

Investing in Blockchain: A Breadth of Unparalleled Opportunity [Part 2]

July 30, 2019



With the inevitable shift towards Web 3.0, the sun is setting on the ability for large Web 2.0 tech platforms to constantly abuse and mismanage our data and information without consequence.

Introduction

In this three-part series, we are introducing some of the key themes and areas of investment related to blockchain which has Hutt Capital so excited about investing in blockchain technology opportunities. We are keeping it high level in order to cover a wide range of topics. We hope this series of posts helps investors better understand why blockchain is so broadly disruptive and why every serious investor needs to be considering this space as part of a diversified investment portfolio.

There is too much to cover in a single post, so we have broken this up into three parts with each covering five categories.

This is Part Two (Part One can be found [here](#)), which starts with blockchain's technical infrastructure and then covers some of the exciting themes and investment areas related to Web 3.0. The third and final part of this series (coming later) will cover additional topics such as Gaming and Non-Fungible Tokens (NFTs) & Digital Collectibles.

List of Covered Topics

- Blockchain & Crypto Technical Infrastructure
- Own Your Data
- Token-Based Economies: Disrupting Online Marketplaces / Intermediaries
- Token-Based Economies: Economically Incentivize Users and Bootstrap Network Effects
- Web 3.0 Platforms

Crypto Technical Infrastructure

What is it: Crypto protocols are the backbone for both digital assets and Web 3.0 (decentralized web). But those building this backbone for Web 3.0, and building products and services on top of crypto protocols, can't use existing infrastructure from the legacy tech world. Similar to the financial services infrastructure, it all needs to be built from scratch.

There are a wide range of companies focused on helping blockchain technology to become more scalable, faster, cheaper, and easier to use for both the mass consumer and developers. Remember when we didn't have APIs and developer tools to automate software development, we used dial-up modems, and it was a big deal when in 1997 consumer Internet access increased to 56 kbps? Investment in technology infrastructure will drive immense improvement in performance of crypto protocols just like it did with the Internet, and we believe this iteration will progress even more quickly.

Another area of focus is on interoperability, or the ability for different blockchains to seamlessly interact rather than each being its own silo.

Why is it compelling for investment: Technical infrastructure is usually less familiar to the average consumer or non-tech investor. For example, most people don't know that everything done online is going to be routed and secured by companies such as Akamai ([\\$13.8B market cap](#)) and Cloudflare ([reportedly](#) a multi-billion private valuation), or that software developers rely on tools like Twilio ([\\$17.7B market cap](#)) and Elastic ([\\$7.6B market cap](#)), or that online business use Stripe ([reportedly](#) a \$22.5B private valuation) to enable online payments. But all these businesses, along with so many more, are crucial parts of the traditional technology infrastructure.

The functions that they provide need to be replicated to enable blockchain technology to reach its full potential. This will not be led by the legacy players including those mentioned above, but rather by new startups who bring the unique expertise and skills. These startups will become the next generation of markets leaders who don't build the crypto protocols, but enable blockchains to be fast, scalable, and easy to use both for consumers and developers.

Examples: [BloXroute](#), among others, are building "Blockchain Distribution Networks" trying to speed up blockchain networks and become the Akamai or Cloudflare for blockchain.

Startups such as [BitPay](#), [Flexa](#) and [Wyre](#) are aiming to enable cheap, seamless crypto payments for merchants. [Tierion](#) and [BlockCypher](#), among others, offer developer tools and APIs for applications to interact with blockchains.

[Lightning Labs](#) and many more are developing methods to make bitcoin and other crypto protocols faster and more scalable.

[Metamask](#) is a widely used tool which makes it easy for consumers to hold and use ETH (Ethereum's native crypto token) online, as well as any tokens built on top of Ethereum.

Meanwhile, crypto protocols such as [Polkadot](#) and [Cosmos](#) are working to address interoperability.

Investors in the companies mentioned above include Pantera Capital, Polychain, Draper Associates, 1confirmation, Blockchain Capital, Fabric Ventures, Flybridge Capital Partners, ZhenFund, Menlo Ventures, RRE Ventures, Felicis, Founders Fund, NEA, and Foundation Capital, among others.

Own Your Data

What is it: The prevalent business model for many consumer-facing Web 2.0 companies such as Facebook, Google, Twitter and others, is to own and monetize your online footprint. They offer you a free product, collect as much data on you as possible, and then monetize that information by selling ads for higher prices through better targeting, selling your data to third parties, and so on. You are the product for these companies.

Not only are they tracking everything you do on every device you own, but they are [listening to your phone calls](#), [reading your emails](#), analyzing every item in every picture you ever post, and any other intrusive activity you could possibly imagine. And because you willingly signed their terms of services (which you didn't read), it's no longer your data, so there is little you can do about it (even leaving doesn't erase what they already have).

Trust in large tech companies [is decreasing](#) as they continue to abuse [our personal data](#) and information.

Blockchain allows consumers to push back on this trend — we can own our online data and be able to monetize it (or not) as we see fit. The Internet experience should not depend on giving big tech companies information about everything you have ever done on an Internet-connected device. In the future, we will hold the digital keys to our online identity and data.

This model also applies to other sectors, such as healthcare, where our data is better protected by HIPAA from rampant commercial use, but it would still be logical to have a secure way to access all your healthcare data which you control and have ownership over.

Why is it compelling for investment: Large tech companies are disincentivized to move from their cash cow model of online ads and data extraction, and will milk them as long as possible, while simultaneously harming innovation by using their massive resources to crush or copy competing Web 2.0 startups.

The abusive business model of these large tech companies does have one positive side effect: to drive the creation of startups and decentralized applications built on top of crypto protocols that offer consumers better privacy and innovate on new models of data ownership and monetization.

The scope of applications is incredibly broad, akin to the wide universe of mobile applications. There will also need to be a whole ecosystem built out around the management, security and monetization of identity and data which will be for the first time owned by the consumer — data “wallets”, marketplaces, analytics, monetization platforms, etc.

I believe the business around self-management and monetization of data will be an enormous market opportunity. As IoT develops and is accelerated by 5G infrastructure, the amount of data that we each create is only going to grow — as will the opportunity to control it.

Examples: A notable example of an “own your data” company today is [Brave](#), a company whose main product is Brave Browser, a web browser. Brave has raised \$37.5 million of equity from VCs such as Founders Fund, Pantera Capital, and Foundation Capital, and \$35 million through a token sale. Brave is run by a highly experienced Founder and CEO Brendan Eich, JavaScript creator and former CEO and CTO of Mozilla and Chief Architect at Netscape.

Brave has built ad-blockers and other privacy-focused (and speed-enhancing) features to help protect users, and just recently rolled out the ability to be paid to view ads on their browser. Users can opt into what quantity and types of ads they want to see and will receive up to 70% of the revenue generated from the ad sales in Brave's native currency BAT (Basic Attention Token). BAT can also be used as a micropayments system to automatically and anonymously pay users' favorite websites, creating a new revenue stream for publishers.

Brave [reported](#) in January 2019 that it had 5.5 million monthly active users (MAUs), up 450% year-over-year.

Token-Based Economies: Disrupting Online Marketplaces / Intermediaries

What is it: Many of the large Web 2.0 companies have the same model: create a two-sided online marketplace and then take a cut of every transaction (Uber, Airbnb, Lyft, Etsy, GrubHub, Kayak, etc.). Looking forward, the next trend driven by token-based economies is where marketplaces will be peer-to-peer and sit on a public ledger, with no rent-seeking intermediary taking 10–30% of every transaction.

There may be a small associated fee but it would be significantly lower than existing marketplace take rates. Investment returns will primarily be made either through holding the native token (which would be the currency of the platform) and/or other adjacent revenue models. By getting rid of the middleman, online marketplaces become cheaper for both buyers and sellers of marketplace goods and services.

The fact that online marketplaces can today take 10–30% of every transaction speaks to their power and value proposition, but technology naturally erodes margins for legacy models and in this case we will see the disruptors get disrupted.

Why is it compelling for investment: Online marketplaces facilitated over [\\$1.6 trillion](#) in global spend in 2018, an increase of 20% from 2017. The value creation mechanism will change with the next wave of online marketplaces, but the reason for investment remains the same. Being an early investor in the next Uber, Airbnb or GrubHub is going to be lucrative regardless of whether it's a token structure or equity.

By erasing the rent-seeking intermediary, crypto-based marketplaces will enable significantly lower costs for merchants and consumers alike. The reduced cost-savings should be sufficient over time to allow for novel business models to develop and attract users who want to save money / earn more profits.

Even more exciting, blockchain has enabled innovative new peer-to-peer business models which drive superior utilization of resources in way which were not possible prior to blockchain technology. We believe blockchain will continue to enable new peer-to-peer business models in a wide range of sectors, leading to increased efficiency and enhanced utilization of various types of resources, and that this represents the most exciting near-term opportunity.

The disruption of more traditional marketplaces will take additional time given incumbent network effects and competitive moats, representing an exciting but more longer-term opportunity.

Examples: Blockchain has enabled completely new peer-to-peer business models which weren't prior feasible, such as those that allow for marketplaces around computer storage space or compute power (like [Filecoin](#) or [Cudo](#)), live video streaming capacity (like [Livepeer](#) or [Theta](#)), the utilization and trading of excess energy (like [Grid Singularity](#), [Crusoe](#) or [Power Ledger](#)), and many yet to come.

The aforementioned companies have VC investors such as Blockchain Capital, Sequoia Capital, Union Square Ventures, Northzone, Collaborative Fund, Libertus Capital, Bain Capital Ventures, Digital Currency Group, and Dragonfly Capital Partners.

There are also a number of companies building the infrastructure for the future of online marketplaces. A notable example is [Origin Protocol](#), which enables a sharing economy with no intermediaries (built on Ethereum and IPFS) and is backed by Pantera Capital, Foundation Capital, Danhua VC and several high-profile angel investors. The original decentralized marketplace is

[OpenBazaar](#), backed by VCs such as Andreessen Horowitz, Union Square, BlueYard and Digital Currency Group. OpenBazaar allows for peer-to-peer marketplace transactions with no middleman fee and has built in the ability to transact in crypto, meaning that one never has to enter their bank or credit card information if not desired.

[Freelance Labs](#) (dba Braintrust), a token-based marketplace for freelancers offering 40–70% cost savings by cutting out the middleman, raised an initial \$5 million in December 2018 from True Ventures, IDEO CoLab, Homebrew, Galaxy and Vy Capital, among others.

Token-Based Economies: Economically Incentivize Users and Bootstrap Network Effects

What is it: Token-based economies offer consumer-focused startups a novel way to incentivize early users to consistently use and promote their product, thus accelerating user growth and bootstrapping network effects. For the first time, users can share in the value creation as a network grows rather than watching private investors reap all the gains as equity holders.

[Network effects](#) dictate that the winner in a given space scales quickly to capture significant market share while others lag behind. Look at Google vs. Alta Vista, Facebook vs. Myspace, Uber vs. Lyft, or Bitcoin vs. its copycats. Any early stage startup chasing network effects will live or die by growing its network as fast as possible while minimizing churn. But today, individuals are not incentivized to be early users of consumer Internet products. Whether you were user number 1 million or 1 billion of Facebook, you ended up gaining roughly the same LT value and utility.

This is changing with Web 3.0, in which network effects businesses will be built on top of blockchains such that value can be captured through a token structure, not solely a traditional revenue/equity model. Users who create content (or otherwise enable usage in various fashions) will get compensated in the native token which, if the platform scales, should increase in value as demand grows. The token can later be used within the ecosystem, or converted to other crypto assets or fiat. Token-based economics offer a strong alignment between a network and its users to grow and increase demand, a stark contrast to today's systems where users are mined for data and unable to monetize their role in helping new products grow and gain traction.

Another powerful aspect of token-based economies is that anyone can participate in the value creation exhibited by certain platforms. In the future, an early Facebook user or Uber driver, for example, could reap massive rewards for being active early without having to even outlay capital for investment. Wealth generation will be relatively more equal in token-based economies and better serve 99.9% of the population.

Why is it compelling for investment: For venture funds, investing in token-based economies represents the same model as how they have always invested (i.e. pick the best startups and help them succeed) but through a different value creation mechanism enabled by building on top of blockchain-based networks (Ethereum, etc.). Outsized returns will still go those VC funds who can pick the Google, Facebook, LinkedIn, Uber, etc. of Web 3.0, and those who utilize the native benefits that crypto offers in bootstrapping networks effects will have a clear competitive advantage.

With most traditional VC firms overlooking blockchain innovation, those who are dedicated to this space will have the highest likelihood of being early into the first wave of big Web 3.0 companies built as token-based economies. For individuals who aren't able to invest in the top early stage startups (i.e. almost everyone), the ability to earn and own tokens in an early stage startup with outsized potential is game-changing. Especially given the ludicrous "accredited investor" laws that we use in the U.S. to govern who is allowed access to high-returning private investments.

Examples: There are a number of companies such as [Steemit](#) and the upcoming [Voice](#) (which [Block.One](#) is funding with \$150M) which utilize tokens to bootstrap network effects who are aiming to be the decentralized version of existing Web 2.0 platforms such as Facebook or Twitter. But consumers don't care about something being decentralized, they just want good products, so unless content creators [can make serious money](#), I believe the early winners will be those using tokens in more novel ways.

For example, [Binance](#) (a leading crypto exchange) uses its native token [BNB](#) (\$4.3B market cap) to offer discounted trading fees and is now facilitating dApps on top of its blockchain so holders can use BNB for those applications similar to how they would use Ethereum's native token ETH.

Another example is Brave and its native token [BAT](#) (\$320M market cap) in which users are paid for viewing ads (as described in an earlier section) and which can be used to compensate creators of online content.

One interesting example of a decentralized application using crypto to drive network effects is [Augur](#), a decentralized prediction market. Augur's native token [REP](#) (\$130M market cap) plays a key role in ensuring its market functions so early users / holders of REP are incentivized to help the network grow in order to make their REP holdings more valuable.

Web 3.0 Platforms

What is it: If you accept that the blockchain-driven Web 3.0 is the future, you still need platforms to build, discover and use decentralized applications (dApps). We will use Blockstack as a singular example of this category to make it more tangible. [Blockstack](#), in its own words, is "a decentralized computing network and app ecosystem that puts users in control of their data and identity. Apps built on Blockstack make data breaches and trust violations an antiquated notion." In other words, Blockstack provides the infrastructure to build, find and use dApps. It also offers an identity for users to own and through which to maintain ownership of data. All of this activity is done on Blockstack's STX blockchain, turning Blockstack into somewhat of a parallel decentralized Internet.

Why is it compelling for investment: We know through the success of companies such as Google that anyone who offers a platform to search for applications or to search the Internet (whether Web 2.0 or 3.0) has the potential to create massive value. A platform like Blockstack, if successful, would sit at the epicenter of a massive online ecosystem, just like Google does for Web 2.0, and has the opportunity to

drive significant value to its native token. Blockstack would also be well-positioned to build applications on top of its platform and find other ways to generate revenue if it chooses to do so.

Blockstack is the first crypto company to [have approved a Reg A+ public offering](#) of its token, meaning non-accredited investors can purchase its token in the U.S. through a public sale. While early private investors will have a lower cost basis, the offering will still empower individuals to invest in Blockstack at a much earlier stage than they can with equity-based startups (i.e. not until IPO).

Examples: Blockstack has received \$71 million in funding from firms including Union Square Ventures, Blockchain Capital, Harvard's endowment, Lux Capital, Foundation Capital, and Digital Currency Group. Blockstack, while different in many ways, will end up competing with other decentralized computing platforms such as Ethereum, Tezos and EOS.