

Task 1

Research 4 cryptocurrencies, 2 which are good short term plays, 2 which are good long term investment.

Describe why you picked these?

Describe how you performed the research, what was the logic you followed?

Long term cryptocurrencies investment:

1. Celsius (CEL)

CEL has a maximum supply of **695,658,161 tokens**, of which **76%** are in circulation and **24%** are locked according to a schedule laid out in the project's technical literature.



CEL had an initial coin offering (ICO) in May 2018. The presale and crowdsale took **50%** of the token supply, with **27%** going to the treasury, **19%** to the team and **2%** to partners and advertisers respectively.

Celsius Network is a wealth management platform that allows users to earn interest and borrow funds in cryptos. The network has an app for both Android and iOS devices. Launched in June 2018.

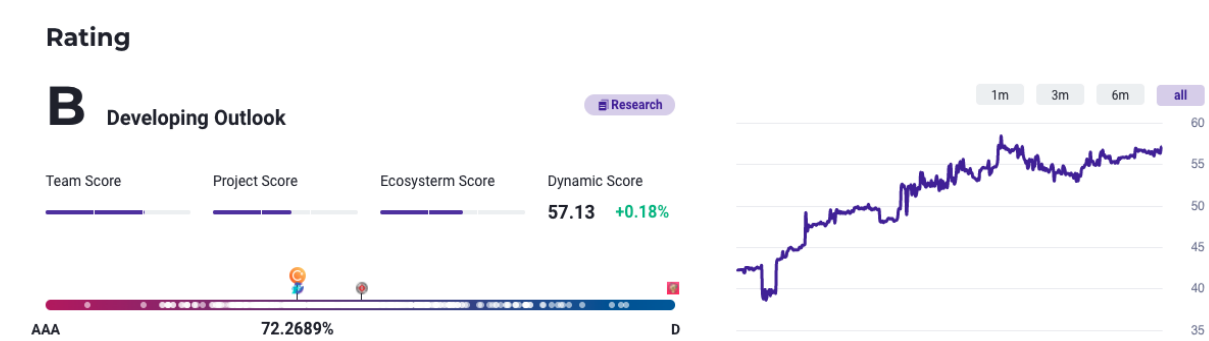
Celsius aims to outperform banks at their own game by offering financial services on the kind of terms which traditional financial institutions no longer offer. These include much higher rates of returns on savings and deposits, much easier and fairer loan requirements and automated rewards computed for each user algorithmically. The platform also functions as a wallet via its CelPay.

As a for-profit company, Celsius takes a cut of profit margins on interest payments, still returning 80% to users themselves. The company also lends to institutional entities such as hedge funds.

Celsius uses a modified proof-of-stake algorithm for its token, while broader security procedures were outlined in a dedicated presentation in June 2020, still available on the company's website.

Token Rating

Token rates range from excellent to poor in 10 ranks in the following manner: AAA, AA, A, BBB, BB, B, CCC, CC, C and D.



Rating: B

Description of Token Rating: Technical feasibility is moderate, the status of operations is relatively stable, the possibility of influence on the project by unfavorable changes in the environment or uncertain factors exists to a very large extent, and risk is to a definitely limited extent controllable.

My view

My opinion is that the Celsius network has very good potential for growth in the future. One of the reasons is because the Celsius network upgrades and invests its business constantly. In the table below you can see how the Celsius network grows over time.

Year	Mounth	News
2018	March	Completed ICO
2018	June	Version 1.0 of the Celsius app is launched
2018	August	Celsius user receive their first reward vai the Celsius app
2018	December	Celsius exceeds \$50m in community assets and \$100m in coin loan origination
2019	April	Version 3.0 of the Celsius app is launched

2019	May	Celsius exceeds \$200m in community assets and \$1.2b in coin loan origination
2019	December	Celsius is available in over 100 countries around the world
2020	June	New round of founding
2021	March	Celsius exceeds \$10b in community assets
2021	April	Celsius has over 200 employees
2021	May	Celsius is available in any device with the launch of the new web app

A couple days ago Celsius acquired a development division of 50 blockchain developers from MVP, a leader in blockchain product development. This move exemplifies the continued commitment of Celsius to invest in and expand its technical capacity, and also outlines the MVP Workshop team's trust in Celsius and its mission.

MVP Workshop is a blockchain product design and development studio driven by the exploration of disruptive technologies and their application in real-life scenarios. They are one of the blockchain pioneers in Europe focusing exclusively on developing Web3 products - and as such have been working on some of the most renowned projects and with some of the best teams in the industry such as Polygon, Moonbeam, Web3 Foundation, The Enterprise Ethereum Alliance, and much more.

Celsius is the only app with no withdrawal fees, no lockups, no minimums. You can also transfer crypto to other users in the app without fees. There are also no limits on withdrawals.

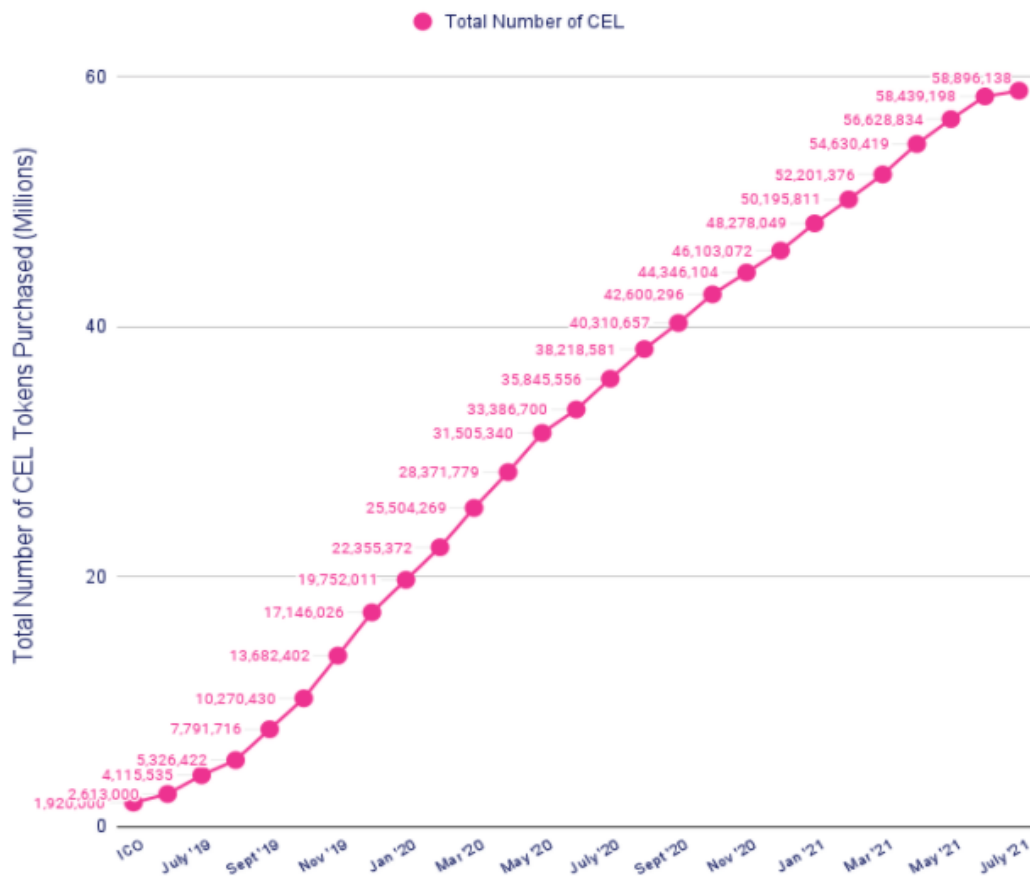
More than 3 years of business, Celsius has never had a hack, security breach, or loss of funds. The company has \$20 million in insurance in hot wallets. These contain coins in transit from one place to another. But Celsius doesn't have insurance on currencies lent out. Why? Because Celsius loans out coins to a wide variety of different institutions. These loans get collateralized, unlike many others in the industry. That means there's a minor chance that multiple institutions could get hacked. If this happens, the company could lose its funds. In this worst-case scenario, the network wouldn't have enough collateral to cover its losses.

As of January 2021, here are some noteworthy numbers for the Celsius Network:

- 345,854+ active users
- \$8.2B loans processed
- Hodls \$5.3B in community assets

\$200M crypto rewards distributed It is also important to mention that Celcius Network is a custodial wallet. This means that you are not in control of your private keys. As the mantra goes, not your keys not your crypto

CEL Tokens Purchased for Community Rewards



2. Cardano (ADA)

There is a maximum supply of 45 billion ADA – but at the time of writing, there was a circulating supply of about ~ 33 billion. Five rounds of public sales of Cardano tokens were held between September 2015 and January 2017.



Approximately 2.5 billion ADA was allotted to IOHK once the network launched. Meanwhile, an additional 2.1 billion ADA was given to Emurgo, a global blockchain technology company that served as a founding entity of the Cardano protocol. Last but not least, 648 million ADA was given to the not-for-profit Cardano Foundation, which aims to promote the platform and increase levels of adoption.

Overall, about 16% of ADA's total supply went to the project's founders, with the remaining 84% being split among investors.

Cardano was founded by Charles Hoskinson, who was also one of the co-founders of the Ethereum network. He is the CEO of IOHK, the company that built Cardano's blockchain. As well as being a technology entrepreneur, Hoskinson is also a mathematician. In 2020, his technology company donated ADA worth \$500,000 to the University of Wyoming's Blockchain Research and Development Lab.

Cardano is one of the fastest-growing projects in the cryptocurrency space. The team behind its open source blockchain conducts extensive research and regularly publishes its results in peer-reviewed academic papers. Their research is focused on building a scalable, secure and efficient decentralized network by taking a systematic approach to blockchain research and development.

One of the core missions of the Cardano Foundation is the transformation of decentralization. Although the Cardano blockchain is one of the most decentralized in the world, there are still entities who have direct control over critical aspects of the blockchain.

The EMURGO team, one of the founding entities of Cardano, is striving to facilitate a mainstream transition to blockchain technology — encouraging governments, companies, universities, and other groups to leverage Cardano's broad functionality, extensive security, and high transactional throughput.

The Cardano blockchain was written using a universally recognized and secure programming language known as Haskell. Another founding member of the Cardano ecosystem, IOHK is a blockchain engineering company responsible for meticulously updating Cardano's codebase and facilitating roadmap goals. Founded in 2015, IOHK has a strong focus on formal methods and peer-review, publishing more than 90 papers in support of Cardano and the wider blockchain industry through academic conferences

Cardano's proprietary Proof-of-Stake (PoS) consensus protocol is called Ouroboros and is one of the project's most groundbreaking achievements to date. Ouroboros is the first PoS algorithm to have been scientifically peer-reviewed and independently audited and verified.

The Cardano blockchain splits time into divisible epochs (around five days), which are further divided into slots. To achieve consensus, the network randomly nominates a few nodes to validate new blocks for every slot. These selected nodes are known as slot leaders.

Cardano's unique programming languages for smart contracts, Plutus and Marlowe, are offered as a set of libraries for Haskell, leveraging existing Haskell documentation, toolkits,

and a highly professional community to provide a base from which to build secure and enterprise-grade smart contracts.

Roadmap

The Cardano protocol is still in development and its roadmap can be broken down into five phases.

1. Byron era

First phase, this era marked the creation of the network's primary architecture. During this era, the Daedalus wallet – IOHK's official desktop wallet for ADA – was integrated into the Cardano ecosystem, in addition to Yoroi, a light wallet from IOHK's sister firm Emurgo, which was designed for day-to-day use and offered efficient transaction execution.

2. Shelley era

Established a higher degree of decentralization on the platform. Cardano ecosystem to move to more of a reliance on community-run nodes. This era also saw the introduction of delegation and incentivization schemes.

3. Goguen era

Brought smart contracts to Cardano, enabling the creation of decentralized applications on the network using its smart contract development language, Plutus. During this time, Cardano also implemented a multi-currency ledger to facilitate the creation of new, natively supported tokens.

4. Basho era

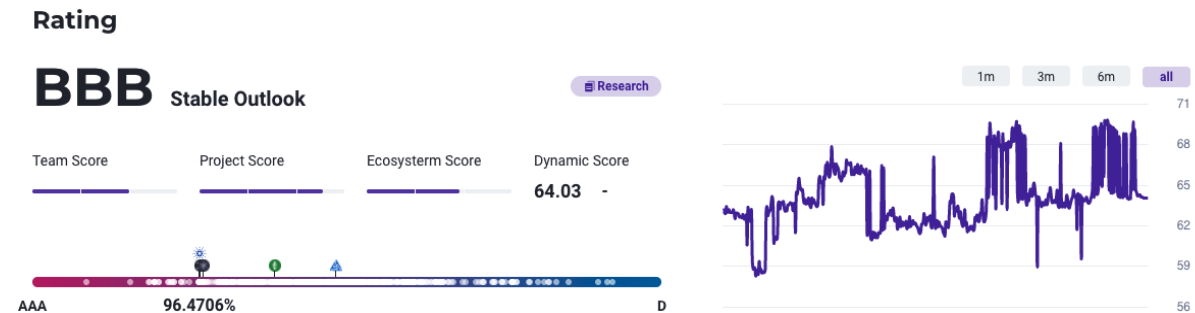
Will involve scaling the blockchain network, adding solutions focused on enhancing its performance and stability. It will also introduce interoperable sidechains, which will significantly help Cardano to handle higher throughput levels, along with parallel accounting styles that can facilitate greater interoperability for Cardano and its applications.

5. Voltaire era

Final era of Cardano. Voltaire will establish an autonomous, decentralized network, transferring the responsibility for Cardano's future to the community. Instead of development and maintenance being undertaken by a centralized entity like the Cardano Foundation, the community will itself be tasked with upholding the network. The community will take its cue from Cardano's treasury, voting and delegation systems in order to accelerate its evolution into a full-fledged, self-sustaining, decentralized protocol.

Token Rating

Token rates range from excellent to poor in 10 ranks in the following manner: AAA, AA, A, BBB, BB, B, CCC, CC, C and D.



Rating: BBB

Description of Token Rating: Technical feasibility is very good, the status of operations is stable, influence on the project by unfavorable changes in the environment or uncertain factors exists to a certain extent, and risk is controllable

Cardano Ecosystem

ENTERPRISE & BUSINESS <ul style="list-style-type: none"> STARTUPS: Helixworks, GIMBALABS, API3, Pet Registry, CREDMARK PARTNERS: QuviQ, vacuumlabs, Konfido, pwc, Sinaris, runtime verification DEPLOYMENTS: BeefChain, new balance, ALKO, SCANTRUST, BLUE KORINTJI COFFEE 			ORACLES : WolframAlpha, ERGO	EXCHANGES : coinbase, BINANCE, Huobi, KuCoin	CORE ORGANIZATIONS : CARDANO FOUNDATION, INPUT/OUTPUT, EMURGO
DEFI & MARKETS : celus, Bondly, Algoz, GENTWO, wave	SOLUTIONS : Emurgo Traceability	ALLIANCE : HYPERLEDGER	FUNDING : Catalyst, cFund, DC Fund, Cardano Grants	COMMUNITY TOOLS : CardanoAssets.com, PoolTool.io, ADAex.org, ADApools.org, ADAtainment.com, ADAtools.io, PoolStats.org, Cardano Explorer	RESEARCH : TOP TIER RESEARCH CONF, ESORICS, IEEE, EUROCRYPT, EURO S&P CRYPTO, SODA S&P FINANCIAL CRYPTOGRAPHY
GOVERNMENTS : (Flags of various countries)	DEVELOPER TOOLS <ul style="list-style-type: none"> LANGUAGES: Haskell, Marlowe, Solidity, GLOW DEV RESOURCES: KEVM, METADATA, NATIVE TOKENS, Testnet, ATLAS 	INFRASTRUCTURE <ul style="list-style-type: none"> SECURITY AUDITS: Quantstamp, FP Complete, NAGRA, R9B ACTIVE STAKE POOL OPERATORS: 2151 	OUROBOROS CONSENSUS : Ouroboros Classic, Ouroboros BFT, Ouroboros Genesis, Ouroboros Praos, Ouroboros Hydra, Ouroboros Chronos, Ouroboros Crispinus, Ouroboros Omega	EDUCATION & BC LABS : THE UNIVERSITY OF EDINBURGH, UNIVERSITY OF WYOMING, NATIONAL TECHNICAL UNIVERSITY OF ATHENS, UCONN, UNIVERSITY OF OXFORD, UNIVERSITY OF KENT, UNIVERSITY OF ILLINOIS, UNIVERSITY OF CAMBRIDGE, UCL, 東京工業大学, TOKYO INSTITUTE OF TECHNOLOGY	RESEARCH CENTERS : BERKMAN KLEIN CENTER FOR INTERNET & SOCIETY AT HARVARD UNIVERSITY, PRIVILEGE

My view

Cardano is an incredibly ambitious project and, as with any grand venture, things don't always go according to plan. Over the years, the Cardano team has missed multiple deadlines on its roadmap, taking a deliberately slow route and forgoing the first-mover advantage it could have had. Nevertheless, this project – once an underdog – has emerged as one of the most promising alternatives to Ethereum and other third-generation PoS-based blockchains, which merge features from different blockchains onto a single network.

Cardano Africa is the biggest blockchain deal ever. This will see them create a blockchain-based digital identity for 5 million students and teachers to verify grades, monitor school performance and boost nationwide education.

Charles Hoskinson, consistently posts video updates to the team's development progress online (<https://www.youtube.com/c/charleshoskinsoncrypto>), sharing details about the latest research being conducted and their plans for the future.

Despite the various criticisms that have been leveled against it, Cardano remains one of the most popular blockchains in the industry due to its rigorous approach to research and development, robust consensus mechanism and aspirations to establish an autonomous, decentralized and self-sustaining governance model.

This is a very interesting time for Cardano (ADA). In the near future, we can expect implementations of smart contracts (Alonzo upgrade) and whitepaper about AgeUSD (the first stablecoin on Cardano).

I also believe that other cryptocurrencies have very good potential for long-term growth as Polygon (MATIC), Ethereum (ETH), Binance (BNB), Uniswap (UNIs), Chainlink (LINK), Solana (SOL), Ethereum Classic, Algorand (ALGO), COTI, etc ...

Short term cryptocurrencies investment:

I am not a fan of short-term investment. Sometimes it can be very profitable but it is a very risky move. The best short-term investment in my opinion is when BTC bounces. This way you can earn between 10% and 100%, sometimes more, in one day. We have had that situation a couple of times this year. In that situation, it is important to choose a coin with the best recovery rate. The best recovery rate in this market cycle has ADA and BNB. On the other hand, a very popular technique is to buy coins in the ICO period. It can be profitable if you buy coins in the early phase.

Describe how you performed the research, what was the logic you followed?

I researched information about coins in coin whitepapers and some trust websites, and always check information on a couple of sources. First, I need to be sure that the project is not a scam. After that check, I always try to understand the technology behind the coin and to see the future potential.

Websites:

<https://coinmarketcap.com/>
<https://tokeninsight.com/>
<https://celsius.network/>
<https://bitcompare.net/>
<https://www.gemini.com/cryptopedia>
<https://celsiushub.com/>
<https://cointelegraph.com/>
<https://www.coindesk.com/>
<https://www.gemini.com/cryptopedia>
<https://decrypt.co/>
<https://academy.binance.com/en>

Whitepapers:

<https://celsius.network/static/media/celsius-whitepaper.27574611.pdf>
<https://cryptoverze.com/cardano-whitepaper/>

Youtube:

<https://www.youtube.com/c/charleshoskinsoncrypto>
https://www.youtube.com/results?search_query=coin+bureau
<https://www.youtube.com/channel/UCRvqjQPSeaWn-uEx-w0XOIg>