



DRAGONCHAIN (DRGN) ANALYST REPORT

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The Summary

Dragonchain provides an opportunity for investors to buy and hold Dragons (listed under the symbol DRGN), a token used to power the Dragonchain technology.



Dragonchain is a secure platform used to develop blockchain applications, with a ready-made library of smart contracts to allow applications to be developed more quickly. Think of it as a "plug and play" solution, allowing developers to use "off the shelf" parts to create new blockchain apps, using languages they already know well (Java, C#, and Python).

Further, Dragonchain connects to commercial platforms such as Amazon Web Services and Google, allowing developers to quickly write and market blockchain applications at scale.

Dragonchain, which was <u>originally developed</u> at Disney's Seattle office, also has plans to develop an incubator that will give developers access to qualified vendors as well as technical, legal, and marketing experts.

Because of the platform's potential, and the quality of the team, we believe that Dragon tokens represent a promising investment opportunity.



The information outlined in this analysis is for informational purposes only and should not be taken as investment advice. You should not invest in Dragon tokens unless you are prepared to sustain a total loss of your money. This is a high-risk investment, so never invest more than you are willing to lose.

The Problem and the Solution

Developing blockchain applications is difficult and expensive.

We might call it a "dark art." The technology is so new that experienced developers are hard to find, and the rules of development are still being written. Security is extremely important, but extremely difficult to ensure. Like the early days of the Web, companies are racing to develop tools and standards that will make it easier to develop blockchain applications.



Dragonchain wants to make the blockchain development process quick, easy, and secure. By doing so, Dragonchain can make it easier for companies to launch new blockchain applications, with less specialized knowledge.

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Even though there is significant momentum surrounding the blockchain and the wide range of potential applications, some businesses – including Disney – have been <u>reluctant</u> to put their information on blockchains, simply because doing so would make this data available to the public.

Keeping this in mind, Dragonchain aims to create a ready-made environment that will also protect sensitive information. This focus on security is what <u>inspired Dragonchain's name</u>, as "a Dragon protects its treasure," said Joe Roets, Architect, Founder and CEO of Dragonchain.

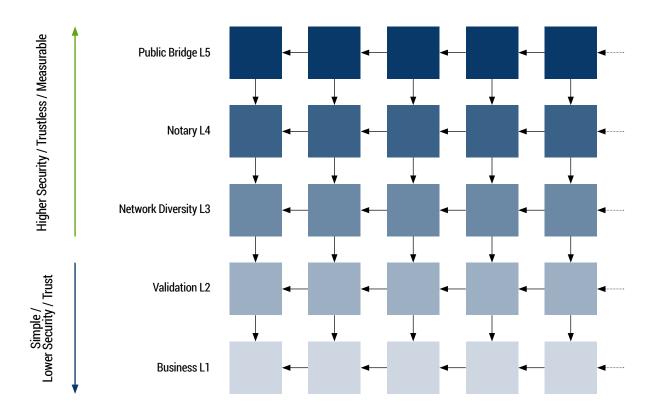


Most financial institutions hold sensitive customer data, and harnessing blockchain technology can provide them with significant risk of <u>data exposure</u>. Businesses also face potential risks since smart contract logic is transparent on the majority of platforms.

Putting these two challenges together, institutions could potentially find both their business logic and sensitive data compromised. If hackers discover a vulnerability, they could potentially use it to obtain sensitive information or even withdraw funds.

In order to protect the information of these institutions, the Dragonchain team has created the <u>Dragonchain architecture</u>, which offers five levels of consensus. Users have the ability to select the appropriate verification level, with higher verification levels corresponding with less security risk. Through this setup, the Dragonchain architecture offers a "spectrum of trust."





Dragonchain offers five levels of consensus, which allows companies to have their own private blockchain, while also leveraging one or more public blockchains to obtain further verification if desired. Here's how they work.

- 1) Business (Approval) Verification
- 2) Enterprise (Validation) Verification
- 3) Network Diversity Verification
- 4) External Partner (Notary) Verification
- 5) Public Checkpoint Verification

Level 1 determines consensus using business logic. If approved at this level, transactions will be incorporated into a block called a "verification record."

Level 2 examines blocks and individual transactions at an enterprise level, looking at required data elements and then creating a new verification record.

Level 3 nodes look at Level 2 verifications, making sure these verifications come from a diverse set of sources: unique business units, deployment locations, and management authorities. By using this level of consensus, institutions can have a higher level of assurance that their data has not been compromised, since doing so would require hackers to attack multiple businesses, systems and data centers.

Level 4 involves obtaining additional verification from an outside party, which would cryptographically sign all verification records that it receives. Through this process, a Level 4 node can serve as an independent witness to Level 3 verifications.

Level 5 provides a connection to a public blockchain such as bitcoin or ether. One major benefit of this consensus level is that transactions, block verifications and other key information can all be placed on a public blockchain.

By using Dragonchain's multiple levels of consensus, users can dial verification levels up and down as needed for their application.



"Here's where you give me non-comprehending nods of approval"



While the Dragonchain architecture helps manage the risk of one's data being compromised, Dragonchain's platform and the DragonFund incubator can help developers reduce their expenses and also their time to market.



By providing a library of ready-made smart contracts, the platform can help lower the time needed to create blockchain applications. Instead of reinventing the wheel, developers can build a wheel far more quickly using parts that have already been created.

The platform also supports common development languages such as Java, C#, Python, Mode, and Go. It is also connected to cloud services like Amazon Web Services and Google. As a result, developers can use Dragonchain to develop blockchain applications and then scale them quickly.

In addition, Dragonchain is using its ICO to fund the DragonFund incubator, which is in place to help developers create token-based systems that flourish. This resource will offer several benefits, including a marketplace dashboard that helps promote community engagement and standard processes used to create blockchain startups and integrations.

Dragonchain plans for the incubator to also grant access to technical, legal, and marketing subject matter experts who can help developers complete their project, get it ready for the market, then scale it effectively.

The Customer

Dragonchain has two target customers: **decision makers and influencers.**

The **decision maker** is the one who chooses the development platform for a new blockchain application. This may be anyone from the Chief Information Officer of a large financial institution to the founder of a new blockchain startup. This customer needs to build a new blockchain application, and is considering whether to use an established platform (like Ethereum) or develop a new blockchain from the ground up.

A typical decision maker – let's refer to him as John – is overseeing the development of a new blockchain application. He is probably tech–savvy, middle–aged, and male. John faces the "build or buy" decision to either build a new blockchain infrastructure (which gives him more flexibility), or to use an existing platform (which gives him more speed and security).

A typical **influencer** is a developer who researches and makes recommendations on the blockchain platform to use for the project. He is likely tech-savvy, younger (20's or 30's), and male. He is interested in a platform that offers speed, security, and support, with positive reviews from the developer community. After narrowing down options, he makes a final recommendation to the decision maker.

In smaller projects, the decision maker and influencer may be the same person.

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While both the influencer and the decision maker will consider a wide array of factors in making their decision, there is a strong "network effect": they will be more likely to choose platforms with a large number of users. Popular platforms imply trust, support, and stability. Thus, Dragonchain faces a "chicken and the egg" problem, like all platforms.

For this reason, the DragonFund incubator is a critical factor of Dragonchain's success: they need to kickstart enough developers to give Dragonchain credibility to future developers.

The Market

Dragonchain is targeting the global blockchain development market. While blockchain technology has been around for less than a decade, the market is growing rapidly. Technologists, industry participants, and market observers have predicted that the blockchain could have applications in many different sectors, ranging from financial services to healthcare.



According to reports by Grand View Research, this market was worth roughly \$500 million in 2015, and is expected to reach a total value of roughly \$7.7 billion by 2024. Market research firm IndustryARC predicted that the global blockchain market's total value will surpass \$6 billion by 2023, pointing to strong demand from various sectors.

Capturing 10% of a \$6 billion market (an admittedly arbitrary number) would mean a \$600 million business. The potential opportunity is huge.

The global blockchain market is unlike many others, in that it is very young and does not have heavyweights with established market positions. Thus, Dragonchain has the opportunity to capture a significant portion of the market.

The Competition

There are several platforms currently competing for blockchain developers: Blockstack, Hyperledger, and Ethereum Enterprise Alliance, to name a few. The biggest difference between these varying solutions is "how they approach the problem," said Yazan Barghuthi, project lead at <u>Jibrel Network</u>.

Blockstack, for example, "provides infrastructure to capitalize on blockchain tech. If you have a login requirement, you can use on-chain digital identities. If you require immutable data storage, they provide that." In other words, Blockstack provides a number of "plug and play" parts that can be used to develop your application, like Dragonchain, but potentially more scalable.

Hyperledger, however, is more like an <u>environment</u> where developers and companies can meet and collaborate on blockchain projects. This platform, which is hosted by The Linux Foundation and sports both corporate giants and young startups, has amassed <u>more than 170 members</u> at the time of report.



Ethereum, while possibly better known, may be a bit more straightforward than Blockstock and Hyperledger. A platform for creating decentralized blockchain applications known as "Dapps," Ethereum is powered by digital tokens called ethers.

The Ethereum Enterprise Alliance, an open-source blockchain <u>consortium</u>, has secured the backing of several major companies including JPMorgan Chase and Microsoft. Most recently, it has built up a roster of <u>200 members</u>.

Many projects seek to enable blockchain developers, emphasized Robin Bloor, Senior VP of Strategy & Communications for software provider <u>Algebraix Data</u>. However, he noted: "I'm not aware of anything else quite like Dragonchain."

Going forward, the global blockchain market is unlikely to become a winner-take-all scenario, predicted Barghuthi. "We don't think there will be an ultimate chain everyone builds on, just because of the nature of blockchains," he stated. "It makes much more sense to have multiple use-case specific chains, rather than to try to build a one-size-fits-all model."

The Team

Dragonchain's leadership team brings significant software development experience to the table.

- <u>Joe Roets</u>, Architect, Founder and CEO, has deep experience in software development and systems architecture, previously holding positions with The Walt Disney Company, Overstock.com, and Royal Bank of Canada.
- <u>George Sarhanis</u>, Founder and Chief Business Officer, is an entrepreneur and strategic consultant who focuses on emerging technology and business models for the digital sector.
- <u>Brandon Kite</u>, Lead Developer, most recently worked as a Senior Software Engineer at The Walt Disney Company.
- <u>Alex Benedetto</u>, Developer, has held both Cloud Engineer Intern and Blockchain Development Intern positions at The Walt Disney Company.

In addition to these core members, Dragonchain also has several advisors who offer diverse experience.

- Jeff Garzik, a former Bitcoin Core Developer, is a co-founder of blockchain startup Bloq.
- Ed Fries, co-founder of the Xbox project, worked as a Vice President for Microsoft.
- <u>Maria Smith</u>, VP of Partnerships and Payment Strategy for Starbucks, previously worked as VP of Finance, Business Development & Rewards Operations for The Walt Disney Company.
- <u>Tom Bush</u>, Owner of Tom Bush Consulting, previously worked for the FBI as an Assistant Director of the Criminal Information Justice Services Division.

Overall, these leaders combine strong development experience with seasoned advisors who have generated significant accomplishments in the technology industry.

Oliver Isaacs, tech influencer and investor, expressed a similar sentiment, stating that the organization "has a very strong management team with serious credentials."

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The Investment Opportunity

Investors can buy tokens, called "Dragons," which are used for accessing <u>any and all parts</u> of the Dragonchain environment. These digital tokens can be used for provisioning smart contracts, spinning up nodes, accessing incubated projects, etc.

Once Dragonchain completes its Initial Coin Offering, it can list its Dragon tokens on exchanges. There are a few different ways to view investments in these tokens:

- As an investment in a **new kind of digital currency** that could appreciate
 if adoption rises;
- As an investment in an **innovative blockchain platform** which could rise in value as more companies use it.

If you purchase Dragons, you are not investing directly in Dragonchain, Inc. Buying these tokens does not give you ownership interests in the company like buying a stock.



Alternatively, we believe that a good way of conceptualizing digital currencies like Dragons is that they are something like a "store of confidence." In this way, these tokens function like stocks. When investors are confident, they rise in value. When investors lose confidence, they fall.

When evaluating new financial instruments, consider the amount of confidence they are likely to create. As the number of companies using Dragonchain rises, confidence in this environment could grow. Should Dragonchain capture a significant portion of the global blockchain market, its Dragon tokens could experience significant upside.

When these Dragons are first issued, their value will be a function of demand. The supply is fixed at 433,494,437 digital tokens, so their price will be based on how much funding the organization receives.

The tokens will be distributed like so:

- 55% will be distributed to the public (238,421,940)
- 20% will be distributed to the Dragonchain team (86,698,887)
- 10% will be reserved for the Dragonchain Foundation, the nonprofit that owns Dragonchain's open-source code. (Dragonchain's platform was released as open-source software in 2016) (43,349,444)
- 10% will be held in reserve (43,349,444)
- 5% will be allocated to the Dragon Fund, the Dragonchain incubator (21,674,722)

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Here are some likely scenarios:

Total raised	Token value	Public tokens	Team tokens	Dragonchain Foundation	Reserves	Incubator
\$4,000,000	\$0.01	\$2,200,000	\$800,000	\$400,000	\$400,000	\$200,000
\$8,000,000	\$0.02	\$4,400,000	\$1,600,000	\$800,000	\$800,000	\$400,000
\$12,000,000	\$0.03	\$6,600,000	\$2,400,000	\$1,200,000	\$1,200,000	\$600,000
\$15,000,000	\$0.03	\$8,250,000	\$3,000,000	\$1,500,000	\$1,500,000	\$750,000
\$20,000,000	\$0.05	\$11,000,000	\$4,000,000	\$2,000,000	\$2,000,000	\$1,000,000

When explaining why there would be no cap on funds raised, the Dragonchain team <u>stated</u> that it wanted the market to set the price instead of issuing units of digital currency at an arbitrary price. While the team did provide a sound explanation for taking this approach, some analysts expressed concerns about holding a token sale without any sort of funding cap.

Barghuthi, for example, asserted that any ICO without one of these caps should be viewed with significant skepticism. He emphasized that without establishing a firm, upper limit, a company could end up raising too much money, which could distract management from its original goals.

Brad Chun, Chief Investment Officer of <u>Shuttle Fund Advisor</u>, offered a similar sentiment, emphasizing that he does not invest in any funding rounds that are uncapped. Doing so can reduce the chances of getting a fair market value, he noted.

While these analysts have warned about the downsides of uncapped funding rounds, Dragonchain has seemingly thought out its funding plans, providing a <u>roadmap</u> that outlines different initiatives it will spearhead based on the funding levels reached. In this financial blueprint, Dragonchain outlined Core Funding (\$10m), Midsize Funding (\$25m) and Large Funding (\$50m) levels.



Aside from these concerns, there are other risks to investing in Dragons. Here are some of them:

- **Entrenched Network Effects.** While Dragonchain is new to the blockchain development scene, some competitors have a far greater footprint. Ethereum, for example, has built up a significant network of developers and applications.
- **Market Risks.** Dragonchain is holding its ICO at a point when many market observers have warned about a bubble in digital currencies. If the project attracts significant financial resources during this funding round and then the bubble bursts later on, it could cause the value of Dragons to plummet.

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- **Regulation.** Currently, the regulations surrounding digital currencies represent a patchwork of decisions made by varying government entities, including national governments, regulatory agencies, and even courts. Over time, it is inevitable that this regulatory framework will change. The question is what it will look like.
- **Competition.** While Dragonchain's environment does have some compelling offerings, it is possible that this organization will fail to "win over" enough businesses to generate adequate market share.

The Takeaway

There is significant momentum surrounding the blockchain industry, with many companies working to capitalize on these trends. Several companies are racing to provide tools and platforms for blockchain development. With a strong team, compelling offerings, and well-developed roadmap, Dragonchain appears well-positioned to capture a significant portion of this market.

At the time of report, investors can purchase Dragon tokens through the company's ICO, and once this sale is over, this digital currency will be available on exchanges. Should Dragonchain take off as a blockchain development platform, the value of these Dragon tokens could rise significantly. We think it is likely that they will.

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