

# Blockchain Ecosystem: Insights from Market Capitalization



## ABOUT IKIGAI LAW

We are an award-winning, general practice law firm. We provide legal and strategic advice to a wide variety of clients, from high impact startups to mature market-leading companies. Our approach is to be partners in progress, finding our clients practical and efficient solutions to some of their most complex legal and business challenges.

Ikigai Law was started with the aim of innovation augmenting the and entrepreneurship ecosystem in India, both of which offer little support to innovators and entrepreneurs. We are privileged to represent some of the most exciting entrepreneurial and innovative ventures in the country, that includes small satellite manufacturers, flight simulation service providers, AR/VR hardware and content e-retailers: companies; cryptocurrency platforms and other fintech ventures.

Over the years, impact and innovation have become the core of what we do.

This report seeks to identify trends in funds raised by and the market capitalization of the most successful blockchain projects in various sectors, such as smart contracts, finance, artificial intelligence, virtual reality, and specialized blockchain. For ease of the analysis, we have divided our study in the "Major Sectors" "Minor form of and Sectors". Major sectors are the sectors whose market capitalization exceeds 1 Billion USD and minor sectors are those that do not exceed the 1 Billion USD mark in the market capitalization.

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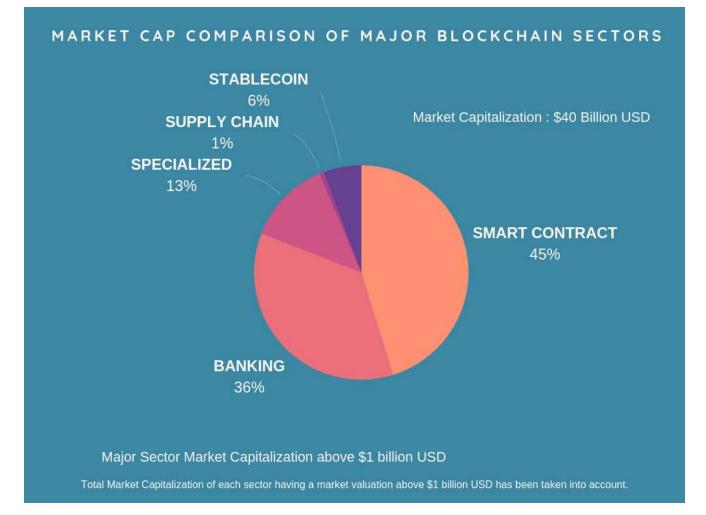
## ABOUT THIS REPORT

#### **EMERGING TRENDS**

Blockchain startups have raised capital through initial coin offerings to develop different platforms and services. Some sectors have raised the most amount of capital indicating a much wider investor acceptance, interest and hype related to such products in the blockchain community. This report seeks to study the market capitalization and funds raised by leading blockchain startups by sector and to identify such trends.

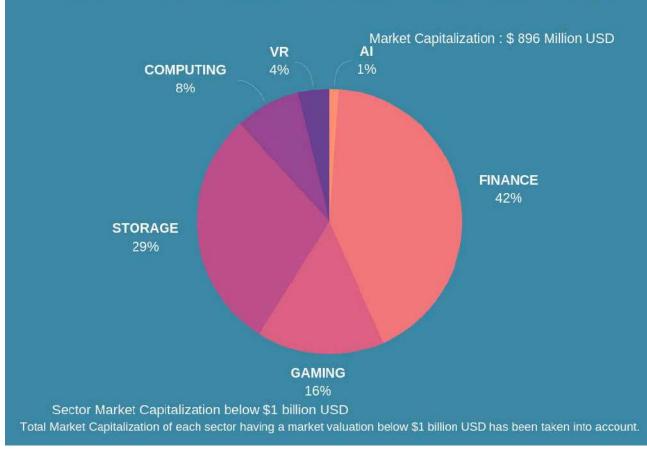
During our research, we have only taken account of the blockchain projects leading by market valuation and funds raised by them in each sector. We have divided the market into Major and Minor sectors for ease of the analysis. Major sectors are those whose total market capitalization is more than \$1 Billion while minor sectors are those whose total market capitalization is lower than \$1 Billion as at the time of computation.

## Major Blockchain Sector Projects



We have categorized smart contracts, banking, specialized blockchain, stable coin and supply chain as Major Blockchain Sectors. Blockchain startups such as EOS, Cardano and Neo that are developing smart contracts and decentralized applications platform have received the most amount of funding from investors amongst the Major Sector developers. Further, such blockchain projects also have the highest market capitalization in the current market, even after a deep dip in digital assets' pricing, indicating a high level of interest from investors and the community in such applications. Ethereum, Eos and Cardano's market capitalization as on 1st January 2019 stood at \$14.7 Billion, \$2.4 Billion and \$1 Billion respectively.

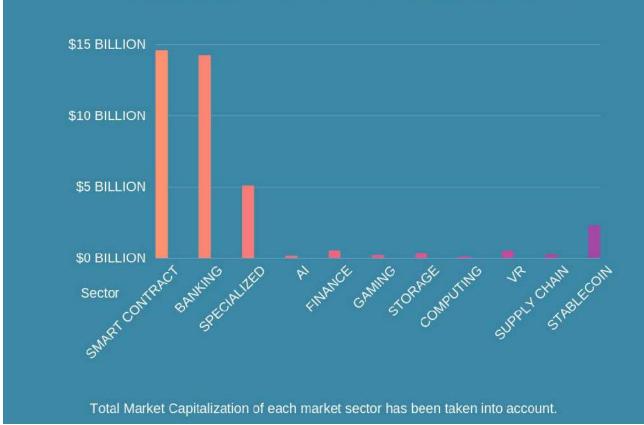
Blockchain startups such as Ripple and R3 are providing services to financial institions from their platfroms namely RippleNet and Corda by facitilating blockchain infrastructure for settlements of transcation and cross border payments. XRP, the digital asset launched by Ripple has a market capitalization of \$14.8 Billion as on 1st January 2019. Blockchain startups developing specialized blockchain such as Tron, OTA, Decred and Zilliqa stood at a third place with a market capitalization of \$1.6 Billion, \$1Billion, \$169.6 Million and \$191 Million. Nebulas has raised funds amounting to \$60 Million however its current market capitalization.



#### MARKET CAP COMPARISON OF MINOR BLOCKCHAIN SECTORS

#### **Minor Blockchain Sector Projects**

We have categorized storage applications, finance, gaming, computing, virtual reality and artificial intelligence applications as Minor Blockchain Sectors. Amongst the Minor Blockchain sectors, startups such as OmiseGo, PundiX and TenX that are developing financial platforms and services have received the most amount of funding from investors. Further, such blockchain projects have the highest market capitalization in the minor sector. The market capitalization of such blockchain startups as on 1st January 2019 stood at \$205 Million, \$80 million and \$45 million respectively.



MARKET CAP COMPARISON OF ALL SECTORS

Blockchain startups such as Filecoin and Sia which are distributed cloud storage applications are at the second place with Sia having a market capitalization of \$104

Million as of 1st January, 2019. Blockchain startups developing cloud computing platforms such as Golem, Aelf and Sonm stood at third place with a market capitalization of \$64.7 Million, \$31.5 Million and \$8.12 Million respectively.

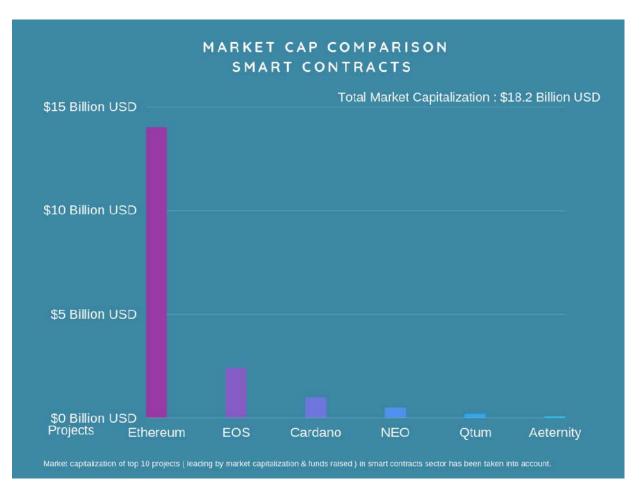
The comparison of various sectors shows a stark difference in terms of market capitalization and funds raised. Smart contract and banking applications lead in terms of market capitalisation by a wide margin. The laggards - Al, finance, gaming, storage, VR, supply chain, etc. - are also younger. The acceptance and adoption of such applications would increase over a period of time with an increase in user base and recognition of the technology.

#### **Smart Contracts: Key Blockchain Projects**

Ethereum has emerged as the most popular platform for deploying smart contracts and many financial institutions and central banks are testing the Ethereum platform to issue bonds, securities and other financial instruments. Ethereum has consolidated its position as one of the most sought-after smart contracts enabled blockchain, leaving competitors far behind. EOS which is one of the major competitors of Ethereum is feeling the heat after Daniel Larimer, the founder of EOS is stepping aside<sup>1</sup> from the project to pursue working on another project, shaking up confidence of investors and developers who are working to build applications on EOS.

EOS is followed by Cardano, Neo, Qtum and Aeternity. Cardano, Qtum and Aeternity are relatively new blockchain projects launched in early 2017 and 2018 but have been able to attain a high market capitalization and community interest in a short time frame.

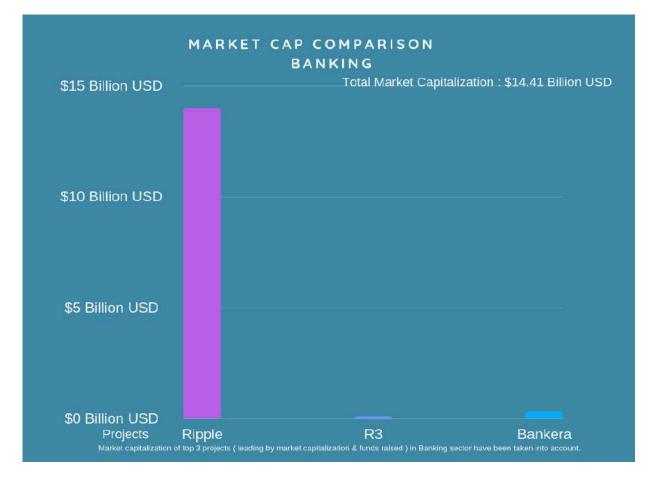
<sup>&</sup>lt;sup>1</sup> Dan Larimer Works on Another Project; Denies Leaving EOS by Carlos Terenzi, Coinstaker, Dec 1st 2018



### **Banking: Key Blockchain Projects**

Ripple dominates the banking sector with prominent clients all over the world which use RippleNet platform such as MUFG, BBVA, SEB, Akbank, Axis Bank, YES BANK, SBI Remit, Cambridge Global Payments, Star One Credit Union and eZforex.com2 which are some of the largest bank's and payment service providers. RippleNet and XRP digital-currency are two totally different products of Ripple Labs. Inc. Ripple net is a payment and exchange network protocol whereas XRP is a digital asset for border payments, micropayments, machine to machine payments and API's.

<sup>&</sup>lt;sup>2</sup> David Patterson, Ripple Insights, Ten New Customers Join Ripple's Global Payment Network,



Ripple net is used for global cross border payments due to its low cost of capital requirements, high speed with instant settlement of transactions. RippleNet is also used for providing On-Demand Liquidity where the liquidity is provided via XRP the digital assets acts as a bridge between the origin and the beneficiary by providing liquidity. The liquidity is provided via digital exchanges where the transaction amount is converted from fiat currency to XRP and then the cross border payment is executed after the beneficiary receives the payment, XRP is converted back into the desired currency and the transaction is settled.

Ripple is followed by R3 which is a blockchain startup which has developed and launched Corda. Cordite is designed specifically for use by the banking industry, it has low levels of decentralization and is not censorship resistant which is a good thing as banks needs to comply with laws and regulatory requests thus immutability is not a characteristic which banks and financial institutions are looking for. The nodes in the corda network are arranged in a peer-to-peer manner. There is no global broadcast of transactions and data in Corda instead the information is shared on a need to know basis. Corda does not use a proof-of-work algorithm instead to prevent the possibilities of a double spend it utilizes on a notary which signs the transactions only if the input transaction hash is unconsumed.

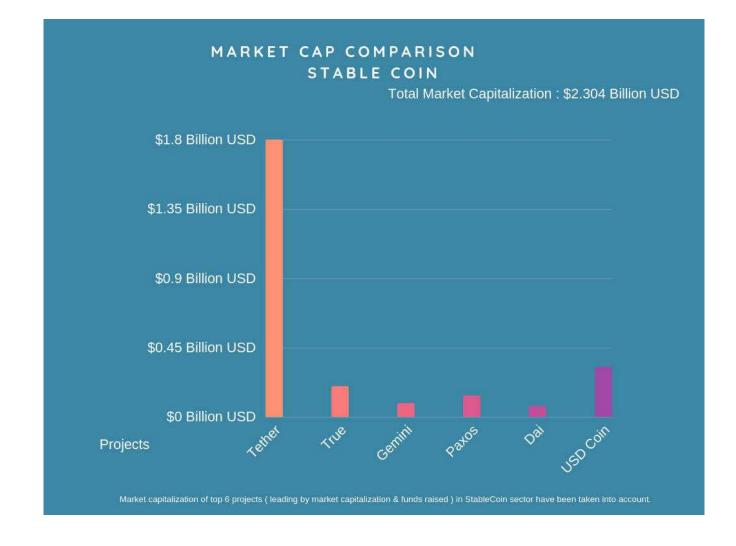
#### **Stablecoins: Key Blockchain Projects**

Bitcoin and altcoin markets have а high rate of volatility due which stablecoins have emerged as an efficient hedge to minimize to the effects of price volatility. For example when the price of bitcoin and other digital asserts decreases, investors buy into stablecoins protect their investments. The stablecoin is pegged such as Tether to to a fiat currency or any other commodity such as precious metals, the advantage of such asset backed stablecoins is that bitcoins and altcoins are correlated thus investors only have the option to either exit the investments into fiat or market by converting to find refuge in stablecoins. The advantages of a stablecoin over a fiat currency is that converting into stablecoin is more efficient, less expensive and more feasible.

Digix Gold Tokens which has a marketcap of \$3.7 million is backed by physical gold where one DGX token represents 1 gram of gold token on the ethereum blockchain. The tokens are transferable, cryptographically secure and the investors have full visibility over the transaction records and its ownership.

Tether is the largest stablecoin and dominates the sector with a market capitalization and fiat currency depositories worth \$1.8 Billion. It is the most popular stablecoin which is listed in top exchanges such as Binance, Bittrex, Bitfinex etc and drives large amount of trading volume. The daily trading volume of Tether as on 1st January 2018 was about \$3.25 Billion. Tether has been a part of lots of controversies revolving around its secrecy of operations and questionable auditing standards and practices.

Tether has its banking relations with Deltec Bank and Trust Limited which is a 72 year old financial instituion based out in the Bahamas.



#### Specialized Blockchain: Key Blockchain Projects

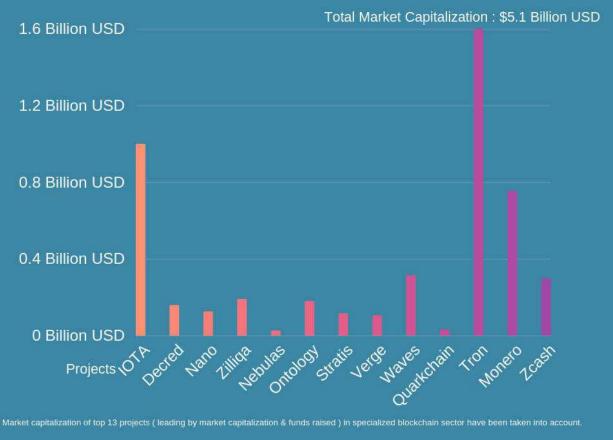
Tron dominates the specialized blockchain with its a decentralized content distribution protocol and currency which focuses on content distribution for the entertainment industry. Tron uses its inbuilt coin known as TRX (Tronix) for content payments, entertainment distribution, rewards etc. Tron is scalable and is based on the Paxos algorithm and PoS consensus based model. The startup has been in headlines recently for acquiring BitTorrent and for launching and supporting its ICO, where TRX holders will receive BitTorrent tokens as an airdrop. Tron Foundation is expanding its staff, operations and acquiring new technologies and companies in order to maximize its resources for an successfully launch of the Tron decentralized web. Decred is a innovative decentralized autonomous governance cryptocurrency. It uses its consensus hybrid algorithm system which gives voting rights and powers to its stakeholders, decred also provides for a cross-platfrom wallet.

Zilliga is a high throughput blockchain with the ability to process 2,300 transactions per second. This high scalability potential and low transaction fees enables developers to deploy decentralized applications on top of Zilliga with low level of cost involved and high confirmation rates for transcations. Zilliqa enables users to perfrom without micro-payments cross border payments the need of and any intermediary.

Monero is an open-source digital privacy coin that centers around fungibility, security and decentralization. Monero utilizes a muddled open public record ledger, which means anyone can communicate or send transactions, yet no outside third party can tell the source, sum or destination. Monero utilizes a Proof of Work system to issue new coins and boost developers and miners to anchor and facilitate the system and validate transactions into the public record ledger.

Tron dominates the specialized blockchain sector with a market cap of \$1.6 Billion at the time of computation and is followed by IOTA and Monero.

#### MARKET CAP COMPARISON SPECIALIZED BLOCKCHAIN



### Logistics: Key Blockchain Projects

Vechain dominates the supply chain sector with a market capitalization of \$225 million at the time of calculation followed by WaltonChain and Ambrosus. Vechain has partnerships with popular giants such as PwC, DNV GL, National Research Consulting Center and BitOcean<sup>5</sup>.

Waltonchain has formulated a 4-phase development plan, starting from infrastructure platform establishment to gradually incorporate retail, logistics and product manufacturing to finally achieve the full coverage of the business ecosystem. Vechain has raised about \$10 Million through ICO, whereas WaltonChain and Ambrosus have raised \$11 Million USD and \$30 Million respectively.

<sup>&</sup>lt;sup>5</sup> Vechain Insider, A complete list of VeChain partnerships, 1st August 2018



### Artificial Intelligence: Key Blockchain Projects

Matrix AI dominates the artificial intelligence sector with a market capitalization of \$11.1 Million followed by DeepBrain Chain and Effect AI with a market capitalization of \$2.34 Million and \$1.4 Million respectively. Matrix AI, DeepBrain Chain and Effect AI have raised an amount of \$12 Million, \$11 Million and \$13 Million through ICO. DeepBrain Chain and Effect AI have lost a considerable amount of market capitalization when compared to the amount raised by them through investors. Effect AI has lost a considerable amount of interest and trading volume with a daily trading volume ranging between \$1,500 as compared to \$170,000 as on 26th

July 2018. Matrix AI is building Auto-coding smart contracts which will use natural language such as Mandarin and English for programming and will support deep learning based templates to auto-code, further it would support adaptive blockchain parameters, AI based cyber security and dynamic delegation network which would be a hyrbid consensus mechanism with reduce rate of transaction latency.



Use of blockchain technology and artificial intelligence is still at a budding stage where blockchains startups are using artificial intelligence protocols and algorithms to create intelligent smart contracts to counter the backdrops of human error during contract deployment, mining mechanisms to enable efficient blockchains and identify potential loopholes and attacks. The total market capitalization of the major blockchain projects in artificial intelligence at the time of computation stands at \$14.4 million USD. Indicating that the sector is still increasing in terms of investor awareness, education and the amount raised by the public.

#### **Finance: Key Blockchain Projects**

Financial heavyweights such as NASDAQ and NYSE would start providing institutional grade services to investors in early 2019, thus the financial landscape of the blockchain sector is set to change in toto. Intercontinental Exchange (ICE) the parent company of NYSE is set to launch Bakkt, which would be providing bitcoin futures to institutional grade investors bringing Bitcoin into the mainstream capital markets.

Currently, OmiseGo dominates the Financial sector with a market capitalization of \$205 Million followed by PundiX and TenX with a market capitalization of \$80 Million and \$45 Million respectively. OmiseGo, Polymath and Santiment have raised an amount of \$25 Million, \$12 Million and \$96 Million through ICO.



Blockchain startups operating in the financial sector are developing various kind of financial applications to harness the blockchain technology. OmiseGo is building public, decentralized OMG network, digital asset gateway, decentralized exchange and clearinghouse for digital assets and sidechains<sup>6</sup>. While polymath is building security tokens known as ST20 token standard for investors to invest in securitized tokens<sup>7</sup>, whereas Santiment is building data analysis platform for understanding crypto markets and investor behavior. There are various blockchain startups which are building applications for crypto markets or to supplement trade and commerce.

<sup>&</sup>lt;sup>6</sup> OmiseGo, Home, available at https://omisego.network/

<sup>&</sup>lt;sup>7</sup> Polymath, ST20, available at https://polymath.network/st20.html

#### **Gaming: Key Blockchain Projects**

MobileGo dominates the gaming sector with a market capitalization of \$55.3 Million followed by Wax and Fun with a market capitalization of \$34.5 Million and \$34 Million respectively. Gifto, MobileGo and BetterBetting have raised an amount of \$30 Million, \$53 Million and \$5 Million through ICO. Comparatively gaming sector is an upcoming market sector with increase in competitors and market capitalization of blockchain startups and more projects launching their ICO's.



The gaming sector is still in its nascent stage in terms of funding, investor awareness and market capitalization. Startups are building gaming applications, gaming trade markets and betting platforms for users. The total market capitalization of key blockchain startups in the gaming sector stands at \$202 Million at the time of computation whereas the total market capitalization for the financial sector stands at \$550 Million indicating a much larger room for growth in blockchain gaming applications and services.

### **Distributed Cloud Storage: Key Blockchain Projects**

Sia dominates the distributed cloud storage sector with a market capitalization of \$104 Million followed by Storj and Filecoin with a market capitalization of \$20 Million, Filecoin is not being traded right now. Sia, Filecoin and Storj have raised an amount of \$1.65 Million, \$257 Million and \$30 Million through ICO and seed funding. Comparatively distributed cloud storage sector is a growing market with lots of new startups joining the race to build a truly decentralized cloud storage computing platform for users with mass user adoption.



The Sia storage platform leverages underutilized hard drive capacity around the world to create a data storage marketplace that is more reliable and lower cost than traditional cloud storage providers<sup>8</sup>. The total market capitalization of major blockchain startups in the distributed cloud storage sector stands at \$381 Million at the time of computation.

<sup>&</sup>lt;sup>8</sup> Sia, About, SiaTech, Available at https://sia.tech/

#### **Distributed Cloud Computing: Key Blockchain Projects**

Golem dominates the distributed cloud computing sector with a market capitalization of \$64.7 Million followed by Aelf and Sonm with a market capitalization of \$31.5 Million and \$8.12 Million respectively. Golem, Aelf and Sonm have raised an amount of \$8 Million, \$24 Million and \$42 Million through ICO. Comparatively distributed cloud computing is a growing market with increasing competition for cloud computing related products and there is an increase in investor awareness regarding the use of blockchain technology and cloud computing to harness and monetize computing power through users.

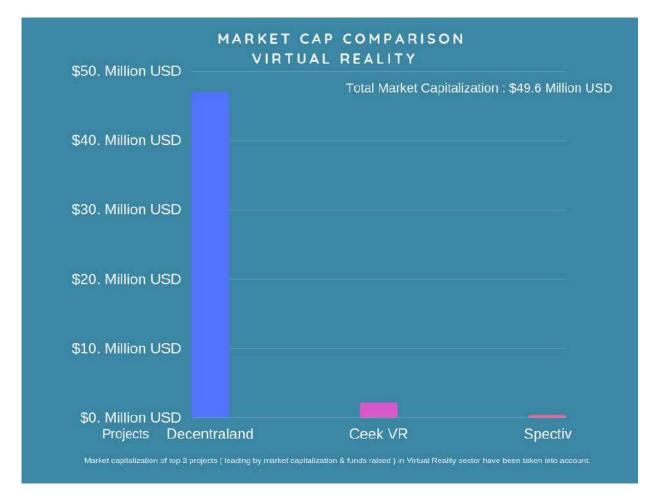


Golem is building an open source, decentralized super-computing network that relies on the connected devices of each of its peers to provide power to global users. PCs, laptops, and even large data centers can lend processing power to the network to receive GNT tokens in return<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> David Amoyal, Chainbits, Golem (GNT) Review – A Streamlined Blockchain Supercomputer, 9th Sep 2018

### Virtual Reality: Key Blockchain Projects

Decentraland dominates the virtual reality sector with a market capitalization of \$47.6 Million followed by Ceek VR and Spectiv with a market capitalization of \$2.2 Million and \$0.398 Million respectively. Decentraland, Ceek VR and Spectiv have raised an amount of \$24 Million, \$24 Million and \$24 Million through ICO. Comparatively, VR is a budding sector which is dominated by Decentraland, a virtual reality immersive city like second life where users can own land, develop and interact with other objects and buildings in the city. Decentraland uses its own utility token \$MANA, which has a market cap of \$47 Million USD at the time of calculation.



The total market capitalization of major blockchain startups in the virtual reality sector stands at \$49.6 Million at the time of computation.

### **KEY BLOCKCHAIN PROJECTS IN EACH SECTOR**

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
			Smart C	Contrac	ts/Dapps	S	·	
<b>\</b>	1	Ethereum	Ethereum is an open-source, public, blockchain-based distributed computing platform and operating system featuring smart contract functionality. [1]	Funds Raised: \$15 Million USD	\$14.7 Billion USD	1.)Developed by:Ethereum Foundation2.)CompanyType: Swiss Non-ProfitOrganization3.)Registered:Zug, Switzerland4.)Jurisdiction:Switzerland	Github Activity: Very Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 3.) Proof-of-Work 4.) Enables creation of Tokens	https://ethereu m.org/
	2	EOS	EOS is a cryptocurrency token and blockchain that claims to operate as a smart contract platform for the deployment of decentralized applications and a decentralized autonomous corporation. [2]	Funds Raised: \$4.4 Billion USD	\$2.4 Billion USD	1.)Developed by:Block.one2.)CompanyType: Privately Held3.)Registered:George Town, GrandCayman Islands4.)Jurisdiction:Cayman Islands	Github Activity: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Delegated Proof-of-Stake 4.) Scalable Blockchain	https://eos.io/
	3	Cardano	Cardano is a decentralized public blockchain and cryptocurrency project and is fully open source. Cardano is developing a smart contract platform which seeks to deliver more advanced features than any protocol previously developed. [3]	Funds Raised: \$63 Million USD	\$1 Billion USD	Developed by: 1.) Input Output Hong Kong (IOHK): Switzerland 2.) Cardano Foundation: Zug Switzerland 2.1.) Company Type: Foundation 2.2.) Jurisdiction: Switzerland 3.) Emurgo: Tokyo, Japan	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Delegated Proof-of-Stake 4.) Deploy Smart Contracts	https://www.ca rdano.org
	4	NEO (Antshares)	NEO is a blockchain platform and cryptocurrency designed to build a scalable network of decentralized applications. The base asset of the NEO blockchain is the non-divisible NEO token which generates GAS	Funds Raised: \$28 Million USD	\$500 Million USD	Developed by: 1.) Onchain: Yangpu, Shanghai 1.1) Company Type: Privately Held 2.) NEO	Github: Very good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Delegated	https://neo.org /

			tokens that can be used to pay for transaction fees generated by applications on the network. [4]			Foundation, Shanghai 2.1) Company Type: Non-profit	Proof-of-Stake 4.) Deploy Tokens	
	5	Qtum	A decentralized and open-source smart contracts platform and value transfer protocol. A DGP governed blockchain where community participants can vote to change certain network parameters. [5]	Funds Raised: \$15 Million USD	\$200 Million USD	Developed by: 1.) Qtum Foundation 2.) Company Type: Non- Profit 3.) Registered: Singapore 4.) Jurisdiction: Singapore	Github: Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Proof-of- Stake 4.) Deploy Tokens	https://qtum.or g/
æternity	6	Aeternity	æternity is a public, open-source, blockchain-based distributed computing and digital-asset platform that builds upon decentralized cryptographic P2P technology. Real-world data can interface with smart contracts through "oracles". [6]	Funds Raised: \$25 Million USD	\$92.1 Million USD	Developed by: 1.) Aeternity Foundation 2.) Company Type: Non-Profit 3.) Registered: Vaduz, Liechtenstein 4.) Jurisdiction: Liechtenstein	Github: Moderate 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Proof-of- Stake 4.) Deploy Tokens	https://aeternit y.com/

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
	1		Specia	lized Blo	ockchain	1	1	1
ΝΤΟΙ	1	ΙΟΤΑ	IOTA is a revolutionary new transaction settlement and data transfer layer for the Internet of Things. It is based on a new distributed ledger technology, the Tangle, which overcomes the inefficiencies of current Blockchain designs and introduces a new way of reaching consensus in a decentralized peer-to-peer system. [7]	Funds Raised: \$434,511 USD	\$1 Billion USD	Developed by: 1.) IOTA Foundation 2.) Company Type: Non-Profit 3.) Registered: Berlin, Germany 4.) Jurisdiction: Germany	Github: Very Good Legal: Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 4.) Proof-of-Work	https://www.iot a.org/
C decred	2	Decred	Decred is a cryptocurrency, similar to Bitcoin, with a strong focus on community input, open governance, and sustainable funding and development. [8]	NO ICO Distribution via Airdrop Mining	\$159.6 Million USD	Developed by: 1.) Company 0 2.) Company Type: Privately Held 3.) Registered: Chicago, Illinois 4.) Jurisdiction: United States of America	Github: Very Good Legal: Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 4.) Hybrid (POW+POS)	https://www.de cred.org/
	3	NANO	Nano is a trustless, low-latency cryptocurrency that utilizes a novel blocklattice architecture, where each account has its own blockchain and achieves consensus via delegated Proof of Stake voting. [9]	Fair Distribution No ICO	\$126 Million USD	Developed by: 1) NANO Foundation 2) Company Type: Non- Profit 3.) Registered: 4.) Jurisdiction:	Github: Very Good Legal: Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 3.) Hybrid 4.) Low Latency 5.) Block-Lattice Architecture	https://nano.or g/en
zilliqa	4	Zilliqa	Zilliqa is enabling new decentralized business models which remove middlemen and inefficiencies. The trustless connections formed on Zilliqa's blockchain are creating new ways of interacting and trading with each other and we've only just begun unfolding the possibilities. [10]	Funds Raised: \$22 Million USD	\$191 Million USD	Developed by: 1.) Zilliq (Company) 2.) Company Type: Privately-Held 3.) Registered: Central Region, Singapore 4.) Jurisdiction: Singapore	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Hybrid 4.) High transactions per sec	https://zilliqa.co m

NEBULAS Decentrulad Sourch Francework	5	Nebulas	Nebulas is a next-generation public blockchain, aiming for a continuously improving ecosystem. Based on its blockchain valuation mechanism, Nebulas proposes future-oriented incentive and consensus systems, and the ability to self-evolve without forking. Nebulas is an open source public chain, capable of supporting all functions offered by Ethereum, including decentralized apps, token issuing, and smart contracts. [11]	Funds Raised: \$60 Million USD	\$26 Million USD	Developed by: 1.) Nebulas (Company) 2.) Company Type: Privately-Held 3.) Registered: San Francisco, California 4.) Jurisdiction: California, United States	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Hybrid 4.) Self-evolve without fork 5.) Token Issue 6.) DaPPS	https://nebulas. io
Ontology	6	Ontology	Ontology is a new high- performance public blockchain project & a distributed trust collaboration platform. Ontology provides new high-performance public blockchains that include a series of complete distributed ledgers and smart contract systems. [12]	Airdrop to Neo Holders	\$180 Million USD	Developed by: 1.) Onchain 2.) Company Type: Privately Held 3.) Registered: Yangpu, Shanghai 4.) Jurisdiction: Shanghai	Github: Very Good 1.) Use of Coin: Utility 2.) Neo Based Token 3.) Hybrid 4.) High- performance	https://ont.io/
Stratis	7	Stratis	Stratis is a Blockchain-as-a-service (BaaS) Platform, created to provide solutions for corporations in the financial sector that wants to enjoy the benefits of Blockchain technology. [13]	Funds Raised: \$750,000 USD	\$116 Million USD	Developed by: 1.) Stratis (Company) 2.) Company Type: Privately Held 3.) Registered: London, United Kingdom 4.) Jurisdiction: United Kingdom	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) POS + Masternode 4.) BaaS 5.) Deploy Sidechains 6.) C# Deployment	https://stratispl atform.com/
<b>VERGE</b>	8	Verge	Verge uses multiple anonymity- centric networks such as TOR and I2P. The IP addresses of the users are fully obfuscated. The Core QT wallet has built-in TOR integration as well as SSL encryption which adds an extra level of security. [14]	No ICO No Premine Distribution - Mining	\$106 Million USD	Developed by: 1.) Anonymous Developers 2.) Company Type: Not Registered 3.) Registered: Not Known 4.) Jurisdiction: Not Known	Github: Very Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 4.) Mining 5.) SSL encryption 6.) Wrath Protocol	https://vergecu rrency.com/

9	Waves	Waves is an open-source blockchain platform, developed, marketed, and operated by Waves Platform AG, that allows users to launch their own custom cryptocurrency tokens. [15]	Funds Raised: \$15 Million USD	\$315 Million USD	Developed by: 1.) Waves 2.) Company Type: For Profit 3.) Registered: Moscow City, Russian Federation 4.) Jurisdiction: Russian Federation	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Deploy Token 4.) DEX	https://wavespl atform.com/
QuarkChain (QKS)	Quarkchain	The QuarkChain consists of two layers of blockchains. It applies elastic sharding blockchains (shards) as the first layer, and a root blockchain that confirms the blocks from the shards as the second layer. Cross-shard transactions can be issued at any time, and confirmed in minutes. [16]	Funds Raised: \$ 20 Million USD	\$31.7 Million USD	Developed by: 1.) Quarkchain 2.) Company Type: Privately Held 3.) Registered: Palo Alto, California, United States 4.) Jurisdiction: United States	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) Mining 4.) Sharing 5.) Cross-Shard transactions	https://quarkch ain.io/

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
	_		Artifici	al Intelli	gence	1	1	1
MATRIX	1	Matrix Al	MATRIX aims to be a new generation of blockchain that supports smart contracts and machine learning services. It uses artificial intelligence (AI) techniques to solve emerging issues in the current blockchain implementations. This makes MATRIX blockchain will employ an AI security engine. Faster to use. [17]	Funds Raised : \$12 Million USD	\$11.1 Million USD	Developed by: 1.) Matrix Foundation 2.) Company Type: Privately Held 3.) Registered: Hong Kong 4.) Jurisdiction: Hong Kong	Github: Very Good 1.) Use of Coin: Utility 2.) Own Blockchain 3.) POS + Masternode 4.) Sharing 5.) Cross-Shard transactions	https://www.m atrix.io
DeepBrain Chain	2	Deepbrain Chain	DeepBrain Chain is a decentralized neural network. Countless nodes across the world will supply computational power to Al companies and receive DBC as rewards. 70% of the DBC will be paid by the system and Al companies only need to pay 30%. [18]	Funds Raised : \$11 Million USD	\$2.34 Million USD	Developed by: 1.) Deep Brain Chain Foundation 2.) Company Type: Non-Profit 3.) Registered: Singapore 4.) Jurisdiction :	Github : Very Good 1.) Use of Coin: Utility 2.) ERC20 3.) Al Network 4.) Neural Network 5.) DBC as rewards	https://www. deepbrainchai n.org/
	3	Effect AI	Effect.AI proposes a private, decentralized ecosystem for AI development and AI related services called The Effect Network. The Effect Network is designed to provide a feature- complete alternative to services like Amazon Mechanical Turk, Fiverr, OneSpace and Guru.com. It will operate fully on smart contracts deployed on the NEO blockchain. The Effect Network, like other decentralized applications, directly connects supply and demand without the need for an intermediary party. [19]	Funds Raised : \$13 Million USD	\$1.4 Million USD	Developed by : 1.) Effect.Ai 2.) Company Type: Privately Held 3.) Registered: Amesterdam , Holland 4.) Jurisdiction :Holland	Github: Very Good 1.) Use of Coin: Utility 2.) Neo based token 3.) Private chain 4.) No intermediary 5.) DaPPS	https://effect.ai /

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
	1			Finance	<del>)</del>		1	1
omisego	1	OmiseGO	The OMG network is a scaling solution for finance on Ethereum, enabling transparent, peer-to-peer transactions in real-time. The decentralized network facilitates self-sovereign financial services across geographies, asset classes, and applications. Offer a decentralized exchange mechanism to provide multiasset and cross-chain interoperability, that is scalable and secure via proof-of-stake. [20]	Funds Raised : \$25 Million USD	\$205 Million USD	Developed by : 1.) Omise Co. Ltd 2.) Company Type : Privately Held 3.) Registered: Singapore 4.) Jurisdiction : Singapore	Github : Very Good 1.) Use of Coin : Multipurpose 2.) ERC20 Token 3.) Scaling solution for finance 4.) Decentralized Network 5.) DEX 6.) Scalable 7.) Secure	https://omisego .network/
) BANKEX	2	Bankex	BANKEX provides the universal solution which can transform different asset classes to a digital system/field/economy/area providing it with liquidity, flexibility, and safety for asset owners and investors like never before. [21]	Funds Raised : \$70 Million USD	\$2.35 Million USD	Developed by : 1.) Bankex 2.) Company Type : Privately Held 3.) Registered: New York, United States 4.) Jurisdiction :United States	Github : Good 1.) Use of Coin : Utility 2.) Banking service 3.) Provide liquidity 4.) Secure Digital Assets	https://bankex. com/en/
·santiment·	3	Santiment	Santiment is a platform for accessing cryptocurrency data, sharing insights, and learning about how crypto markets work. We welcome data scientists, crypto traders and investors, and anyone passionate about promoting trust and transparency to create a better society for all people. [22]	Funds Raised : \$12 Million USD	\$21.7 Million USD	Developed by : 1.) Santiment 2.) Company Type : Privately Held 3.) Registered: Zurich, Switzerland 4.) Jurisdiction :Switzerland	Github : Good 1.) Use of Coin : Utility 2.) Predection 3.) Analysis of market 4.) Data sharing	https://santime nt.net/

POLYMATH	4	Polymath	The Polymath platform opens up the blockchain to legally compliant securities offerings with a network of services designed to lower associated transaction costs over time. [23]	Fund Raised : \$96 Million USD	\$40.7 Million USD	Developed by : 1.) Polymath Inc. 2.) Company Type : Privately Held 3.) Registered: Saint George, Barbados 4.) Jurisdiction : Barbados	Github: Good 1.) Use of Coin : Utility 2.) Deploy Security Tokens 3.) Legally Compliant	https://polymat h.network/
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Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
I			Gaming	/ Mark	etplace	1	1	
<b>D</b> market	1	DMarket	DMarket is a blockchain-based marketplace for turning virtual items into real assets. Steam item is an item that is stored on Steam. It has to be imported from Steam account to DMarket account for participating in trading operations. It can be withdrawn from DMarket account to Steam account so that you'll be able to use it on Steam. DMarket Blockchain item is an item that is stored in the DMarket blockchain. At the moment this type is presented by the items, that were published by DMarket. [24]	Funds Raised : \$15 Million USD	\$12.2 Million USD	Developed by: 1.) Suntechsoft 2.) Company Type: Privately Held 3.) Registered: Las Vegas, Nevada, United States 4.) Jurisdiction : United States	Github : Good 1.) Use of Coin: Utility 2.) Virtual Asset Marketplace 3.) Steam account API 4.) Blockchain marketplace	https://dmark et.io/
	2	MobileGo	MobileGo tokens will be used to gamify the mobile platform, and to incentivize gamers for loyalty and participation through rewards. MobileGo tokens will also allow smart contract technology. MobileGo tokens will allow the development of a decentralized virtual mobile gamer marketplace, the ability for gamer vs. gamer decentralized match play, and decentralized tournaments run on smart contracts. [25]	Funds Raised : \$53 Million USD	\$55.3 Million USD	Developed by : 1.) Mobile Go 2.) Company Type : Privately Held 3.) Registered : United States, North America 4.) Jurisdiction :United States	Github : Very Good 1.) Use of Coin : Utility 2.) In game tokens 3.) Rewards to players 4.) Tournament rewards 5.) Decentralized marketplace 6.) Virtual mobile gamer	https://game credits. com/mobileg o/
BETR	3	BetterBetting	BetterBetting is revolutionizing the world of sports betting. The release of the BETR token has created a betting cryptocurrency that will establish truly decentralized sports betting. The BETR token provides financial security with true peer-to-peer betting by eliminating the middle man and using blockchain technology. [26]	Funds Raised : \$5 Million USD	\$1 Million USD	Developed by : 1.) BetterBettin g 2.) Company Type : Privately Held 3.) Registered : Tallin, Harjumaa, Estonia 4.) Jurisdiction : Estonia	Github: Very good 1.) Use of Coin : Utility 2.) Betting 3.) Peer-Peer Betting 4.) Decentralized Betting	https://betr.or g/
	4	The Abyss	The Abyss is a next-generation digital distribution platform, delivering all types of video games, including AAA-titles, to the fast-growing global game community. Unlike other platforms, The Abyss offers a ground-breaking motivational and multilevel referral system, allowing gamers to earn from in-game and social activities, and other gamers' payments as well. [27]	Funds Raised : \$15 Million USD	\$1.44 Million USD	Developed by : 1.) The Abyss 2.) Company Type : Privately Held 3.) Registered : Zug, Switzerland 4.) Jurisdiction : Switzerland	Github : Good 1.) Use of Coin : Utility 2.) ERC20 3.) Digital Distribution Platform	https://www.t heabyss.com/

	5	GIFTO	Gifto Protocol - The Universal Gifting	Funds	\$13.2 Million USD	Developed by :	Github : Moderate	https://gifto.io
GIFTO by Uplive	5	GIFIO	Protocol is envisioned to be a self- governing and self-sustaining ecosystem for virtual gifts to be created, curated, tracked, bought, sent and exchanged across any content platform such as YouTube,		\$13.2 Million 03D	1.) Asia Innovations Group (AIG) 2.) Company Type : Privately Held 3.)Registered : Hong	a.) Use of Coin :   utility 2.) ERC20   3.) Gifting Protocol   4.) Peer-to-peer   gifting	///gino.io
			Instagram, Facebook, and Uplive [28]			Kong 4.) Jurisdiction: Hong Kong	gining	

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
				Banking	)		1	1
-8	1	Ripple	Payment Providers use XRP to expand reach into new markets, lower foreign exchange costs and provide faster payment settlement. Using XRP, banks can source liquidity on demand in real time without having to pre-fund Nostro accounts. [29]	No ICO Private Funding	\$14 Billion USD	Developed by : 1.) Ripple Labs 2.) Company Type : Privately Held 3.) Registered: San Francisco, California, United States 4.) Jurisdiction :United States	Github : Very Good 1.) Banking ledger protoocl 2.) Instant confirmations 3.) Iow-latency 4.) Liquidity on Demand	https://ripple. com/xrp/
r3.	2	R3	R3 builds blockchain technology to transform the way the world does business. Our global network of partners works with us to develop innovative apps for finance and commerce on our blockchain platform, Corda.R3 was born out of a common frustration with multiple generations of disparate legacy financial technology platforms that struggle to interoperate, causing inefficiencies, risk, and spiraling costs. [30]	Private Funding: \$111 Million USD	Not Traded	Developed by : 1.) R3 2.) Company Type : Privately Held 3.) Registered: New York, United States 4.) Jurisdiction : United States	Github : Good 1.) Distributed database 2.) Restrict transaction data 3.) Compatiable with other products	https://www.r 3.com/
CANKERA INF FOR THE DIGITAL ERA	3	Bankera	Bankera's exchange, to be launched in the second quarter of 2018, will offer a trading solution on the next- generation level for cryptocurrencies and tokens. [31]	Funds Raised: \$150 Million USD	\$0.3 Million USD	Developed by : 1.) Bankera 2.) Company Type : Privately 3.) Registered: Vilniaus Apskritis, Lithuania 4.) Jurisdiction : Lithuania	Github : Good 1.) Banking Solution 2.) Asset-Security 3.) Bankera Exchange	https://banker a.com/

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalizati on	Project Information	Project Framework	Link
			Distribute	d Cloud	d Storag	ge		
<b>∮</b> Filecoin	1	Filecoin	Filecoin is a cryptocurrency powered storage network. Miners earn Filecoin by providing open hard-drive space to the network, while users spend Filecoin to store their files encrypted in the decentralized network. [32]	Funds Raised: \$257 Million USD	Not being traded	Developed by : 1.) Protocol Labs Inc 2.) Company Type : Privately Held 3.)Registered :San Francisco , United States of America 4.) Jurisdiction: United States of America 5.)Terms of Use : Present 6.) Jurisdiction Disclaimer : Absent 7.) Investment Disclaimer : Present 8.) SAFT: Present	Github: Very Good 1.) Use of Coin : Utility 2.) Own Blockchain 3.) Cloud Storage 4.) Proof-of-Work 5.) Store files encrypted	https://filecoin .io/
$\textcircled{\textbf{O}}$	2	Sia	Sia is a decentralized storage platform secured by blockchain technology. The Sia Storage Platform leverages underutilized hard drive capacity around the world to create a data storage marketplace that is more reliable and lower cost than traditional cloud storage providers. [33]	Seed Funding : 750,000\$ Coin Sale : 500,000\$ Grant : 400,000\$	\$104 Million USD	Developed by : 1.) Nebulous Inc 2.) Company Type : Privately Held 3.)Registered : Boston , United States of America 4.) Jurisdiction: United States of America 5.)Terms of Use : Absent 6.) Jurisdiction Disclaimer : Absent	Github : Very Good 1.) Use of Coin : Multipurpose 2.) Own Blockchain 3.) Data storage marketplace 4.) Proof-of-Work 5.) Lower Cost	https://sia.tec h
	3	Storj	Storj is the storage layer for the Internet. Decentralized cloud storage is a new paradigm that removes intermediaries, enabling you to control your personal data. [34]	Funds Raised: \$30 Million USD	\$20 Million USD	Developed by : 1.) Stoj Labs Inc 2.) Company Type : Privately Held 3.]Registered : Atlanta, United States of America 4.) Jurisdiction: United States of America 5.]Terms of Use : Present 6.) Jurisdiction Disclaimer : Present 7.) Arbitration Clause : Present	Github : Very Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Storage Layer 4.) Delegated Proof-of-Stake 5.) Remove Intermediary 6.) Decentralized cloud storage	https://storj.io

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalizati on	Project Information	Project Framework	Link
			Cloud	d Comp	outing			
golem o	1	Golem	The Golem platform is a marketplace for computing power. On the peer-to-peer network, unused computational resources can be rented out to users wishing to perform memory-intensive tasks, who pay the provider in Golem's cryptocurrency. [35]	Funds raised: \$8 Million USD	\$64.7 Million USD	1.)Developed by :Golem Factory GmbH2.)CompanyType : Privately Held3.)Registered :Zug, Switzerland4.)Jurisdiction :Switzerland5.)Collection ofGeneral Data andInformation : Present	Github : Very Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Renting out hard drive 4.) Cloud computing marketplace 5.) Peer-to-peer network 6.) Payment via golem	https://golem. network
	2	Aelf	Aelf is a decentralized self-evolving cloud computing blockchain network that aims to provide a high- performance platform for commercial adoption of the blockchain. [36]	Funds raised: \$24 Million USD	\$31.5 Million USD	1.)Developed by :Grid Foundation2.)CompanyType : Privately Held3.)Registered :Singapore4.)Jurisdiction :Singapore	Github : Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Self-evolving 4.) High performance 5.) Peer-to-peer network 6.) Cloud computing	https://aelf.io/
	3	Sonm	Sonm provides cloud services based on distributed customer level hardware including PCs, mining equipment, and servers. You can either rent out your hardware or use someone's computing power for your needs. [37]	Funds raised: \$42 Million USD	\$8.12 Million USD	1.)Developed by :Sonm Pte. Ltd.2.)CompanyType : Privately Held3.)Registered :Moscow, Russia4.)Jurisdiction :Russia5.)Collection ofGeneral Data andInformation : Absent	Github : Very Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Cloud services 4.) Rent out hardware 5.) Rent out mining equipment 6.) Cloud computing marketplace	https://sonm. com/

Sector	Serial Number	Name of the Project	Information	Funds Raised	Market Capitalization	Project Information	Project Framework	Link
			Virt	ual Rec	ality			·
	1	Decentraland	Decentraland is a virtual reality platform powered by the Ethereum blockchain. Users can create, experience, and monetize content and applications [38]	Funds raised : \$24 Million USD	\$47.6 Million USD	1.)Developedby : DecentralandFoundation2.)CompanyType : Privately Held3.)Registered :Buenos Aires ,Argentina4.)Jurisdiction :Argentina	Github : Very Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Virtual Reality platform 4.) Monetize content 5.) Virtual land marketplace 6.) Create VR City	https://decen traland.org/
CEEK VR	2	Ceek VR	CEEK VR is a distributor of cryptographically authenticated immersive content and merchandise. CEEK's device agnostic platform is compatible with smartphones, Smart TV's, desktop, Virtual Reality, Augmented Reality and Mixed Reality devices. CEEK's world- class partners include Universal Music, Apple and T-Mobile. [39]	Funds raised : \$24 Million USD	\$2.2 Million USD	Developed by : 1.) Ceek VR 2.) Company Type : Privately Held 3.) Registered : Miami , Flodria 4.) Jurisdiction : United States	Github : Good 1. Use of Coin : Utility 2.) Token : ERC20 3.) Distributor of VR 4.) Cryptographically authenticated 5.) Highly compatible	https://www.c eek.io/
	3	Spectiv	The Signal Marketplace enables advertisers to directly reward attention influencers for driving engagement. This marketplace can be used by anyone interested in marketing their product, service, or media. The Signal Marketplace is currently being used by Spectiv VR to drive adoption in the growing VR space. [40]	Funds raised : \$24 Million USD	\$0.398 Million USD	Developed by : 1.) Spectiv 2.) Company Type : Privately Held 3.) Registered : Houston, Texas, United States 4.) Jurisdiction : United States	Github : Good 1.) Use of Coin : Utility 2.) Token : ERC20 3.) Reward attention influencers 4.) VR Marketplace	https://www.s pectivvr.com/

Sector	Serial Number	Name of the Project	Information	Funds Raised	Current Market Capitalization	Project Information	Project Framework	Link
			Logistics / Su	pply M	anagem	nent		
vechain	1	VeChain	VeChain offers Blockchain-as-a- Service to enterprises for products and information. By leveraging on blockchain technology, VeChain strives to build a trust-free and distributed business ecosystem, which is self-circulating and scalable. VeChain has successfully implemented blockchain solutions across various industries such as luxury goods, liquor, and agriculture. These use-cases go beyond the Proof-of-Concept and have already been launched on the market globally. [41]	Funds raised: \$10 Million USD	\$225 Million USD	Developed by: 1.) Vechain Foundation 2.) Company Type: Privately Held 3.) Registered: Singapore 4.) Jurisdiction : Singapore	Github : Very Good 1.) Use of Coin: Multipurpose 2.) Own Blockchain 3.) BaaS 4.) Business ecosystem 5.) Logistics support	https://www.v echain.org/
<b>F, F, F</b>	2	Waltonchain	The Waltonchain ecosystem uses an overall structure including a parent chain and child chains (or subchains) where the parent chain is Waltonchain and the token used for circulation and payment is called Waltoncoin. During the 1.0 stage of the project, the parent chain — Waltonchain — is used to open up a complete supply chain system of the apparel industry, including production, logistics, warehousing and stores [42]	Funds raised: \$11 Million USD	\$46 Million USD	Developed by : 1.) Walton Chain 2.) Company Type : Privately Held 3.) Registered : Shenzhen, Guangdong 4.) Jurisdiction : Guangdong	Github : Very Good 1.) Use of Coin: Multipurpose 2.) Parent Chain 3.) Side-Chain 4.) Logistics management 5.) BaaS	https://www. waltonchain. org/
(III) Ambrģsus	3	Ambrosus	Ambrosus is a blockchain-powered IoT network for food and pharmaceutical enterprises, enabling secure and frictionless dialogue between sensors, distributed ledgers, and databases to optimize supply chain visibility and quality assurance. [43]	Funds raised: \$30 Million USD	\$10.6 Million USD	Developed by : 1.) Ambrosus 2.) Company Type : Privately Held 3.) Registered : Zug, Switzerland 4.) Jurisdiction : Switzerland	Github : Good 1.) Use of Coin: Multipurpose 2.) IoT Network 3.) Food & Pharma logistics 4.) Supply Chain 5.) Optimization	https://ambro sus.com/

## REFERENCES

- [1] Understanding Ethereum (Report). CoinDesk. 24 June 2016
- [2] "EOS: Unpacking the Big Promises Behind a Possible Blockchain Contender - CoinDesk"Stanley, Aaron (2017-06-25)
- [3] Available at https://www.cardano.org/en/home
- [4] "Titan Digital Asset Group Research, NEO: The Vanguard of a Digitized China". Strategic Coin. Retrieved 27 December 2017.
- [5] Available at: https://qtum.org/en
- [6] "Early thoughts on Aeternity Stephan Tual's Blog". Stephan Tual's Blog. 2017-01-12
- [7] Available at: https://www.iota.org/get-started/faqs
- [8] Available at: https://docs.decred.org/
- [9] Available at: https://nano.org/en/faq
- [10] Available at: https://zilliqa.com/
- [11] Available at: https://nebulas.io/
- [12] Available at: https://ont.io/
- [13] Available at: https://stratisplatform.com/
- [14] Available at: https://vergecurrency.com/
- [15] "The Birth of a Blockchain: From Ripples to Making 'Crypto' Waves".
  - [16] Available at: https://quarkchain.io/
  - [17] Available at: https://www.matrix.io/
  - [18] Available at: https://www.deepbrainchain.org/
- [19] Available at: https://www.effect.ai/download/effect\_lightpaper.pdf
- [20] Available at: https://omisego.network/
- [21] Available at: https://bankex.com/en/
- [22] Available at: https://omisego.network/
- [23] Available at: https://polymath.network
- [24] Understanding Ethereum (Report). CoinDesk. 24 June 2016
- [25] Available at: https://gamecredits.com/wp-content/uploads/2018/06/ MobileGo-Whitepaper.pdf
- [26] Available at: https://betr.org/about-us/
- [27] Available at: https://www.theabyss.com/
- [28] Available at: https://icobench.com/ico/gifto
- [29] Available at: https://ripple.com/xrp/
- [30] Available at: https://www.r3.com/
- [31] Available at: https://bankera.com/
- [32] Available at: https://protocol.ai/projects/
- [33] Available at: https://sia.tech/
- [34] Available at: https://storj.io
- [35] Available at: https://golem.network/
- [36] Available at: https://grid.hoopox.com/aelf%20intro.pdf?v=1
  - [37] Available at: https://sonm.com/
  - [38] Available at: https://decentraland.org/
  - [39] Available at: https://www.ceek.io/
  - [40] Available at: https://www.spectiv.io/
- [41] Available at: https://www.vechain.com
  - [42] Available at: https://www.waltonchain.org/templets/default/doc/ Waltonchain-whitepaper\_EN\_20180525.pdf
  - [43] Available at: https://ambrosus.com/#mission





# The End

