

We're Buying the "Missing Link" of the Blockchain

By Teeka Tiwari May 16, 2019

Here's How We'll Make 3,200% by Linking the Blockchain to the Outside World

By Teeka Tiwari

“The idea of a personal communicator in every pocket is a pipe dream driven by greed.

It's been my experience that bright people sometimes say really dumb things.

Take Andy Grove, for instance. The legendary former Intel CEO said the quote above in 1992. Yet today, more than 3 billion people carry smartphones in their pockets.

History is littered with brilliant industry experts who failed to see the rise of new technologies.

In 2007, then-Microsoft CEO Steve Ballmer infamously said, "There's no chance that the iPhone is going to get any significant market share."

Of course, today, Apple controls 19% of the smartphone market (and 87% of the profits). The company is now worth north of \$800 billion.

Here's the problem... These brilliant men couldn't see beyond the world they lived in at the time.

Fast-forward to today's most transformative new technology: blockchain. Now, just like then, many so-called experts view blockchain technology as a fad with limited applications.



I've often heard blockchains described as “dumb as rocks.” And their smart contract applications referred to as “dumb contracts.” (Smart contracts are computer programs that automatically facilitate, verify, and enforce transactions.)

The best I'll get out of blockchain naysayers is something along the lines of: “For all the hype and hoopla, most blockchains are only good for a few things.”

That's like saying Joe Montana was only good at a few things. If one of those few things was throwing footballs—that was enough to make him a legend.

The fact that blockchains can write, store, and send information in a way that requires no middlemen is a herculean accomplishment. And if that's all they're ever able to do... they'll *still* have immense value.

The ability to transact with another person without having to rely on trust will change everything—including how we trade and settle stocks... hold land titles... and move, store, and spend money.

It's critical to understand that what we're seeing today is the earliest version of a new network that'll evolve—and ultimately become as deeply entrenched in our everyday lives as the internet is today.

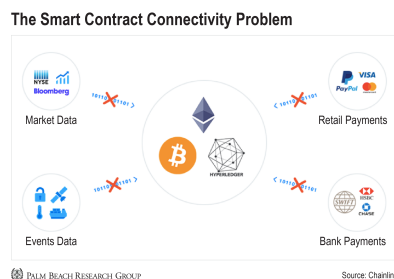
Smart Contracts Need “Plumbing”

Just like the early days of the internet, blockchains and smart contracts have problems.

For instance, blockchains have no way of securely exchanging information with the outside world. In other words, they have a connectivity problem.

Take the world's biggest blockchain: bitcoin.

Today, the bitcoin network can't link directly to off-chain databases. For example, it can't “talk” to the New York Stock Exchange (NYSE), the Visa retail payment system, or the SWIFT banking network.



If you want to enter that information into the bitcoin network, you need a third party. But third parties can be bribed or coerced into entering false or misleading data. That defeats the entire purpose of blockchain.

So you can see the blockchain can't securely pull in data from multiple sources outside its own database. But back in the late 1980s and early '90s, the internet had the exact same problem.

There was no reliable way to pull data from different sources... until IBM (and others) helped fix this problem with a suite of software tools that became known as "middleware."

Middleware: The Plumbing of the Internet

Like the Roman aqueducts that connected water sources to the city, middleware connects different data sources. That's why people in the tech industry call middleware the "plumbing" of the internet.

Today's blockchains don't have middleware solutions—yet. But once solved, blockchains' usefulness will explode the same way the internet did.

For example, imagine you owned a retail store in the U.S. and wanted to order clothes from a Chinese supplier.

A smart contract on the blockchain would automatically verify your identity and ability to pay. It would also verify the vendor's product and ability to deliver. That would cut down the time of doing paperwork for the trade from days to minutes.

Let's take it a step further... How valuable would it be to match blockchain tech with artificial intelligence (AI)?

For starters, it would do wonders for the insurance industry. A smart contract could use AI to acquire real-time weather data. And it could use the data to automatically write "one-off" policies for airline passengers, trucking companies, construction firms, oil rigs, and so on.

Or what about a blockchain that can automatically verify the collateral behind every derivative trade on its platform? If we had that in 2008, the financial crisis wouldn't have happened.

But how can you trust data pulled from an outside third party?

For instance:

- How do you verify whether an event actually happened?
- How do you know if a stock hit a certain price?
- How do you know what the weather was on a certain date at a certain location?
- How can you prove a person has the goods they say they have?

The answer is: You can't... At least, not without the help of a universally trusted source of proof.

Enter the “Oracles”

In the blockchain world, we call a universally trusted source an “oracle.” It’s essentially an agent who finds and verifies real-world information and submits it to a blockchain for a smart contract to use.

For example, we all rely on the price data we receive from oracles like the Nasdaq and the NYSE. And the National Weather Service is a universally trusted oracle of temperature and wind speed.

So if blockchains are to become more than the blunt instrument the naysayers believe them to be, a low-cost, low-risk way is needed to link them to oracles.

And in this month’s issue, I’ve discovered the project with the single-best solution for seamlessly integrating oracle data into blockchains. It’s starting with Ethereum... and eventually plans to support all smart contract platforms.

The project already has a deal in place with the world’s largest money transmitter. This partner is trusted to move \$5 trillion per day among 12,000 participants. And it has dozens more deals in the pipeline.

This simple, yet crucial, technology will act as the “plumbing” between oracles and blockchains. And it’s doing so in a decentralized way that eliminates bad data, tampering, and fraud.

As I’ll show you in a moment, we believe the market for this service is vast. In the future, virtually every blockchain looking to add “smart” features to its smart contracts will need to use this project’s service.

Plus, over the next three to five years, we think demand for the coin could cause it to rise over 3,200%. That's enough to turn \$500 into over \$16,000. And that's the type of asymmetric bet we look for in *Palm Beach Confidential*.

The Most Widely Used “Link” to the Outside World

The name of the most credible player we've found in the space is **Chainlink (LINK)**.

Chainlink traces its roots back to 2014. That's when co-founders Sergey Nazarov and Steve Ellis started SmartContract.

Keep in mind, 2014 was before Ethereum was even founded. And before most people knew about smart contracts.

Sergey is known as a smart-contract pioneer and has the background to make Chainlink a successful project.

He worked at early-stage venture capital funds FirstMark Capital and QED Investors. He also has experience building decentralized applications. These include CryptaMail (the first blockchain-based messaging service) and Secure Asset Exchange (the first widely used decentralized exchange interface).

In September 2017, Chainlink conducted its initial coin offering (ICO), raising \$32 million. Since then, it's expanded its team to 12 members.

What makes Chainlink special is that it's figured out a decentralized way to pull data from oracles and inject it into the Ethereum blockchain. To date, we haven't seen any other project offer a similar solution that's been so broadly accepted by the blockchain ecosystem.

Chainlink may not be a sexy business... Frankly, this might be the most “boring” issue I write all year. But without Chainlink's technology, smart contracts will forever be “dumb contracts.”

This is one of those leaps forward in network design on par with IBM's foray into middleware. And it's similar to Cisco's early work on linking websites via routers to share a common language. It's the leap that will take smart contracts from obscurity into the very fabric of our daily lives.

Chainlink's solution opens the door to smart contracts that can automatically handle insurance payouts, financial contracts, legal documents, machine-to-machine commerce, and many more applications that haven't even been

thought of yet.

A Network Within a Network

In the blockchain ecosystem, a node is any computer connected to the network. Nodes verify transactions. And Chainlink will use a collection of independent “nodes” to collect data from oracles.

For instance, one node might connect with the National Weather Service. Another will connect with the NYSE. And so on...

To prevent fraud, Chainlink uses multiple nodes and compares their results. It then automatically smooths out the data and sends it to the requesting smart contract. The smart contract using the oracle will pay a fee in LINK (Chainlink’s token) for the data.

To make fraud uneconomical for a bad actor, Chainlink can insist node operators put up LINK tokens as collateral. So the punishment for providing bad data will be swift and financially painful.

A more detailed review of how the Chainlink solution works can be found in the grey box below...

How It Works

Chainlink’s On-Chain Architecture

As an oracle service, Chainlink nodes return replies to data requests and queries made by or on behalf of a user contract (which is called a requesting contract).

Behind the user interface, Chainlink has an on-chain component consisting of three main contracts: a reputation contract, an order-matching contract, and an aggregating contract.

- **Reputation contract:** Keeps track of oracle service provider performance metrics.
- **Order-matching contract:** Takes a proposed service-level agreement (SLA), logs the SLA parameters, and collects bids from oracle providers. It then selects bids using the reputation contract and finalizes the oracle SLA.

- **Aggregating contract:** Collects the oracle providers' responses and calculates the final collective result of the Chainlink query. It also feeds oracle provider metrics back into the reputation contract.

The on-chain workflow has three steps: 1) oracle selection, 2) data reporting, and 3) result aggregation.

Chainlink's Off-Chain Architecture

Chainlink nodes are powered by the standard open-source core implementation (Chainlink Core) which handles standard blockchain interactions, scheduling, and connections with common external resources.

Node operators may choose to add software extensions—known as external adapters—that offer additional specialized off-chain services.

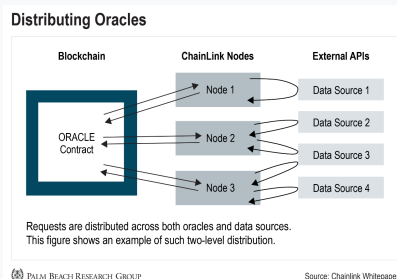
Adapters are external services. By modeling adapters in a service-oriented manner, programs in any programming language can be easily implemented simply by adding small intermediate APIs before them.

Chainlink's Security

Security is essential for decentralized oracles to work as intended.

Chainlink takes a number of steps to ensure the integrity of its services.

- **Collateral insurance:** Smart contract owners can request that a node stakes collateral (LINK tokens) to ensure it completes the job. If it fails to deliver the data, the deposit is forfeited to the smart contract owner.
- **Decentralized approach:** A simple way to deal with a faulty single source is to obtain data from multiple sources. Chainlink does this by using multiple nodes and data sources to service smart contracts.



Another method Chainlink will use in the future to further its decentralized approach is trusted hardware. Trusted hardware is designed to be tamper-proof and resist direct physical access adversaries.

Trusted execution requires specialized hardware. To that end, Chainlink acquired a “trusted hardware system” called Town Crier. It was developed by Ari Juels, a computer science professor at Cornell University and technical adviser to Chainlink. Town Crier is a “high-trust bridge” between the Ethereum blockchain and online data sources.

Chainlink’s Security Services

These systems and services bring additional security to the Chainlink platform and its users.

- **Validation system:** Monitors on-chain oracle behavior, providing an objective performance metric that can guide user selection of oracles.
- **Reputation system:** Records and publishes user ratings of oracle providers and nodes, offering a means for users to evaluate oracle performance. It includes a basic on-chain component where user ratings are available for other smart contracts to reference.
- **Certification services:** Issues endorsements of high-quality oracle providers.
- **Contract upgrade service:** An opt-in service that users can control to deal with faulty smart contracts.

Building Partnerships

Chainlink has been building partnerships since it started as SmartContract. In total, it now has over 30. Here are some key partners:

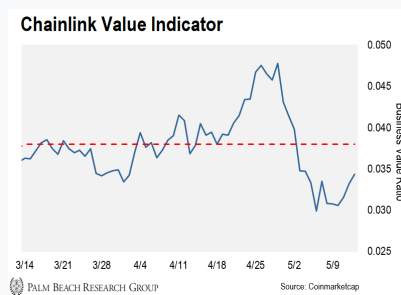
- The Society for Worldwide Interbank Financial Telecommunication (SWIFT): Global banking transfer system that moves over \$5 trillion daily
- Web3 Foundation: A Swiss foundation focused on blockchain technology

- Data-provider partnerships: ClinTex (clinical trial data), Kaiko (digital assets data), Brave New Coin (crypto data), and Data Sports Group (sports data)
- Notable cryptocurrency projects: ZeppelinOS and ConsenSys projects (OpenLaw and Kaleido)

What Is B.I.T.S. Saying?

B.I.T.S. is designed to automatically alert us to ideas when investor sentiment is low. We call this buying at the bottom of the fear curve. [You can read how the system works here.](#)

B (Business Value Ratio): The business value ratio measures the daily dollar value of all transactions compared to the total value of the cryptocurrency. When the business value ratio dips below its average, it's a sign the crypto token is cheap.



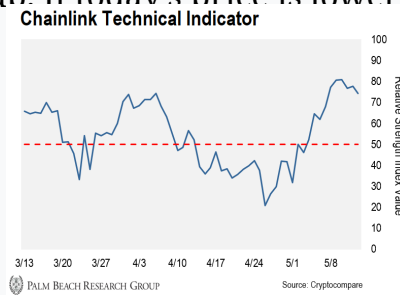
LINK rallied from the end of April into early May. Since then, it's traded sideways, bringing our value indicator back into buy territory.

Insiders (I): CEO Sergey Nazarov is considered one of the pioneers of smart-contract technology. He also brings experience in venture capital and building decentralized applications to the table.

Key technical advisors include Ari Juels and Evan Cheng. Ari is the co-director of the IC3 initiative, a leading blockchain and research development consortium. He's also a PhD professor at Cornell. And Evan is the director of blockchain engineering at Facebook.

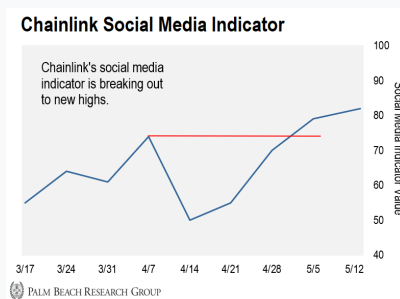
And as mentioned, Chainlink has extensive partnerships with major financial institutions, non-profits, data providers, and cryptocurrency projects.

T (Technical): We use technical analysis to tell us when the selling is over. The Relative Strength Index (RSI) measures how strong a cryptocurrency is based on its previous trading history. If today's price is higher, the RSI moves up. If today's price is lower, the RSI moves down.



Chainlink's technical indicator is above its midpoint, indicating the bulls are in control.

S (Social Media): Our research has shown that before a cryptocurrency takes off, we always see a surge in “chatter” on our social media tracker. As you can see in the chart below, the social media sentiment for Chainlink is breaking out to new highs. It's a good sign for higher prices ahead.



What's It Worth?

Chainlink is set to disrupt industries across the board—including big data, marketing data, insurance data, and financial market data. These industries are massive...

- Data brokers: \$200 billion per year
- Big Data: \$56 billion per year
- Insurance: \$1.2 trillion per year
- Financial market data: \$28.5 billion per year

Combined, these industries generate over *\$1.4 trillion* in revenue. Now, Chainlink won't capture 100% of these markets. But let's be conservative and assume it'll capture just 2%.

The current max supply of LINK tokens is 1 billion. And if we assume \$28 billion (2% of \$1.4 trillion) is tied up in contracts, that gives each token a value of \$28. That would be a 3,200% increase from today's prices.

Now, keep in mind, Chainlink's target markets are continually expanding. In fact, market research firm Statista forecasts Big Data (massive and complex data sets) alone will grow from a \$56 billion per year industry to over \$100 billion by 2027.

So as time passes, Chainlink's potential market will only grow.

A Disruptive Example

Financial companies pay Bloomberg \$6.5 billion annually to access 325,000 terminals and the massive amounts of financial data they provide. Consider this the "yearly stake" for accurate and reliable data.

But there's a problem: These companies totally rely on Bloomberg for their data. That presents a centralized point of failure. If Bloomberg is hacked or corrupted, that could affect its data feeds.

Enter Chainlink. It can use the blockchain to provide decentralized data. And as regular readers know, the blockchain is virtually tamper-proof because it distributes data across a network instead of housing it in one location.

But companies will still want assurances the data they receive from the blockchain will be accurate. So they'll require Chainlink nodes to stake LINK as insurance.

So the node will lose its stake if it sends corrupted or data. This financial penalty incentivizes nodes to provide accurate information—making the system reliable.

Bringing It All Together

There are over 10 million smart contracts today. And by 2023, we expect there will be billions of smart contracts in operation.

To put that in perspective, it took six years for the internet to scale to 10 million websites. Today, we have over 1 billion websites.

If Chainlink comes to dominate this space as we think it will, virtually all smart contracts could end up relying on it for their decentralized oracle data.

By capturing just 2% of the global data market, LINK will be worth \$28 per token. Today, we can buy it for under \$1.

The time to take action is *now*—before Chainlink becomes the de facto global standard for linking oracles to blockchains.

As always, place no more than \$200–400 for smaller accounts and \$500–1,000 for larger accounts into this trade.

Recommended Trade: Buy Chainlink (LINK).

Buy-up-to Price: \$1

Stop Loss: None

Buy It On: Binance

Store It On: MyEtherWallet

IMPORTANT NOTE: Immediately after our buy recommendations, we often see an initial price spike. We understand this can be frustrating. But don't worry. This is par for the course in the cryptocurrency space. Most of the time, the recommendation falls back below our buy-up-to price. Use a limit order. And just be patient and let the price come to you.

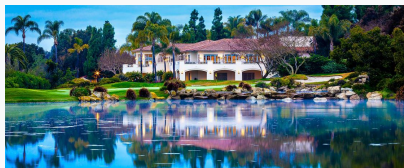
Crypto Corner

Be sure to visit the *Palm Beach Confidential* [Crypto Corner](#). If you have questions about anything cryptocurrencies, chances are you'll find the answers there.

There, you can access our research and step-by-step videos on web-based wallets, hardware wallets, and other cryptocurrency services.

You'll also find our [wallets and exchanges list](#). It will show you which exchanges you can buy all our recommended coins on and which wallets we recommend holding them in.

Only a Few Left Days to Claim Your Exclusive Discount



Join Teeka Tiwari and the smartest minds in the investment world at a secluded resort on the California coast.

They'll be sharing their newest research on cryptos, pot stocks, commodities, the tech sector, and their best wealth-building strategies for 2020 and beyond.

Today, we'd like to make you a very special offer to join them...

By acting today, you can take advantage of special early bird pricing. Plus, you're also entitled to a \$1,000 voucher toward the investment research service of your choice.

[→ Learn More](#)

Portfolio Update

By Teeka Tiwari and Greg Wilson

Read on below for notable developments in our recommendations over the last month. Remember, you can always visit the [portfolio page](#) for our most up-to-date advice. All new actions since last month's issue are highlighted below.

Bitcoin (BTC)

It's an exciting time for bitcoin and cryptocurrencies as we emerge from "Crypto Winter."

Bitcoin is up over 125% from its recent lows. And there are lots of catalysts to take us higher from here:

- Fidelity Investments announced it will buy and sell the world's most popular digital asset for institutional customers within a few weeks. Retail will not be far behind. Fidelity has 30 million clients.
- TD Ameritrade is testing out crypto trading with partner ErisX. The move is a precursor to opening crypto trading to its retail clients. TD Ameritrade has 11 million clients.
- Etrade is also close to launching cryptocurrency trading for its customers. Etrade serves nearly 5 million clients.

On the institutional side, both ErisX and Bakkt are close to launching their full platforms:

- ErisX launched its crypto spot-trading platform at the end of April. Further, it raised an additional \$20 million in funding.
- Bakkt acquired a crypto custodian and partnered with BNY Mellon for compliant storage solutions.

On the enterprise side, we're seeing major tech corporations get involved in digital currencies as well:

- Facebook announced Project Libra, its stablecoin-based payments network.
- Samsung announced it's developing a blockchain network on Ethereum.

These catalysts will take us from the early-adopter phase in cryptocurrency to mainstream adoption. It's a good time to be accumulating bitcoin.

Action to Take: Buy bitcoin (BTC) up to \$25,000.

Ether (ETH)

The Ethereum blockchain's current scalability limitations make some consider it a "has been" in the blockchain world. We would caution against such sentiment.

Blockchain company ConsenSys recently released a report on developer activity using GitHub stats. GitHub is a web-based platform for managing and distributing computer code. Nearly every crypto project uses it.

Of the top 20 projects, 18 are building on Ethereum. Major crypto projects certainly don't consider Ethereum old news.

Regarding Ethereum's scalability issues, the team is working on Ethereum 2.0. It will dramatically improve the Ethereum blockchain's performance.

It's not just the ETH team working on this. Ethereum is open source, so there are also eight independent teams working on Ethereum 2.0. Plus contributions from a host of Ethereum-based projects.

Action to Take: Buy ether (ETH) up to \$550.

NEO (NEO)

NEO released the roadmap for its NEO 3.0 protocol, which is set to launch Q2 2020.

NEO 3.0 will be a robust blockchain protocol with high throughput, enhanced stability and security, and an optimized smart contract system. It will also offer a feature-packed infrastructure for business applications.

Action to Take: Buy NEO (NEO) up to \$22.

Gas (GAS)

GAS is the second token of the NEO system and is the fuel for operating on the NEO platform. We like GAS for the same reasons we like NEO above.

Action to Take: Buy Gas (GAS) up to \$45.

Monero (XMR)

Monero launched Minko last month, the first game using its 90% reduced-fee structure.

Developers and users have taken notice of the upgrade. In fact, over the past month, Monero's active wallets and daily transaction counts have increased by 198%. Even more, the transaction count hit an all-time high this month, partly due to Minko.

Action to Take: Buy Monero (XMR) up to \$60.

Peerplays (PPY)

Peerplays is close to launching BookiePro on its mainnet. Recall that BookiePro is Peerplays' decentralized betting app, which includes sports from major leagues such as the NFL and MLB.

Looking forward, Peerplays is working on interoperability and further decentralization.

Action to Take: Hold Peerplays (PPY).

Storj (STORJ)

Storj is targeting customers who currently use AWS. It aims to be the more economical, efficient, and faster option.

And it's making the transition to its platform as seamless as possible. To facilitate this, it released a feature that allows developers to harness the Storj cloud system for programs that might have a large memory requirement.

Storj also mentioned it continues to add storage node operators each day. With each added operator, the network's available storage and health increases, which continues to build value in the STORJ token.

Action to Take: Buy Storj (STORJ) up to \$1.

Ethereum Classic (ETC)

A tokenized version of ETC will soon be running on the Ethereum blockchain and vice versa in a project called PeaceBridge. This is great for ETC and its projects as they can benefit from Ethereum's resources.

Action to Take: Buy Ethereum Classic (ETC) up to \$25.

Dash (DASH)

Dash is focused on remittances in Colombia and Venezuela with its Dash Text service. The service, which allows users to exchange DASH via text message in Venezuela, has expanded into Colombia. Dash Text is a way for the 59% of Colombians and 60% of Venezuelans who don't own a smartphone to receive DASH.

Further, Dash Text has launched its Telegram integration in these two countries. Telegram is a social message app with more than 200 million users per month. Users can now send DASH payment using this app.

Dash continues to develop ways that allow for easy adoption for users. As it continues building, expect DASH adoption to rise, benefiting DASH holders.

Action to Take: Buy Dash (DASH) up to \$800.

Factom (FCT)

M3 is now live on Factom. It makes Factom fully decentralized and autonomous. Meaning 65 or more independent parties run the protocol day to day without a central control.

This is monumental for Factom since it's the final milestone the team laid out in the original whitepaper. A testament to the focus the Factom team has and their follow-through. We continue to expect great things from them.

Action to Take: Buy Factom (FCT) up to \$50.

Ripple (XRP)

In April, Ripple released its first quarter report. Institutional and programmatic sales totaled 700 million XRP for the quarter. The funds will be used in a variety of ways to help support the XRP ecosystem. Ripple also added Yoshitaka Kitao to its board of directors. Kitao established SBI Holdings in July 1999, a company now worth over \$5 billion. SBI Holdings is considered one of the most influential adopters of blockchain and digital asset innovation in the region.

Action to Take: Buy Ripple (XRP) up to \$0.30.

OmiseGO (OMG)

OmiseGO released the alpha version of its Plasma network in April. The team is now focusing on expanding the usability of Plasma. This will enable greater adoption throughout the crypto community, bringing greater attention to the OMG token.

Further, it earned the No. 13 spot for development activity for April, according to GitHub. The team is working on getting its network fully running. Upon completion, we anticipate the OMG network will gain users quickly, which in turn, will reward token holders.

Action to Take: Buy OmiseGO (OMG) up to \$20.

Cindicator (CND)

Cindicator continuously monitors the accuracy of its Hybrid Intelligence system to build utility in the CND token. The team understands the more valuable and accurate they are, the more users will stake CND to gain market insights.

Thy recently published Cindicator's impressive Q1 results. Its accuracy for binary (buy or sell) was 68.3%, while its support and resistance accuracy was 75.7%. Even more impressive, over the last three months, its accuracy has continually improved.

Cindicator expects the accuracy of its system to only improve, bringing more utility to the CND token.

Action to Take: Buy Cindicator (CND) up to \$0.30.

Aion (AION)

Unity is the new consensus algorithm for the Aion network. It will implement a combination of a Proof-of-Work and Proof-of-Stake algorithm. That will increase the security of the network, leave room for adaptability to network size, and create lower barriers to entry for staking.

We'll pass along details as they come on how and when the team plans to fork the network.

Action to Take: Buy Aion (AION) up to \$10.

Gifto (GTO)

Gifto is close to finishing its smart contract lockup for "Company Reserve" and "Power the Ecosystem" tokens. It's important for three reasons:

- First, these two token allocations account for 55% of GTO's supply. "Company Reserve" makes up 25% and "Power the Ecosystem" is 30%. (Note: 218 million of the 300 million "Power the Ecosystem" tokens are still available.)
- Second, once the smart contract lockup is completed, it will trigger Gifto's partnership initiative. During 2019, 20 million GTO will be distributed to support major new partnerships.
- Third, the smart contract lockup of "Company Reserve" tokens ensures the team is properly incentivized. These team tokens won't be released until 2021 and 2022.

Gifto moved forward on a few initiatives during the last two months:

- In April, Gifto released 30 million GTO from its "Power the Ecosystem" allocation. These tokens will be primarily used for Gifto ecosystem initiatives, including large partnership implementations.

- Gifto Wallet users in Turkey and the Philippines can now exchange uDiamond for GTO.
- Gifto announced it will be migrating to Binance Chain. (This will likely happen in a couple of months. We'll provide details as we learn more.)
- Gifto partnered with InfiniteX, a new compliant-fiat crypto exchange based in Australia. GTO is now the platform token of the exchange.

Action to Take: Buy Gifto (GTO) up to \$0.80.

Quantstamp (QSP)

Secured with Quantstamp is becoming the stamp of approval as it continues to earn audit jobs in the crypto market. This past month, the team audited the Nuo Network and V1 Lendroid. Both projects provide a non-custodial way to lend.

In other news, the team released an update on the Quantstamp Security Assurance Protocol (QSAP). As a quick refresher, QSAP is where users of smart contracts can enlist the help of security experts who stake collateral (QSP) if the contract they audit misbehaves.

The protocol has been in beta since late-2018, and the team is prepared to release the pilot in the next month or two. When the protocol goes live, users will see QSP adoption take place. This will bring scarcity and transaction activity to the token and network. And in turn, it will boost the price of QSP.

Action to Take: Buy Quantstamp (QSP) up to \$0.25.

FunFair (FUN)

FunFair is getting noticed for changing the online casino industry. It's been nominated for three EGR Global (eGaming Review) B2B awards for 2019. EGR is the largest publisher for the online gaming industry.

The three awards they are up for are Software Rising Star, Innovative Start-up, and Cryptocurrency Services Supplier.

And in the past month, it released another game, Fate of Thrones. It now houses 18 games on its platform, all run on the FunFair blockchain. It's continuing its quest to build utility for the FUN token.

Action to Take: Buy FunFair (FUN) up to \$0.04.

Steem Power (STEEM)

Steemit launched its first Twitter ad campaign, which features two ads to build awareness.

Steemit also rolled out MIRA (Multi Index RocksDB Adapter). Without getting too technical, it enables nodes to store necessary data on low-cost hardware instead of in RAM.

This is critical for two reasons: First, RAM is incredibly expensive. And second, no other blockchain has applications with as much real-time engagement and traffic as Steem. So a scalable storage solution is necessary.

Action to Take: Buy Steem Power (STEEM) up to \$3.50.

Stellar Lumens (XLM)

Stellar is predominantly known as a network that can settle cross-border payments in near real time. This ability was highlighted with two significant announcements in March and April. The first was IBM's World Wire being built on the Stellar network. The second was Wirex, a cryptocurrency account and debit-card app, launching 26 fiat-backed stablecoins on Stellar.

Stellar also launched two real estate security token platforms. The first, Smartlands, began a security token offering (STO) for a student housing project in the UK. The second, BlockPark, develops decentralized property management software. Its first project involves a downtown Las Vegas 250-unit residential property where token holders can earn dividends.

Stellar is a network not solely focused on cross-border payments. The possibilities for its network are just beginning to emerge.

Action to Take: Buy Stellar Lumens (XLM) up to \$0.35.

VeChain (VET)

VeChain held its first developer conference in San Francisco last month. And it made some notable announcements:

- The first was its addition of two Board of Advisor members, Masanari Koike and Antonio Senatore. Masanari was a former member of the House of Representatives in Japan and will advise the adoption of

Japanese-based projects and networks. Antonio is Deloitte's Global Blockchain CTO, meaning VeChain is working with the biggest member of the Big Four.

- Second, VeChain unveiled ToolChain. It allows small and medium enterprises to adopt blockchain solutions for supply chain management. The ToolChain comes with handheld devices, RFID chips, sensor devices, QR printers, and more.
- Third, it introduced VeKey. It's a hardware solution that uses security layers like biometric identification, PIN, and multi-signatures to reduce single points of failure with private keys. For example, losing your key or the holder passing away.
- Fourth, the partnership VeChain formed with BMW in February 2018 produced the VerifyCar app. It's an app where sensors on a BMW record data using VeChain. The data can be changing the battery, replacing a filter, regular completed service, odometer reading, etc. The info is updated regularly and added to the blockchain. The app is ready for launch.

In other news, Zeux added VeChain. This means VET holders can now use their tokens wherever Apple Pay and Samsung Pay are accepted. In 2018, Apple Pay had 140 million users and Samsung Pay had 51 million users.

Action to Take: Buy VeChain (VET) up to \$0.016.

0x (ZRX)

Last month, we filled you in on some of 0x's 2019 roadmap, including Zero Knowledge Proofs (which improve security and scalability) and 0x Mesh (a network for sharing liquidity).

This month, we'll fill you in on another part of the 0x roadmap: a proposal for stake-based liquidity incentives.

Under the proposal, takers would pay a small fee on each 0x trade. And market makers would see a liquidity reward that is proportional to the fees generated and their stake of ZRX tokens.

Further, market makers can form ZRX staking pools to amass more liquidity. And those who stake ZRX with a market maker can earn an income.

This is great for 0x and the ZRX token. Staking will encourage market makers to hold ZRX, thereby taking it off the market. And as activity on 0x grows, we should see the value accrue to the ZRX token.

Action to Take: Buy 0x (ZRX) up to \$0.75.

Basic Attention Token (BAT)

The first wave of adoption for BAT is here. In late April, the desktop Brave browser began rewarding users for viewing privacy-preserving Brave Ads.

Users who opt-in to ads will receive 70% of the ad revenue share as a reward for their attention, paid in BAT tokens. In turn, BAT holders can reward the 55,000 content creators for their work. BAT is at the center of this new digital economy.

The Brave team plans to enable reward redemption (e.g. hotel stays and restaurant vouchers) and BAT withdrawals into fiat in the coming months. Additionally, Brave Ads will be integrated into Android and iOS apps soon.

The impact of these developments can be seen in the numbers. In the first week of May, the BAT network saw 112% growth in transactions and 153% growth in active wallets compared to the first week of April. This is adoption. And it's clear BAT usage will continue to climb with these new developments.

Action to Take: Buy Basic Attention Token (BAT) up to \$0.35.

Ripio Credit Network (RCN)

Ripio successfully released Marmo, its software development kit (SDK). It simplifies interactions with the Ethereum and Ripio networks for developers. And that makes building products for Ripio easier.

The team also released the Diaspore update. It incorporates a modular structure which improves scalability and enables new functions, such as collateral-backed loans and multilender to multiborrower debt products. Further, it will allow debtors to pay their loans in installments. This improves flexibility for borrowers and lenders.

Looking forward, Ripio is working on improving the user interface of its dApp. It will focus on making it easier for users to sign up and checkout.

Lastly, the Ripio website is getting a revamp. Its plan is to better reflect the current state of the project and its future milestones.

Action to Take: Buy Ripio Credit Network (RCN) up to \$0.03.

Maker (MKR)

MakerDAO is busy making partnerships to expand the usage of its stablecoin, DAI.

- In South Korea, Maker partnered with GLOSFER and Vanta Network to enable small businesses and enterprises to accept DAI.
- Nitrogen Network and Origin Protocol integrated DAI into their platforms. Nitrogen is a peer-to-peer, decentralized lending app. And Origin is a peer-to-peer, decentralized marketplace, similar to eBay.
- MakerDAO formed a partnership with Quantfury, a trading app that enables cryptocurrency owners to trade financial products. Quantfury has done over \$200 million in trading volume.
- And crypto startup Guesser just raised \$1.1 million, the first-ever venture capital deal done using DAI.

On the development front, Maker continues to make progress with the recent release of MCD (Multi-Collateral Dai) v 0.2.4. With MCD, you'll be able to collateralize multiple cryptocurrencies. And that's exciting for us. With more collateral options, Maker can grow its ecosystem.

In other news, the Maker Foundation raised the stability fee several times. It now stands at 19.5%. The stability fee is like the interest rate for DAI loans. When the rate increases, borrowers are incentivized to cover their debts by paying back DAI. And as the rate decreases, borrowers are incentivized to take out more DAI loans as the costs go down.

Finally, you can now buy MKR on Coinbase Pro.

Action to Take: Buy Maker (MKR) up to \$800.

DigixDAO (DGD)

On March 30, DigixDAO successfully released its governance platform.

That means owners of DGD tokens can now contribute and vote on proposals to grow and improve the Digix platform.

This is exciting news. Proposals submitted on the DigixDAO platform will help increase the adoption of DGX gold-backed tokens. So far, it's reviewing seven projects.

To date, 29.2% of DGD's supply has been locked in DigixDAO to participate.

In other news, Digix was selected as one of the 10 startups to be a part of the Tribe Accelerator program, a Singapore-based blockchain accelerator program. It's run by TRIVE, a venture capital firm based in Singapore and supported by its government.

Action to Take: Buy DigixDAO (DGD) up to \$24.

Short-Term Cryptocurrency Portfolio

NEM (XEM)

NEM plans to release Catapult by Q3 2019. Catapult is the next upgrade of the NEM blockchain, which will add dApp development to the platform. The following quarter, NEM will add STO compliance and support.

NEM also shut down the NEM Community Fund and established NEM Ventures.

NEM Ventures is an investment vehicle supporting the NEM Blockchain ecosystem. It strengthens the investment process by formalizing the proposal, approval, and funding process. That way, only the best projects get, and continue to receive, funding.

Action to Take: Buy NEM (XEM) up to \$0.30.

Syscoin (SYS)

Syscoin released its updated roadmap at the end of April. Right now, the Syscoin team is working on three main objectives:

- **Fusion:** The Syscoin white-label wallet. Fusion will enable developers to incorporate a Syscoin wallet into their projects.
- **SysHub:** A governance portal for the Syscoin ecosystem. It will create a simpler user interface for tracking voting and proposals.
- **Syscoin 4.0:** Enables smart contract execution on the Syscoin protocol. Further, it improves speed and scalability.

These changes will make it easier for enterprises to take advantage of the Syscoin blockchain.

Action to Take: Buy Syscoin (SYS) up to \$0.30.

Waves (WAVES)

Waves has partnered with Blockpass to create KYC (know your customer) solutions for developers. KYC is an essential component for many new financial services and applications being built in crypto.

The unique part of this project is that users will remain in control of their personal data. Typically, users need to surrender their personal information (e.g. Social Security number and home address) to be granted access to platforms requiring KYC. Blockpass and Waves do the opposite by granting certifications and ensuring users don't need to give up their sensitive data at every turn.

Action to Take: Buy Waves (WAVES) up to \$4.

Bitcoin Cash (BCH)

Bitcoin Cash is implementing Schnorr signatures this month ahead of bitcoin (BTC). Schnorr signatures reduce storage and bandwidth by around 25%, improving scalability.

In other news, Bitcoin.com launched Bitcoin Cash Notary in April. Users can create a timestamped proof of a document's existence without third-party aid. A cryptographic imprint of the document is stored in the Bitcoin Cash blockchain. The submission then acts like a time capsule, validating documents for verification at later dates.

Action to Take: Buy Bitcoin Cash (BCH) up to \$1,400.

Binance Coin (BNB)

On May 7, Binance suffered a hack, with 7,000 BTC (worth roughly \$41 million) stolen. We sent out an alert the next day.

Binance said it would cover any losses in full, using its Secure Asset Fund for Users (an insurance reserve set up for this type of situation).

If you suffered a loss, you do not need to contact Binance. However, we recommend you do so to establish an official record.

Remember, we recommend using Binance as an exchange, not as a wallet. You should store your tokens in your own wallet whenever possible. Please see our list of recommended wallets [here](#).

Action to Take: Hold Binance Coin (BNB).

Qtum (QTUM)

Qtum launched a suite of developer tools in partnership with Google Cloud this month.

The tools are designed for developers and nontechnical users to launch nodes and build on the Qtum blockchain. This provides anybody looking to build on the Qtum blockchain a one-stop shop for making a dApp.

Google Cloud will be automatically updating the code to match the Qtum source code. This will save time for developers. The easier it is to build and manage dApps, the more developers will want to build on the Qtum blockchain.

Action to Take: Buy Qtum (QTUM) up to \$65.

Power Ledger (POWR)

Power Ledger just landed another energy project in Australia.

The project is part of the Australian Government Smart Cities initiative. East Village near Fremantle will become an innovation hub for sustainable living using Power Ledger's energy trading platform. The project is in collaboration with land developer LandCorp, Curtin University, and the Australian Government Smart Cities initiative.

The village will be a showcase for energy-efficient residential development, featuring blockchain-ready homes, a microgrid supply network for water and power, and a shared on-site battery.

Action to Take: Buy Power Ledger (POWR) up to \$0.85.

Worldwide Asset eXchange (WAX)

The WAX blockchain is already one of the most active in existence. Daily trading averages 500,000 digital items, worth a combined \$1 million. And it's just in beta.

On June 30, WAX will launch the Wax blockchain. And during that process, we'll be swapping our ERC-20 WAX tokens for WAX protocol tokens.

Along with the token swap, WAX has created the Genesis Block Member program (GBM). It's designed to create broad community support.

GBM participants will receive daily token rewards for 3 years. To be eligible, you must participate in the WAX token swap.

We'll bring you all the details as we get closer to the launch of the WAX blockchain.

Action to Take: Buy Worldwide Asset eXchange (WAX) up to \$1.40.

Stocks

Sandstorm Gold (SAND)

Sandstorm recently reported Q1 2019 results. It sold 14,071 gold equivalent ounces and generated revenue of \$18.2 million. While these results are slightly down compared to Q1 2018, Sandstorm continues to make progress toward its goal of gold-equivalent production of over 140,000 ounces in 2023.

The company made two significant deals during the quarter. The first is a royalty on the Fruta del Norte gold project in Ecuador. The mine is owned by Lundin Gold. And the agreement includes 30 mining concessions held by Lundin.

The second deal was a financing package with Americas Silver Corporation for its Relief Canyon gold project in Nevada.

Sandstorm also received its first delivery of 300,000 silver ounces from Yamana Gold's Cerro Moro project. Cerro Moro has an expected mine life of nine to 10 years, but that will likely end up being conservative. Yamana is targeting an additional 1 million gold equivalent ounces through additional discoveries on the same property.

Sandstorm and its shareholders will benefit from deals like this for years to come.

Action to Take: Buy Sandstorm Gold (SAND) up to \$8.

Investment	Open Date	Open Price	Recent Price	Return	Stop Loss	Notes
Peerplays (PPY/USD)	11/23/16	\$1.29	\$0.63	-51.5%	None	Hold
Storj (STORJ/USD)	04/20/17	\$0.34	\$0.27	-18.0%	None	Buy up to \$1.00
Bitcoin (BTC/USD)	04/18/16	\$428.00	\$8199.38	1815.7%	None	Buy up to \$25,000
Dash (DASH/USD)	05/25/17	\$132.69	\$154.40	16.4%	None	Buy up to \$800
Ether (ETH/USD)	04/18/16	\$9.00	\$247.68	2652.0%	None	Buy up to \$550
Ethereum Classic (ETC/USD)	05/18/17	\$11.15	\$7.63	-31.5%	None	Buy up to \$25
Factom (FCT/USD)	03/16/17	\$4.20	\$9.47	125.4%	None	Buy up to \$50
Lynx (LKK/USD)	11/23/16	\$0.05	\$0.01	-68.5%	None	Hold
SteemPower (SteemPower)	11/23/16	\$0.11	\$0.56	400.9%	None	Buy up to \$3.50
Basic Attention Token (BAT/USD)	06/07/17	\$0.27	\$0.41	53.4%	None	Buy up to \$0.35
OmiseGo (OMG/USD)	08/07/17	\$2.93	\$2.20	-25.0%	None	Buy up to \$20
Gas (GAS/USD)	08/14/17	\$22.64	\$3.10	-86.3%	None	Buy up to \$45
Monero (XMR/USD)	09/15/16	\$8.46	\$94.95	1022.3%	None	Buy up to \$60
Tellar (XLM/USD)	12/20/17	\$0.24	\$0.14	-42.2%	None	Buy up to \$0.35
Aion (AION/USD)	01/02/18	\$6.13	\$0.23	-96.2%	None	Buy up to \$10
Ripple (XRP/USD)	05/25/17	\$0.27	\$0.46	70.4%	None	Buy up to \$0.30
Gifto (GTO/USD)	02/15/18	\$0.34	\$0.03	-91.3%	None	Buy up to \$0.80
NEO (NEO/USD)	02/16/17	\$0.13	\$12.90	10175.5%	None	Buy up to \$22
Cindicator (CND/USD)	12/18/17	\$0.04	\$0.02	-51.6%	None	Buy up to \$0.30
Quantstamp (QSP/USD)	05/04/18	\$0.20	\$0.02	-88.0%	None	Buy up to \$0.25
FunFair (FUN/USD)	06/21/18	\$0.02	\$0.01	-72.4%	None	Buy up to \$0.04
VeChain (VET/USD)	03/12/18	\$0.04	\$0.01	-78.7%	None	Buy up to \$0.016
ZRX (ZRX/USD)	09/20/18	\$0.54	\$0.37	-31.9%	None	Buy up to \$0.75
Ripio-Credit-Network (RCN/USD)	02/21/19	\$0.01	\$0.03	170.7%	None	Buy up to \$0.03
Maker (MKR/USD)	03/21/19	\$692.78	\$712.51	2.8%	None	Buy up to \$800
DigiXDAO (DGD/USD)	04/18/19	\$22.49	\$38.75	72.3%	None	Buy up to \$24

CRYPTOCURRENCY TRADING

Investment	Open Date	Open Price	Recent Price	Return	Stop Loss	Notes
XEM (XEM/USD)	05/25/17	\$0.24	\$0.08	-66.4%	None	Buy up to \$0.30
Iconomi (ICN/USD)	05/22/17	\$0.94	\$0.26	-72.1%	None	Hold
Wings (WINGS/USD)	06/02/17	\$0.45	\$0.05	-89.5%	None	Buy up to \$1
Lisk (LSK/USD)	06/02/17	\$1.30	\$2.15	65.1%	None	Buy up to \$1.50
Bitshares (BTS/USD)	06/21/17	\$0.32	\$0.07	-78.3%	None	Buy up to \$0.40
Syscoin (SYS/USD)	06/21/17	\$0.20	\$0.06	-69.7%	None	Buy up to \$0.30
Waves (WAVES/USD)	06/26/17	\$4.00	\$2.63	-34.2%	None	Buy up to \$4
MaidSafeCoin (MAID/USD)	06/28/17	\$0.47	\$0.18	-61.5%	None	Buy up to \$0.50
Solium Network (GNT/USD)	06/28/17	\$0.55	\$0.09	-83.8%	None	Buy up to \$0.60
Aragon (ANT/USD)	06/28/17	\$2.63	\$0.87	-66.7%	None	Buy up to \$8
Bitcoin Cash (BCH/USD)	11/13/17	\$1234.41	\$405.27	-67.2%	None	Buy up to \$1,400
Zcoin (XZC/USD)	06/21/17	\$16.02	\$7.96	-50.3%	None	Buy up to \$20
Binance (BNB/USD)	11/29/17	\$1.88	\$26.85	1328.2%	None	Hold

Investment	Open Date	Open Price	Recent Price	Return	Stop Loss	Notes
Salt (SALT/USD)	12/06/17	\$5.96	\$0.13	-97.9%	None	Buy up to \$20
eos.io (EOS/USD)	11/14/17	\$1.44	\$6.53	353.3%	None	Hold
Qtum (QTUM/USD)	01/08/18	\$56.28	\$3.27	-94.2%	None	Buy up to \$65
Dragonchain (DRGN/USD)	01/08/18	\$4.17	\$0.09	-97.8%	None	Buy up to \$5
Cardano (ADA/USD)	01/12/18	\$0.77	\$0.09	-87.8%	None	Buy up to \$0.90
Power Ledger (POWR/USD)	01/17/18	\$0.77	\$0.12	-83.9%	None	Buy up to \$0.85
Worldwide Asset Exchange (WAX/USD)	01/08/18	\$1.16	\$0.07	-93.8%	None	Buy up to \$1.40
Bancor-Network-Token (BNT/USD)	04/23/18	\$4.04	\$0.76	-81.2%	None	Buy up to \$5
Litecoin (LTC/USD)	05/04/18	\$159.34	\$102.17	-35.9%	None	Buy up to \$175
CON (ICX/USD)	05/04/18	\$4.20	\$0.40	-90.4%	None	Buy up to \$5.50

STOCKS

Investment	Open Date	Open Price	Recent Price	Return	Stop Loss	Notes
Sandstorm Gold Ltd (SAND)	07/22/16	\$5.17	\$5.17	0.0%	52.3% (T)	Buy up to \$8

All rights reserved. You may **not** republish, upload, post, transmit or otherwise distribute any Palm Beach Research Group content to online bulletin and message boards, blogs, chat rooms, intranets, or in other any manner, without our prior written authorization. Any modification or use of the content for purposes other than your personal, noncommercial use is a violation of our copyright and proprietary rights, and may subject you to legal liability and result in the cancellation of your services.

Information contained herein is obtained from sources believed to be reliable, but its accuracy cannot be guaranteed. It is not designed to meet your personal situation – we are not financial advisors nor do we give personalized advice. The opinions expressed herein are those of the publisher and are subject to change without notice. It may become outdated and there is no obligation to update any such information.

Recommendations in Palm Beach Research Group publications should be made only after consulting with your advisor and only after reviewing the prospectus or financial statements of the company in question. You shouldn't make any decision based solely on what you read here.

Palm Beach Research Group writers and publications do not take compensation in any form for covering those securities or commodities.

Palm Beach Research Group expressly forbids its writers from owning or having an interest in any security that they recommend to their readers. Furthermore, all other employees and agents of Palm Beach Research Group and its affiliate companies must wait 24 hours before following an initial recommendation published on the Internet, or 72 hours after a printed publication is mailed.

Palm Beach Research Group welcomes comments or suggestions

[here](#)

. This address is for feedback only. For questions about your account, or to speak with customer service, call 888-501-2598 (U.S.) Monday-Friday, 9 a.m.-7 p.m. ET, or e-mail us

[here](#)

. We look forward to your feedback and questions. However, the law prohibits us from giving individual and personal investment advice. We are unable to respond to e-mails and phone calls requesting that type of information.