



## Intro to Crypto.

Cryptocurrency and the underlying blockchain technology that supports it are more mainstream than ever. The first cryptocurrency, bitcoin, was created in 2008. Today, [over 20% of Americans \(52 million\)](#) own crypto, including 36% of Gen Z and 30% of Millennials. Globally, adoption rates are also growing, most notably in [emerging markets](#).



### What Is Cryptocurrency?

Cryptocurrency is a digital, encrypted form of currency facilitated by a computer network — blockchain — that doesn't rely on any central authority. Individuals and institutions can buy, sell, hold, borrow, lend, send, and make purchases with cryptocurrencies similar to national "fiat" currencies.

Popular cryptocurrencies include bitcoin and ethereum but there are thousands of different cryptocurrencies in circulation. Beyond these, central bank digital currencies (CBDCs) and stablecoins have emerged as digital representations of fiat currency.

### What Are Some Examples of Cryptocurrency In Use Today?

The list of real-world applications and use cases for cryptocurrencies is growing rapidly. [Examples include](#) cross-border payments, trade finance, B2C rewards, insurance smart contracts, peer-to-peer payments, identity management, asset tokenization, and more.

A growing number of companies and NGOs worldwide are using digital assets for various reasons.

- [Tesla](#), [Square](#), [Microstrategy](#), and others are leveraging cryptocurrencies within corporate treasuries and for liquidity management.
- [Fidelity Investments](#) expanded its retail trading platform to support cryptocurrency exposure.
- [UNICEF](#) introduced a new financial vehicle, CryptoFund, to support receiving, holding, and disbursing cryptocurrency donations in a transparent, fast, cost-effective way.

### What Are the Benefits of Cryptocurrencies?

Depending on the use case and implementation, cryptocurrency benefits can include:



**Inclusion:** Financial services can be more easily extended to the unbanked and underbanked



**Efficiency:** Fewer intermediaries can drive faster and cheaper services



**Availability:** 24/7/365 operational availability without pause for holidays, weekends, etc.



**Security:** Protection of user identities



**Traceability:** Support for standard compliance measures<sup>1</sup>

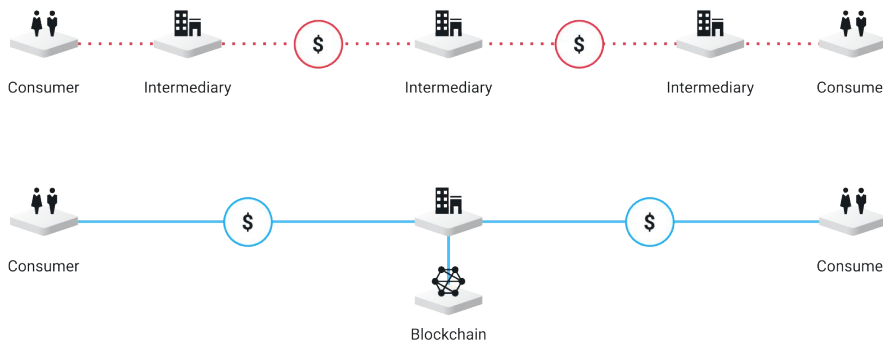
<sup>1</sup> like Anti-Money Laundering (AML) and Know your Customer (KYC) across many but not all cryptocurrencies



### How Do Most Cryptocurrencies Work?

Rather than having a financial institution confirm a transaction, cryptocurrency transactions are managed by a large number of independent validators — computers connected to the blockchain’s open public ledger. Together, these validators collectively confirm every transaction on the ledger.

Each time a set of transactions are confirmed, a “block” of immutable information about those transactions is captured. The chain of all such blocks — or the blockchain — provides a secure, auditable history that helps ensure the accuracy of future transactions.



Traditional finance often requires a number of intermediaries who slow the process and make it more expensive

Blockchain can reduce the number of intermediaries, making financial services more accessible and less expensive.

### What Are the Differences Among Different Cryptocurrencies?

Different cryptocurrencies, and the blockchains that support them, were designed in different ways for different purposes. Here is some information regarding three of the most prominent cryptocurrencies and their blockchains. ^

Cryptocurrency/Blockchain	bitcoin/Bitcoin	ether/Ethereum	XRP/XRP Ledger
<b>Primary Use</b>	<b>Store of Value</b> An asset, like gold, that some hold in order to resist or hedge inflation	<b>Smart Contracts</b> Automated contracts performing specified actions without manual intervention.	<b>Payments</b> Rapidly move high-volume value across borders with low fees in a sustainable way.
<b>Transaction Finality</b>	30-60 minutes	15 minutes	3-5 seconds
<b>Average Cost to Transact</b>	\$0.957	\$5.14	\$0.0002
<b>Transactions Per Second</b>	7	10	1500
<b>Energy Usage</b>	101 TWh of energy/year	.01 TWh of energy/year	Carbon neutral

^ All figures are approximate, and subject to change based on network activity, consensus model, etc.