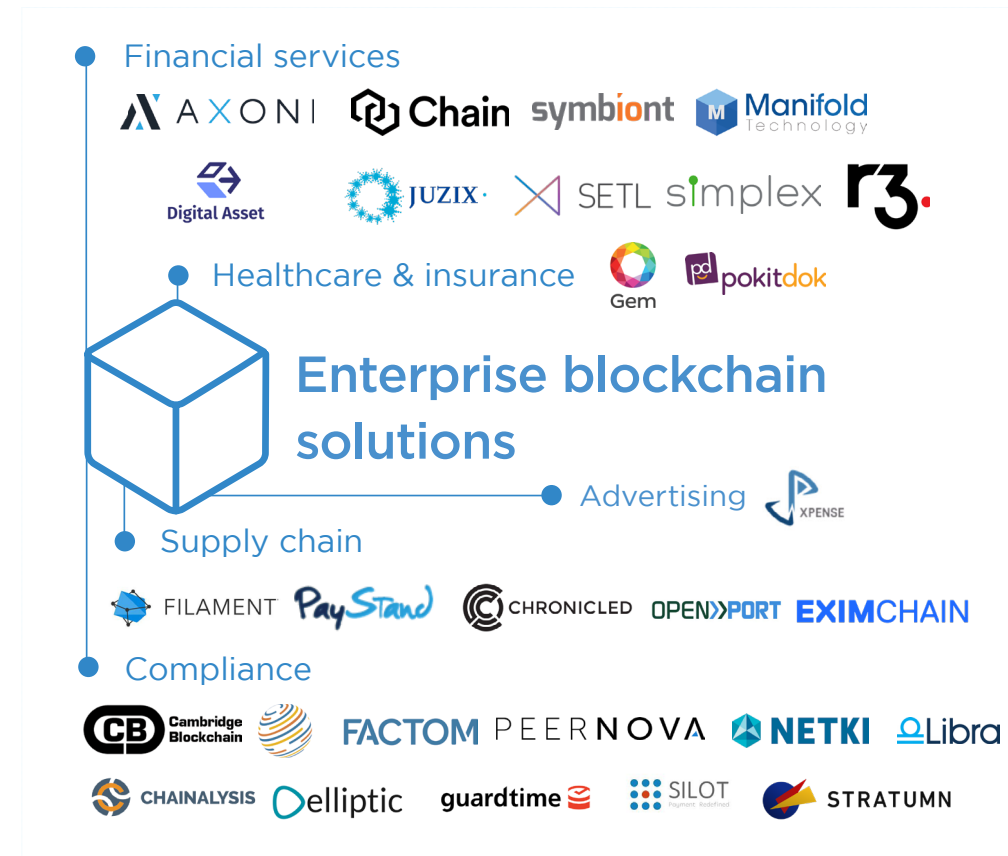
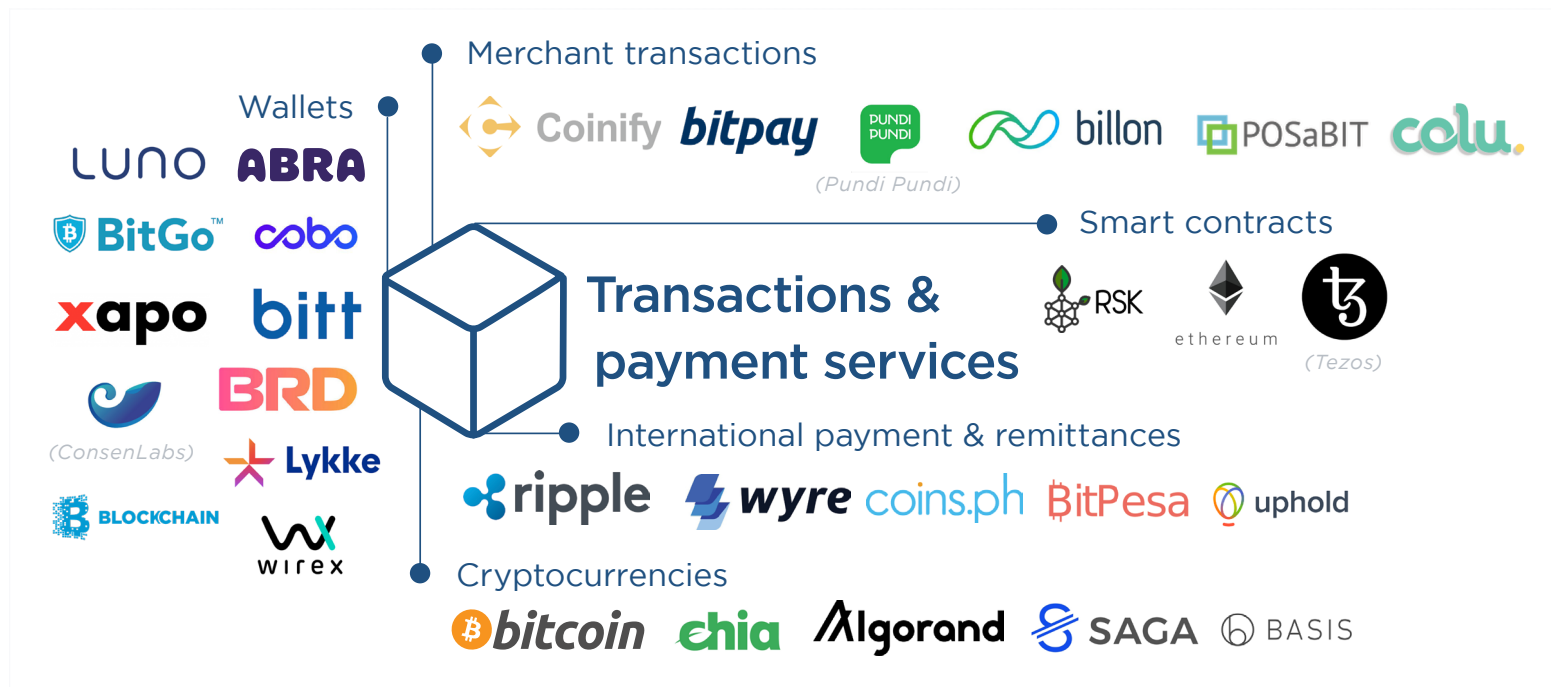


Blockchain Market Map



Overview

Blockchain technology is developing at a rapid clip. To address the evolution of this nascent technology, we present an updated version of our blockchain market map. Following the explosion of crypto-trading at the end of 2017, blockchain startups have rapidly expanded their investment-related products. As specific use cases and areas of demand have emerged, startups have adapted to meet both regulatory concerns and consumer demands. Subsequently, we've seen a flush of investment go toward startups focusing on crypto-investment, compliance and enterprise solutions.

Consolidation has also been prevalent in recent months, as leaders in crypto-trading like Circle and Coinbase have acquired competitors (such as Poloniex and Earn.com, respectively) to fortify market share.

The map consists of 135 blockchain startups that have received the greatest amount of funding from angel investors and VC funds, per the PitchBook platform. As a result, notable projects may be omitted if they are funded exclusively through crowdfunding or initial coin offerings (ICOs). Market segments were determined by similarities in use cases, then further specified into

sub-categories of those uses. While we recognize some startups could belong in multiple segments or sub-categories, they are categorized based on our understanding of their primary use case.

This map tends toward investible opportunities where traditional venture funds can receive equity, either in lieu of or in addition to tokens, in exchange for financing. For the time being, this type of financing appears to be associated with startups whose business models can produce revenue via existing financial systems or hybrid models. One such example is startups that provide enterprise blockchain solutions, including decentralized application development, auditing and compliance, and supply chains and logistics management. While traditional VCs remain attracted to startups with non-digital cash flows, we see a trend of innovative investors adapting to embrace hybrid financings to capitalize on less traditional business models.

Sector descriptions

Transactions & payment services

This category contains startups whose primary use cases involve buying, selling or storing cryptocurrencies. The term cryptocurrency refers to a digital asset which functions as a medium of exchange on a distributed ledger. Smart contracts are programmable, transparent transaction contracts which self-execute upon the fulfillment of their terms of agreement. Wallets are software programs which interact with various blockchains to let users store, send and receive crypto-assets and monitor their holdings. Some wallets extend services internationally and specialize in low-fee cross-border remittances. Merchant services enable vendors or organizations to participate in crypto-transactions.

Cryptocurrency exchanges & trading

Crypto-exchanges are platforms for exchanging cryptocurrencies into other cryptocurrencies, fiat currencies or vice versa. Marketplaces enable parties to list and exchange goods and services with or without an intermediary, while peer-to-peer lending platforms

enable peers to extend and receive credit or loans through a blockchain. Crypto-investment companies and firms invest in cryptocurrencies intending to generate a return via value appreciation. The crypto-investment category has expanded to include portfolio management and investment tools. Startups providing clearing and settlement blockchain platforms for crypto-trading, forex and crypto-derivative markets are also included. Prediction markets involve speculative trading based on forecasts of economic and political events. Finally, fundraising platforms allow startups to complete blockchain-based fundraising and help prospective investors find such startups. Tokenization of assets allows asset owners to transfer tangible assets like commodities or real estate from paper holdings to digital records on a blockchain, often represented as tokens.

Identity, authentication & security

An inherent characteristic of a blockchain is the immutability of transaction records. Startups here use digital ledger software to verify the authenticity of data, as well as assets or documents, and use blockchain identifiers to represent and/or authenticate tangible assets. Additionally, these startups leverage

identity verification methods to track the cryptographic identity of an individual, entity, device, item, etc. These startups also leverage blockchain to validate and store user data so that users own and control who accesses their personal information and credentials. Although blockchains themselves are secure by nature, blockchain-based applications are still vulnerable to cyberattack. Startups in the security category create secure foundations for transactions, data storage and network communication.

Enterprise blockchain solutions

Startups in this category provide enterprise-level blockchain solutions to entities operating in sectors such as financial services, healthcare, insurance, compliance, supply chain and advertising. This includes the development of industry-specific software and companies providing “blockchain as a service”—that is, subscription leasing of proprietary blockchain platforms.

Social, networks & games

In this category, startups leverage decentralized networks to enable social and networking platforms used for recruiting, classifieds, dating and loyalty programs, among other use cases. Similar to the

digital identity category, one of the primary benefits such companies provide is the ability to share data and content without allowing a centralized third-party to assume any level of ownership of such content. Blockchain games include applications and tournament gaming platforms where users can compete for prize pools.

Ecosystem

This category includes startups furthering blockchain technology via underlying infrastructure improvements and software development tools. The issues such companies address include those related to scalability, interoperability and governance, among others. While some of these companies could also be listed under “enterprise blockchain solutions,” they are included here for the contribution of their open-source technology to the ecosystem. Mining companies provide products and services which assist in the computational process of solving cryptographic problems to earn cryptocurrency units. Data storage and hardware companies cater to the operational necessities of blockchain services.