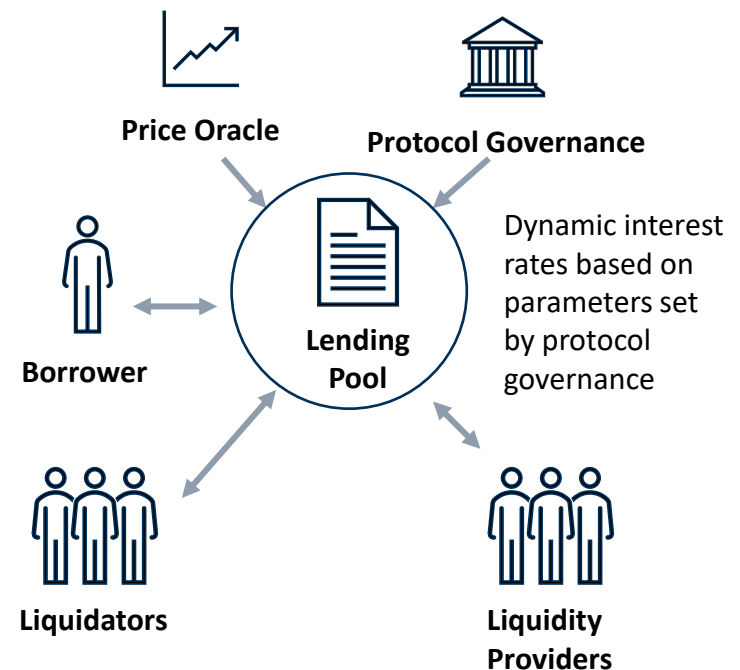
CREDIT MARKETS

- Borrowing and lending are central to finance, because they facilitate risk-taking and expand the supply of capital through leverage, the classic form of centralized credit is banking
- DeFi credit protocols pool together tokens, subject to an interest rate determined by the ratio of supply to borrowing
- DeFi loans are generally backed by collateral in the form of digital assets, and because loans are secured with assets held in smart contracts, there is no need for credit checks or other borrower-specific evaluation prior to a loan

TRADITIONAL CREDIT MARKETS



DECENTRALIZED CREDIT MARKETS



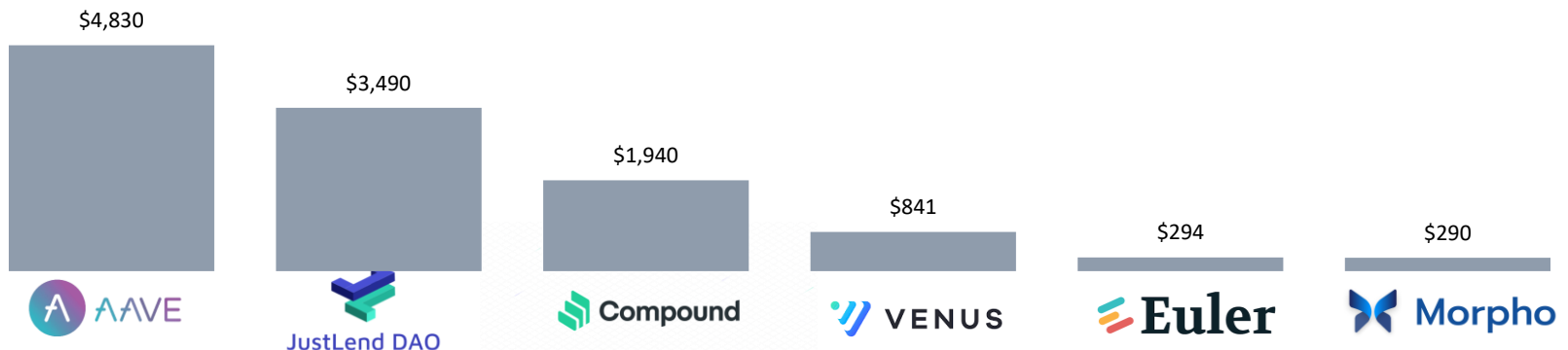
DECENTRALIZED FINANCE CREDIT MARKETS

- The current borrowing and lending ecosystem benefits from a robust liquidity pool of more than \$15 billion
- This system is further strengthened by the availability of stablecoins in select markets, which can be borrowed at impressively low annual percentage yields (APY) currently starting at ~3.00%

AAVE LENDING MARKET AS OF 2/28/2023 (\$MM)

Asset	Total supplied	Supply APY	Total borrowed	Borrow APY, variable
Ethereum ETH	80.02K \$128.46M	2.18 %	50.69K \$81.38M	4.09 %
Wrapped liquid sta... wstETH	67.83K \$120.88M	0.02 %	2.18K \$3.89M	0.57 %
USD Coin USDC	52.90M \$52.89M	2.28 %	39.75M \$39.75M	3.40 %
Wrapped BTC WBTC	1.20K \$27.66M	0.06 %	84.40 \$1.95M	1.10 %
Coinbase Wrappe... cbETH	10.71K \$17.42M	< 0.01 %	8.28 \$13.47K	0.01 %
Dai Stablecoin DAI	10.84M \$10.84M	1.69 %	6.62M \$6.62M	3.10 %
Tether USDT	4.27M \$4.27M	2.09 %	3.07M \$3.07M	3.24 %

TOTAL VALUE LOCKED ON LENDING PLATFORMS AS OF 2/28/2023 (\$MM)



Source: <https://defillama.com/protocols/Dexes>; <https://app.aave.com/markets/>

REAL ESTATE

- Propy is a decentralized real estate platform that uses blockchain technology to enable buying and selling of properties across borders and registry of related information, including ownership deeds and mortgage details
- Lofty.AI is a blockchain-based real estate marketplace that enables buying and selling of tokenized shares of properties for as low as \$50 using cryptocurrencies, while also maintaining property ownership and distributing rental income managed by partners, allowing for more accessible and flexible real estate investments

Lofty Marketplace

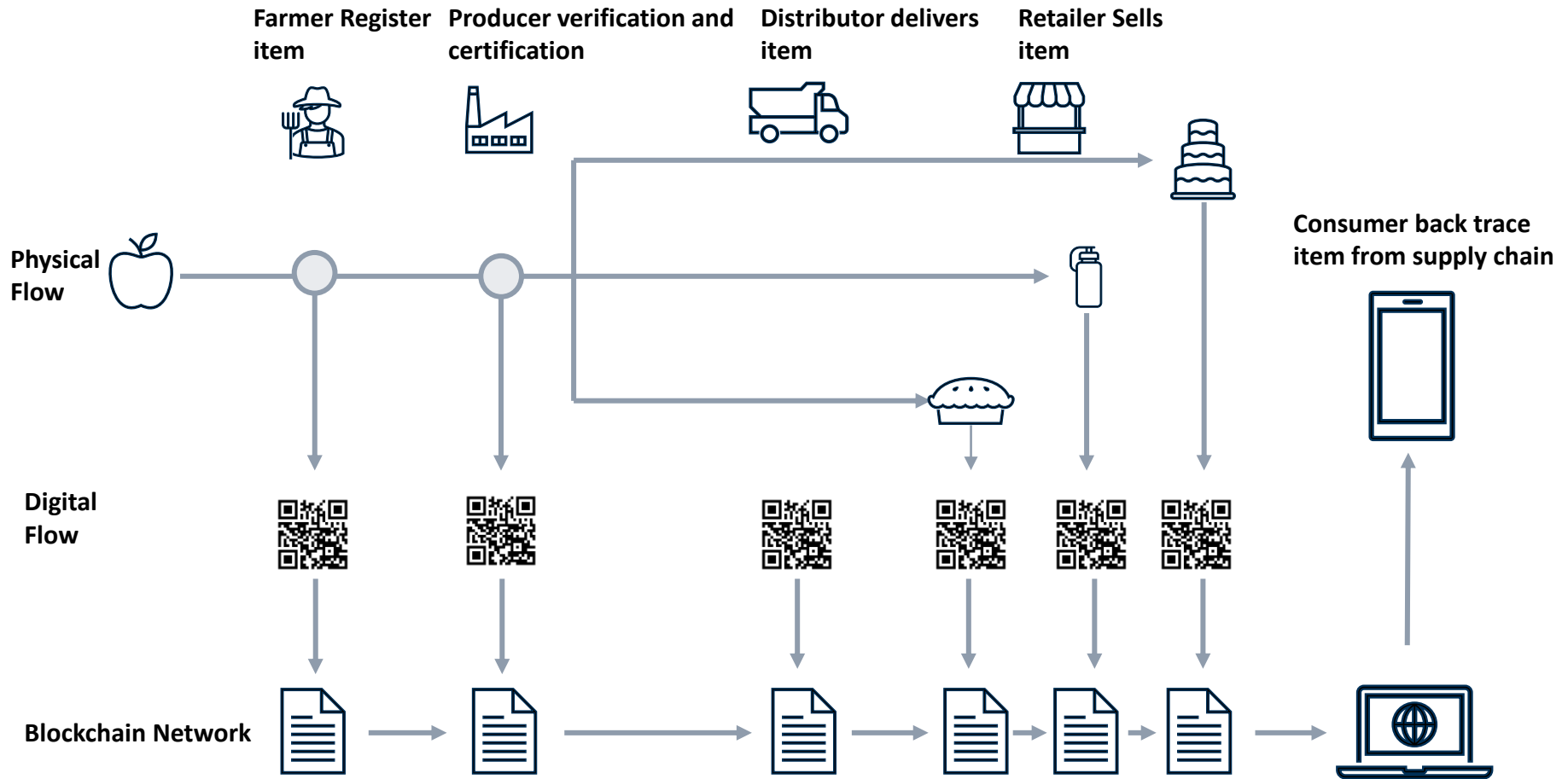
Invest in rental properties for only \$50.

Location: All Markets | Property type: All Properties | Current Cash on Cash Return: 0% to 13% | Current Projected IRR: 3% to 20%

Address	IRR	CoC	Available Tokens
8646 Ford Ave, Warren, MI 48089	8.0%	10.0%	1,881 tokens at \$50
1339 E 115th St, Cleveland, OH 44106	10.1%	8.8%	274 tokens at \$50
927 Euclid Ave Apt 10, Miami Beach, FL 33139	5.8%	4.6%	249 tokens at \$49+
5401 Odom Ave, Fort Worth, TX 76114	10.0%	6.5%	149 tokens at \$53+
3933 Walsh St, St. Louis, Missouri 63116	10.9%	8.3%	135 tokens at \$48+

SUPPLY CHAINS

- By leveraging the potential of blockchain technology, it is now possible to achieve unprecedented levels of transparency in supply chains
- This is achieved by creating and maintaining an immutable digital record of ownership for physical objects, thus ensuring that the journey of a product can be traced and verified with absolute accuracy



HEALTHCARE

- **Medical record-keeping:** Blockchain technology can be used to securely and accurately store and share patient medical records, ensuring confidentiality and reducing the risk of data breaches. Patients can have ownership of their data and grant access to healthcare providers when required
- **Drug traceability:** Blockchain can help track the entire supply chain of pharmaceuticals, preventing counterfeit drugs from entering the market and improving patient safety
- **Clinical trials:** Blockchain can enable secure and transparent management of clinical trial data, which can reduce fraud and ensure the accuracy and authenticity of data
- **Healthcare payments:** Cryptocurrencies can simplify the payment process in healthcare, making it faster, cheaper, and more efficient, especially for cross-border payments
- **Telemedicine:** Blockchain technology can enhance telemedicine by providing secure data sharing between patients and healthcare providers, protecting sensitive patient data, and allowing providers to provide timely and accurate diagnoses and treatment

NFTS

- Broadly, an NFT is simply a non-fungible token, it represents 1-of-1, each use case previously mentioned that requires a registration of an item to a specific owner is merely the non-fungible tokenized representation of that asset on the blockchain
- The potential use cases for non-fungible tokens (NFTs) in the art and entertainment industries are vast and include
 - Collectibles: NFTs are ideal for creating unique, one-of-a-kind digital collectibles, such as artwork, trading cards, and other memorabilia. The use of NFTs ensures the authenticity and uniqueness of the digital item, which can increase its value and appeal to collectors.
 - Music royalties: NFTs can be used to represent ownership of a song or album, allowing artists to sell digital rights to their music directly to fans. This creates a new revenue stream for artists and enables fans to invest in the music they love.
 - Gaming: NFTs can be used in gaming to represent in-game items, such as weapons, skins, and other virtual assets. Players can trade and sell these items using NFTs, creating a new market for gaming items and giving players more control over their virtual assets.
 - Ticketing: NFTs can be used to represent event tickets, allowing organizers to create a secure and transparent ticketing system. This can reduce fraud and scalping while giving fans a unique and secure way to attend events.
 - Fan engagement: NFTs can be used to create exclusive fan experiences, such as meet and greets, backstage passes, and other special events. This can increase fan engagement and loyalty while providing new revenue opportunities for artists and entertainers.
 - Intellectual property rights: NFTs can be used to represent ownership of intellectual property, such as patents, trademarks, and copyrights. This can create a secure and transparent way to manage and transfer ownership of intellectual property, potentially reducing disputes and legal costs.

CASE STUDY: KNOWING YOUR CUSTOMER

- **Vendor:** small farm United States based almond exporter
- **Case:** The vendor sold a large order to a foreign-based grocery store engaged in using on-chain mixers to conceal prior transaction activity which was revealed to be funds sourced from criminal activity. Authorities flagged the tokens and as a result, the vendor's wallet was also flagged and frozen, and the vendor could not deposit their funds into any regulated US-based exchange.
- **Outcome:** The vendor suffered significant losses as they could not access the cryptocurrency they purchased. They also faced legal and financial consequences as they were involved in a transaction with a criminal third-party.
- **Conclusion:** The case highlights the importance of conducting due diligence on the identity and history of transactions of buyers before buying selling and goods or services for cryptocurrency. Vendors should be cautious of buyers who offer prices significantly higher than market rates, and take steps to verify their identities and history of transactions. By doing so, vendors can protect themselves from the risks associated with fraudulent activities and maintain their reputation and credibility. Additionally, vendors should be aware of the potential consequences of buying cryptocurrency from a criminal third-party and the risk of having their wallet flagged and frozen.

CASE STUDY: KNOWING YOUR CUSTOMER AS A THIRD-PARTY

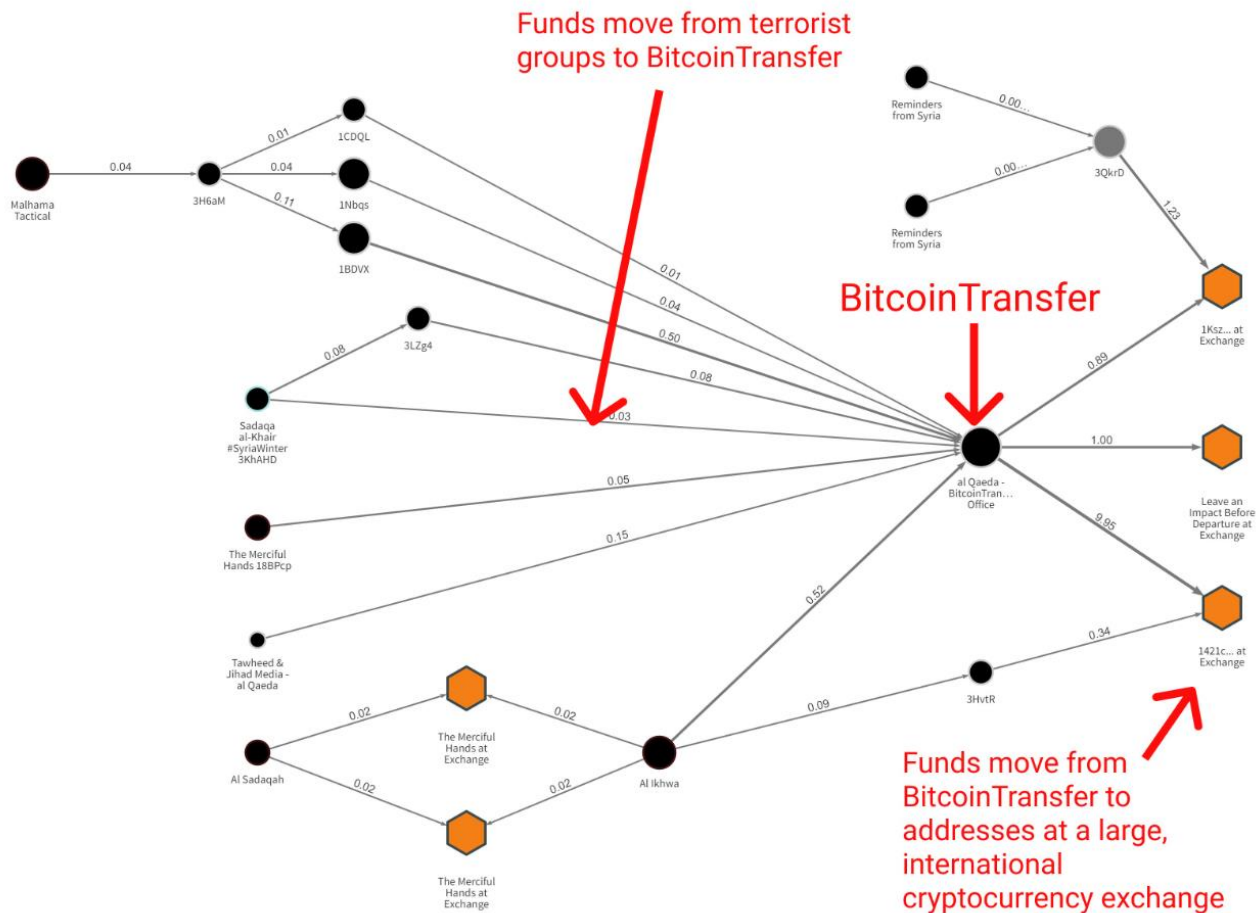
- **Vendor:** Multi-national company providing human resources and payroll software
- **Case:** A group of insider executives used the exchange to launder money from a fraudulent scheme. They created multiple accounts and deposited funds between them to create the impression of legitimate trading activities. The exchange did not have any monitoring system in place to detect suspicious transactions or to flag users who carried out multiple transactions in a short period. The exchange also did not require any identification documents or proof of address from its users, which made it difficult to trace the origin of the funds.
- **Outcome:** The fraudsters successfully laundered hundreds of millions through the exchange before the authorities intervened. The exchange was shutdown after failing to implement a KYC process to verify its users' identities and monitor their activities.
- **Vendor Liability:** As a vendor accepting money from the exchange, you are also liable for engaging in fraudulent activity. In this case, the vendor could face legal and financial consequences for accepting money from the exchange without proper KYC verification. By accepting money from the exchange, the vendor inadvertently participated in the money laundering scheme, which can lead to severe consequences, including fines, legal actions, and reputational damage.
- **Conclusion:** The case highlights the importance of implementing robust KYC processes if wanting to accept payment for services or product in cryptocurrency transactions. It is crucial for vendors to conduct due diligence on their customers and ensure they are complying with KYC regulations. By doing so, vendors can protect themselves from the risks associated with fraudulent activities and maintain their reputation and credibility in the marketplace.

BUY TRACING SOFTWARE OR HIRE A BLOCKCHAIN AUDITOR

- Various services are available to meet the needs of a small business or a multinational corporation from complete on-demand tracing to bespoke analyses

Chainalysis Intelligence Brief

BitcoinTransfer: Syria-based Cryptocurrency Exchange Facilitating Terrorism Financing



USING A THIRD-PARTY CRYPTOMERCHANT

- As a vendor, there are also third-party crypto merchants or payment processors that offer robust fraud protection and liability coverage for their transactions. However, it's ultimately your responsibility as a vendor to ensure that your customers' payments are processed securely and that fraudulent transactions are identified and dealt with appropriately.
- Some popular third-party crypto merchants that offer fraud protection and liability coverage for their transactions include Coinbase Commerce, BitPay, and CoinPayments. These services offer various levels of fraud protection and insurance coverage, but it's important to review their terms and conditions carefully to understand the extent of their liability and what is covered.
- It's worth noting that even if you use a third-party crypto merchant with fraud protection and liability coverage, you may still be responsible for chargebacks or other fraudulent activity if you are found to be negligent in your security practices or fail to follow the merchant's guidelines and policies.

coinbase | Commerce

bitpay



CoinPayments

DISCLAIMER

These materials and / or indicative terms (1) do not constitute an agreement, offer, solicitation of an offer, nor a commitment to enter into any transaction described herein; (2) do not constitute an offer or solicitation to engage in a transaction regulated by the Securities and Exchange Commission pursuant to Securities Act of 1933, as amended; and (3) and are not meant to be all-inclusive of the terms and conditions that would be required to enter into any transaction described herein.

Province, Inc. does not provide any tax advice, and the materials contained herein shall not be construed as such. Any tax statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purpose of avoiding penalties. Any such statement herein was written to support the analysis of the transaction(s) or matter(s) referred to herein to which the statement relates. Each taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor.

These materials are confidential. By receiving and reviewing these materials, each recipient agrees (i) that such recipient shall hold and treat these materials and their contents in the strictest of confidence, (ii) that each recipient shall not duplicate any part of these materials, (iii) that each recipient shall not disclose these materials or any of their contents to any other person without the prior written authorization of Province, Inc., which may be withheld in its sole discretion, and (iv) that each recipient shall not use these materials in any fashion or manner detrimental to the interest of Province, Inc. These materials may not be used or relied upon for any purpose other than as specifically contemplated by a written agreement with Province, Inc.

The information used in preparing these materials was obtained from or through you or your representatives or from public sources. Province, Inc. assumes no responsibility for independent verification of such information and has relied on such information being complete and accurate in all material respects. To the extent such information includes estimates and forecasts of future financial performance (including estimates of potential cost savings and synergies) prepared by or reviewed or discussed with the managements of your company and / or other potential transaction participants or obtained from public sources, we have assumed that such estimates and forecasts have been reasonably prepared on bases reflecting the best currently available estimates and judgments of such managements (or, with respect to estimates and forecasts obtained from public sources, represent reasonable estimates). No warranty or representation, expressed or implied, is made as to the accuracy of the information contained herein, and the same is submitted subject to errors, omissions, and changes. All parties viewing these materials are advised that (i) changes may have occurred since the time of publication of these materials; and (ii) all financial projections are provided for general reference purposes only in that they are based on assumptions relating to the general economy, competition, and other factors beyond the control of Province, Inc. and, therefore, are subject to material variation.

These materials were designed for use by specific persons familiar with the business and the affairs of your company and Province, Inc. assumes no obligation to update or otherwise revise these materials. Nothing contained herein should be construed as tax, accounting or legal advice. You (and each of your employees, representatives or other agents) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of the transactions contemplated by these materials and all materials of any kind (including opinions or other tax analyses) that are provided to you relating to such tax treatment and structure. For this purpose, the tax treatment of a transaction is the purported or claimed US federal income tax treatment of the transaction and the tax structure of a transaction is any fact that may be relevant to understanding the purported or claimed US federal income tax treatment of the transaction.

These materials have been prepared by Province, Inc. and its affiliates for use by Province, Inc. Accordingly, any information reflected or incorporated herein, or in related materials or in ensuing transactions, may be shared by Province, Inc. with Province, Inc. and its direct and indirect affiliates, along with the agents and employees thereof.