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Cryptocurrency Investment Report

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CRYPTO INVESTMENT REPORT



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1. Introduction

Crypto being the new revolution in the financial markets there seems to be a growing interest as well as an ambiguity to explore these investment opportunities by amateur and seasoned investors. This paper talks about the journey of building a diverse portfolio of crypto worth 10 million dollars and the key strategies formulated to take up informed decisions. The elements captured to analyse a specific asset is discussed in detail and debated on. The highlighting feature of the paper is that, it also talks about assets that have been rejected by the investor with substantiating reasons. The paper aims to strike a balanced outlook of both qualitative and quantitative perspectives considered to map the crypto for the portfolio. The chosen class of assets are being held for a period of one month (1st Oct, 2022 - 31st Oct 2022) for which a critical analysis is conducted using statistical methods. Despite the recent turbulence in the crypto markets, the novice investor hopes to get a 10-15% return on investment being aware of the fact that the gains could either be extremely high or low which could even put the initial investment at stake.

2. Asset Selection

As a risk averse investor, Majority of the investor's funds are invested into large cap cryptocurrencies followed by a 30% of the chunk into mid cap cryptocurrencies and the remaining to small cap as they are susceptible to dramatic swings (Figure 27: Asset Selection Criteria).

3. Portfolio

3.1. Bitcoin

Bitcoin being unanimous for bitcoins in the mind of general public, has captured a market cap of \$372,414,733,487 staying on top of the table. At the time of investing (1st Oct, 2022), the prices stood at \$18,970.62 and at the time of writing the report (Nov 16th, 2022) the price is at \$16,526.92 which indicates the price of bitcoin can be highly fluctuating and unpredictable.

Bitcoin could emerge as a bank killer, eliminating bank charges, turnaround time for payments and privacy. On the other hand, it constantly faces challenges as the user adoption is exorbitantly high which could lead to higher transaction fees. Scalability could ring a bell of caution for the coin resulting in slower transaction verification leading to a decline in the number of users.



Figure 1: Bitcoin - SWOT Analysis

The coin has stuck to follow POW ever since its inception, which adds a brownie point to the coin's perception as the miners are incentivised purely based on their computational power and not on the basis of the weight of their stakes to validate the transaction hence portraying true essence of decentralisation.

Bitcoin's RSI (*Figure 7 : BITCOIN - Relative Strength Index*) is fixed in an overbought region for a prolonged period looking for buying opportunity instead of shorting and it indicates excess positive momentum. Bollinger band (*Figure 9: BITCOIN - Bollinger Bands*) confirms that bitcoin is less volatile as the gap between the upper and lower band is low. The same inference is seen in the evaluation of RSI as well. The feature of less volatility confirmed by the above-mentioned metrics looks attractive for investors.

Exponential moving average (*Figure 8: BITCOIN- Moving Average*) depicts that the price stays below the EMA which gives the investor a clear buy signal which is also confirmed by RSI and Bollinger band.

3.2 Ethereum

Ethereum, the beginning of smart contracts turned tables for the previously existing crypto space and opened doors for various other aspects of decentralisation. Ethereum blockchain is used in diverse real life use cases such as payments, decentralised apps, financial derivatives, identity and reputation. The volume of users is high due to the multifaceted usage of the platform (Ethereum, 2022). It dominates the crypto space with a Market Cap of \$160,822,630,103 (as on 1.10.2022) which indicates a less risky investment and the trading volume stands at \$6,227,961,237 as on 1st of October which tells us that it possesses greater liquidity as well as market efficiency.

Ethereum has a proven track record of building large number of applications and executed many smart contracts and moved money worth a trillion dollars (*Table 2: Ethereum - Key figure*). The future prospects of the project look to be promising as they have concentrated their attention towards decentralised social networks, decentralised science, supply chain management and play to earn in games. Santander (Allison, 2019) and Société General were one of the early adopters of Ethereum based bond issuers (Societe Generale, 2020).

Ethereum's vision seems to be more realistic and achievable in the near future of increasing 1000 transactions per second to make Ethereum faster and affordable which would in turn attract a stronger Ethereum community and be bullish. Ethereum's to POS and would reduce electricity consumption by 99.95%.

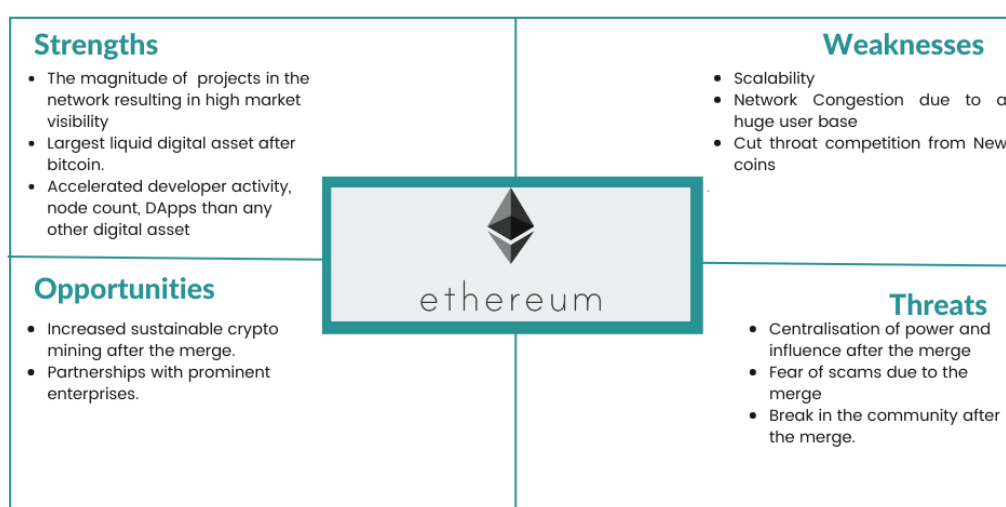


Figure 2: Ethereum - SWOT Analysis

According to the RSI graph calculated for 90 days (July'22-Sept '22), there seems to be an uptrend and the market appears to be bullish and hence would be a good time to invest (**Error! Reference source not found.**).

3.3 Polygon

Polygon's market cap stands at \$6,790,462,373 and the 24h trading volume is \$391,076,262. It is a well-structured, easy to use platform for Ethereum scaling and infrastructure development. Polygon was a key contributor in the Ethereum ecosystem. Polygon's team has a strong background in blockchain with two block chain engineers on the core team.

Polygon is currently working to support Ethereum but has future plans to expand to other base chains, this factor seems promising for the investor. The coin has the potential to process up to 10,000 transactions per second with gas fees coming up to only a few cents (Nir Chemayaa,

2022). Polygon’s key differentiator is the achievement of carbon neutrality, as the investor is inclined towards a sustainable portfolio more than a profitable one.

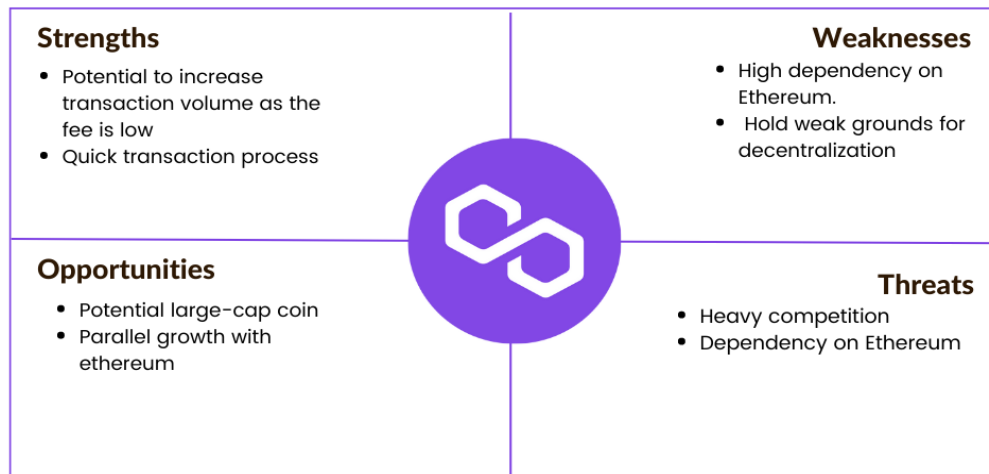


Figure 3: Polygon SWOT Analysis

Polygon’s exponential moving average (*Figure 21: Polygon - Moving Averages*) denotes that price stays below EMA as on 30th September 2022 which gives us a green signal to buy on 1st Oct, 2022.

RSI of polygon is fixed in an overbought region for a long period looking striking a buying opportunity (*Figure 20 : Polygon - Relative Strength Index*). Bollinger band depicts that over a period of 12 months, the coin has been highly volatile but has shifted to less volatile side for the rest 10 months as the gap between the upper and lower band is low (*Figure 19 : Polygon - Bollinger Band*). The same inference is seen in the evaluation of RSI as well. As these metrics are in favour of the investor’s point of view, this coin has been selected.

3.4 Polka Dot

The dream team of the crypto space came together to build Polka Dot among which Dr. Gavin Wood, being an eminent person in the field who had previously co-founded Ethereum. They have secured a funding of 250 million from notable venture capitalists which gives me a strong hold to lay my trust on this asset and so have many, as a result of which the market cap of the coin was at \$7,085,438,248 as on 30th September 2022.

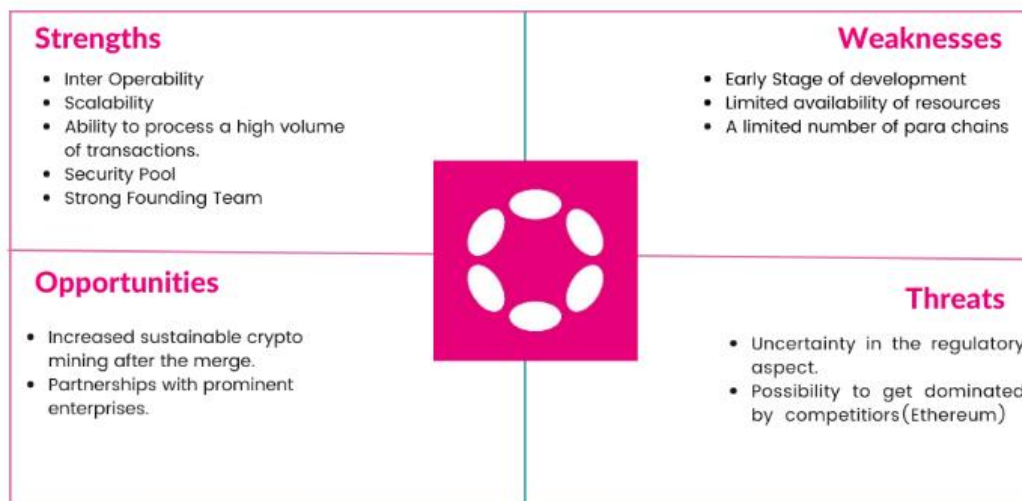


Figure 4: Polka Dot- SWOT Analysis

Despite the existence multiple blockchain networks, there is a concern when it comes to interoperability and scaling because of the design. Polka Dot comes into the picture when this aspect is addressed by enabling para and relay chains. Polka Dot claims “ token holders have complete control over the protocol. All privileges, which on other platforms are exclusive to miners, will be given to the Relay Chain participants (DOT holders), including managing exceptional events such as protocol upgrades and fixes.” (PolkaDot, 2020).

In order to understand the movement of Polka Dot’s recent price change, RSI was calculated using excel. (Refer RSI graph Figure 13: Polka Dot - Relative Strength Index). Based on the observations, The market appears to be bullish and the trading volume as on 30th September 2022 is \$325,171,014 which indicates that the asset is liquid.

The Bollinger band graph for Polka Dot indicates low volatility as the bands grow narrow towards the end of September 2022 (Figure 14: Polka Dot- Bollinger Band). The prices are aligned to the lower band indicating the assets being oversold just as the same as the inference from RSI trends.

Contrast to earlier findings, Polka Dot must channelise its efforts to build a strong developer community and users to remain strong in the competitive field. Based on the above study on Polka Dot, the investor is able to visualise the prospects of it being on top of all blockchain network.

3.5 Power ledger

Soaring energy prices in the UK has raised a concern among many households. The investor finds it important to inculcate sustainable investment choices and hence would like to explore the horizons of what power ledger has to offer to the community. The use case of power ledger looks convincing to the investor as there is an imbalance of power between users and power authorities. (Merhout, 2019). The market cap and volume of the coin stood at \$93,574,377 and \$3,949,675 respectively as on 30th September 2022. The founding team appears as a good composition of leaders with expertise in the key elements of the renewable energy sector.

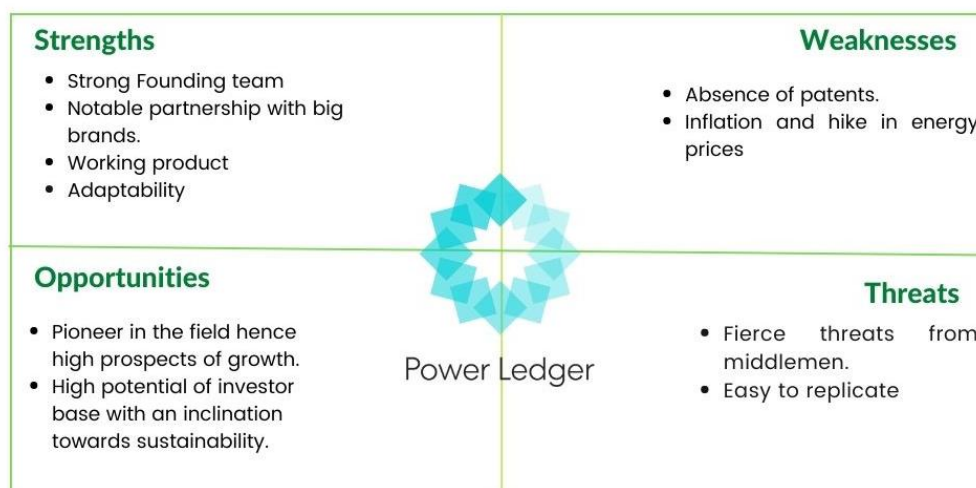


Figure 5: Power Ledger- SWOT Analysis

RSI indicates that the market is bullish and a price reversal trend is expected when the RSI reaches above 70. In the 1st six months of the one-year period signals a bearish trend and no bearish trend was found in the next six months (Figure 16: Power Ledger- RSI).

A directly proportionate relationship is observed between price and volatility as per the Bollinger band plotted for the time period of the asset (Figure 17: Power ledger - Bollinger Band). In relation to RSI, the investor views the inference as a buy signal, predicting the prices to increase in the next 2 quarters as per the historical (1st two quarters) trend observed in the RSI graph and on that note, The investor would look for selling it and book gains. Based on empirical data, A death cross is identified which projects a clear buy signal for the investor (Figure 18: Power Ledger - Moving Average). The investor would prefer to give utmost importance to creating a sustainable portfolio and contribute towards the renewable energy sector as an inspiration drawn from values imparted in by the investor's father who has worked in the sector for more than a decade.

3.6 IOTA

The constantly evolving technological space consists of the infamous IOT, the coin IOTA aims to create a medium of exchange and create a web of trust among devices themselves and among people with devices. IOTA has captured a market cap of \$798,485,904 and a volume of transactions of \$15,331,223. IOTA consists of a widespread team known as the IOTA foundation distributed across 25 countries.

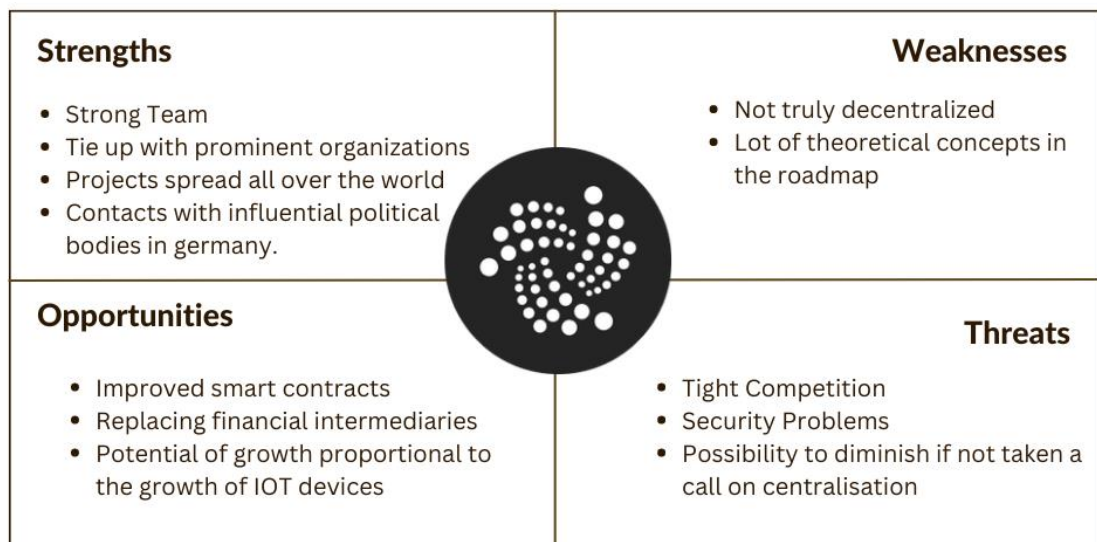


Figure 6: IOTA- SWOT Analysis

IOTA's RSI confirms that the price has been below 30 for a brief period of time which gives a buying signal for the investor. On the other hand, the upper and the lower bands of the Bollinger band also portrays a thin gap between them confirming the inference from RSI. With these factors in consideration, the investor decided to buy the asset. Anonymity raises a point of concern with IOTA, but with sufficient upgrade and improvement on the horizon there is a potential of growth (Tennant, 2017)

3.7 Denta Coin

An exemplary idea of integrating dental care on blockchain network sounds compelling and essential. There is no clear evidence of roadmap after 2019 on its website. The founding team doesn't look attractive as they lack expertise in blockchain technology. The trading volume appears to be extremely low (CoinMarketCap, 2022) which proves that the asset is highly illiquid. The investor does not find Denta coin convincing enough to add it to the portfolio. Refer (Figure 30: SWOT - Denta Coin) and Appendix H.

4. Portfolio Analysis

On careful consideration of investment choices, the portfolio has been constructed (*Figure 25: Portfolio Dashboard*). Furthermore, the dissection of the performance of crypto has been done with the use of descriptive statistical metrics(*Figure 26: Portfolio Analysis*).

The autopsy of the portfolio was carried to understand if the investor's expectation of 10% return was met and to devise future strategies. Variance- Covariance matrix was calculated to understand the asset's return deviation from its own average return and with respect to other asset (*Figure 28: Variance-Covariance Matrix*)

Portfolio variance has been calculated to understand the level of risk associated with the portfolio. The portfolio variance is 1.72% represents the risk on a daily basis. The expected return calculated for investment period of one month was at 9.57% (*Figure 27: Risk and Expected Return Calculation*). On the other hand, the actual return for at the end of the holding period is 9.7% confirming that the expected return is on par with the actuals. Bearing this in mind, If the market variables remain similar the portfolio could yield a return of whopping 80.39% at the end of one year.

In order to have a balanced portfolio, it is ideal to pick fewer assets which would share negative covariance to compensate for each other in an event of loss.

5. Conclusion

The investment report is a reflection of the investor's decisions made in the crypto world as discussed in detail above. The portfolio made a profit margin of 9.7% and looks promising to hold for the future as well. It highlights the importance of building a sustainable, careful and ethical investment decision than just looking for mere gains.

6. APPENDIX

NOTE : All the graphs, figures and tables have been generated by the author via Excel and EViews using the historical data source from CoinMarketCap, 2022. All the data related to prices are in dollars.

APPENDIX – A: Analysis of Bitcoin

About the coin :

Bitcoin is a decentralized digital currency that can be transported on the peer-to-peer bitcoin network. Bitcoin transactions are verified by network nodes through cryptography and recorded in a public distributed ledger called a blockchain (Bitcoin, 2022).

Calculations:

Metrics	Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	$[100 - (100/\{1 + RS\})]$	53.628
Exponential Moving Average (EMA)	Closing price x multiplier + EMA (previous day) x (1-multiplier)	2047.535 (50D*) 28789.207 (200D*)
Simple Moving Average (SMA)	$(P_1 + P_2 + P_3 + P_n)/n$	19176.247 (20D*)
Bollinger Band: Upper Band	Upper Band: $MOV_{20} + (2 * 20 \text{Standard Deviation of Close})$	Figure 14: Polka Dot-Bollinger Band Figure 14: Polka Dot-Bollinger Band
Bollinger Band: Lower Band	Lower Band: $MOV_{20} - (2 * 20 \text{Standard Deviation of Close})$	

Table 1: BITCOIN Calculations

Graphs:

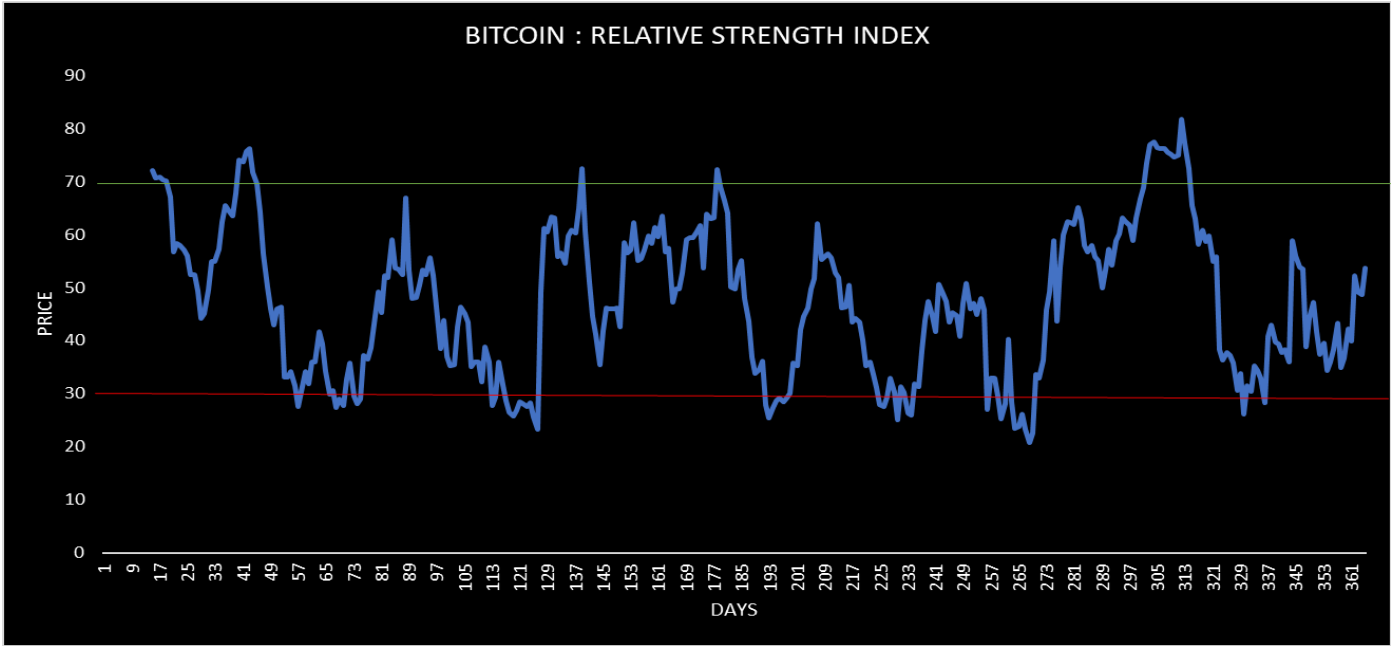


Figure 7 : BITCOIN - Relative Strength Index

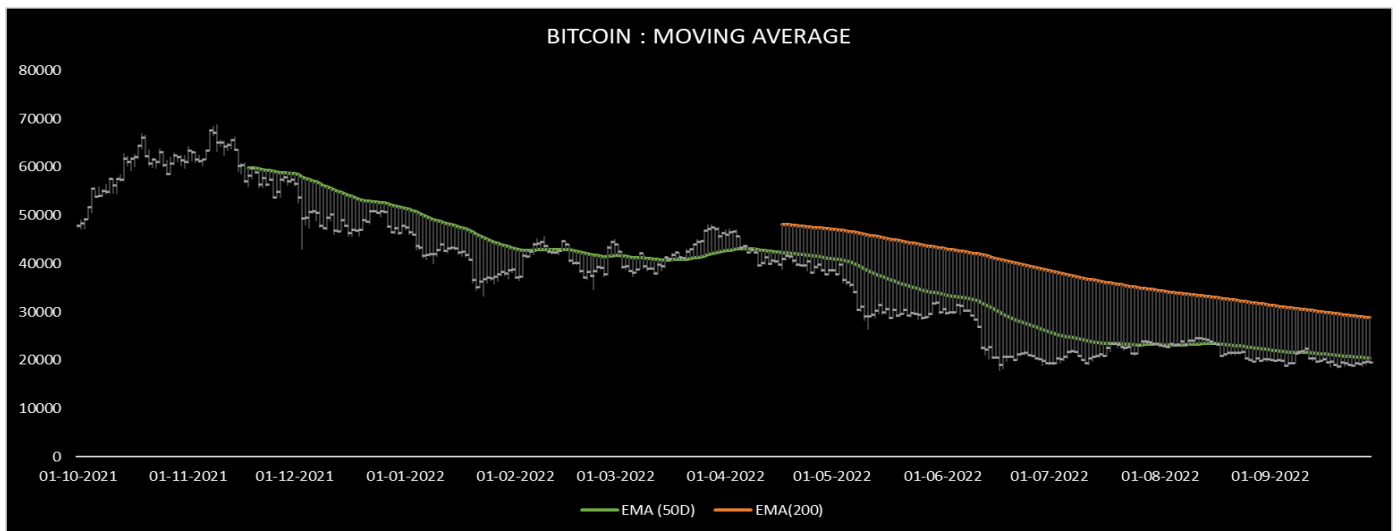


Figure 8: BITCOIN- Moving Average

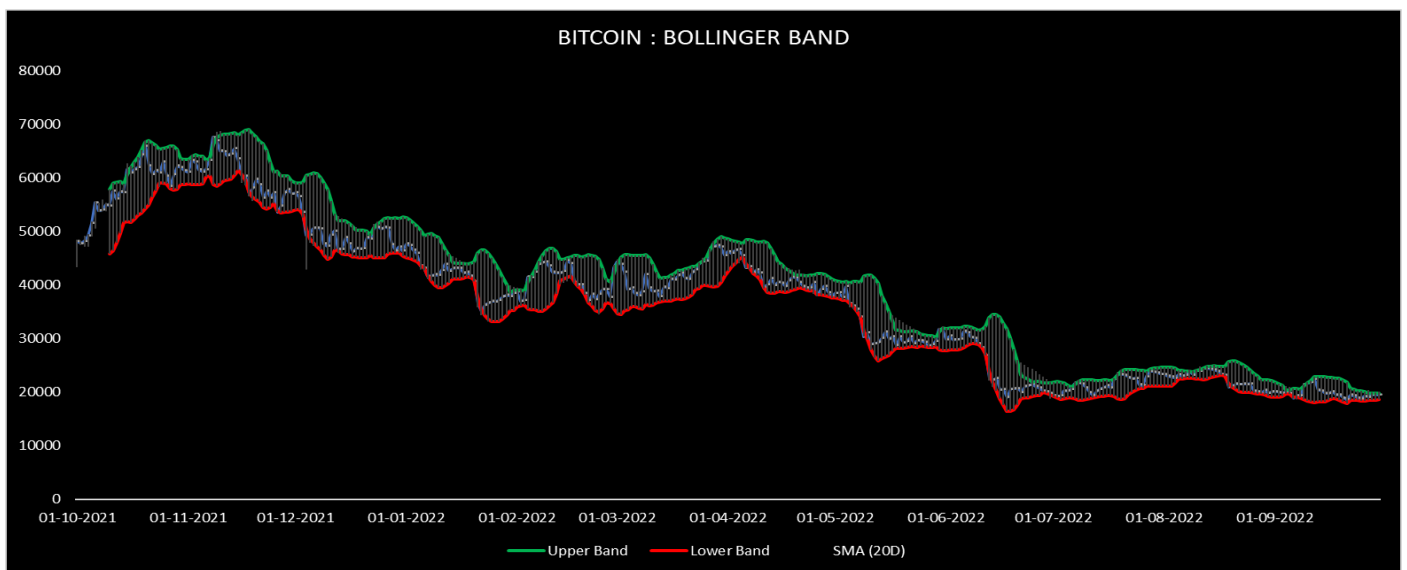


Figure 9: BITCOIN - Bollinger Bands

APPENDIX – B : Analysis of Ethereum

About the coin :

Ethereum is a decentralized, open-source blockchain with smart contract functionality. Ether is the native cryptocurrency of the platform. Ethereum has mastered the concept of a blockchain smart contract platform. Smart contracts are computer programs that automatically execute the actions necessary to fulfil an agreement between several parties on the internet. (Ethereum, 2022)

Projects	2970
Accounts with ETH Wallet	71 million +
Smart Contracts	50.5 million+
Value Moved through Ethereum	11.6 trillion
Creator Earning	3.5 billion
Number of transactions at the time of writing	1.016 million

Table 2: Ethereum - Key figure Source: (CoinMarketCap, 2022)

They were created to reduce the need for trusted intermediates between contractors, thereby reducing transaction costs and also increasing transaction consistency.

Calculations:

Metrics	Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	$[100 - (100/\{1 + RS\})]$	46.839
Exponential Moving Average (EMA)	Closing price x multiplier + EMA (previous day) x (1-multiplier)	1495.072 (50D*) 2037.44 (200D*)
Simple Moving Average (SMA)	$(P_1 + P_2 + P_3 + \dots + P_n)/n$	1318.724 (20D*)
Bollinger Band: Upper Band	Upper Band: $MOV_{20} + (2 * 20 \text{ Standard Deviation of Close})$	Figure 14: Polka Dot-Bollinger Band Figure 14: Polka Dot-Bollinger Band
Bollinger Band: Lower Band	Lower Band: $MOV_{20} - (2 * 20 \text{ Standard Deviation of Close})$	

Figure 10: Ethereum Calculations

Graphs:

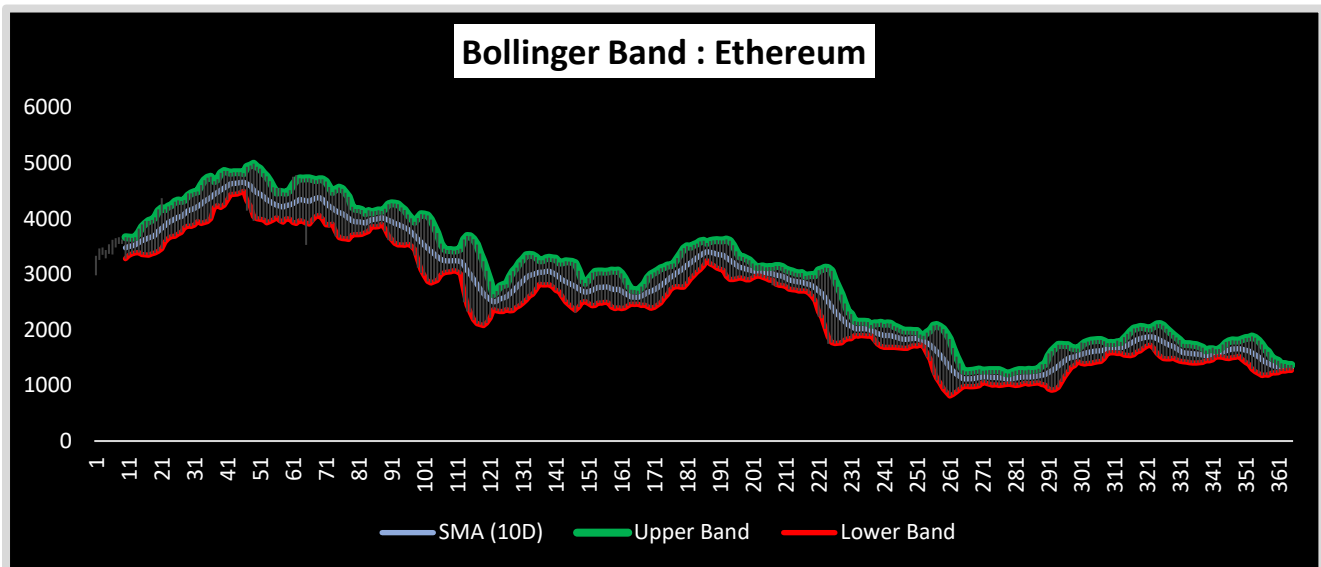


Figure 11: Ethereum - Bollinger Band

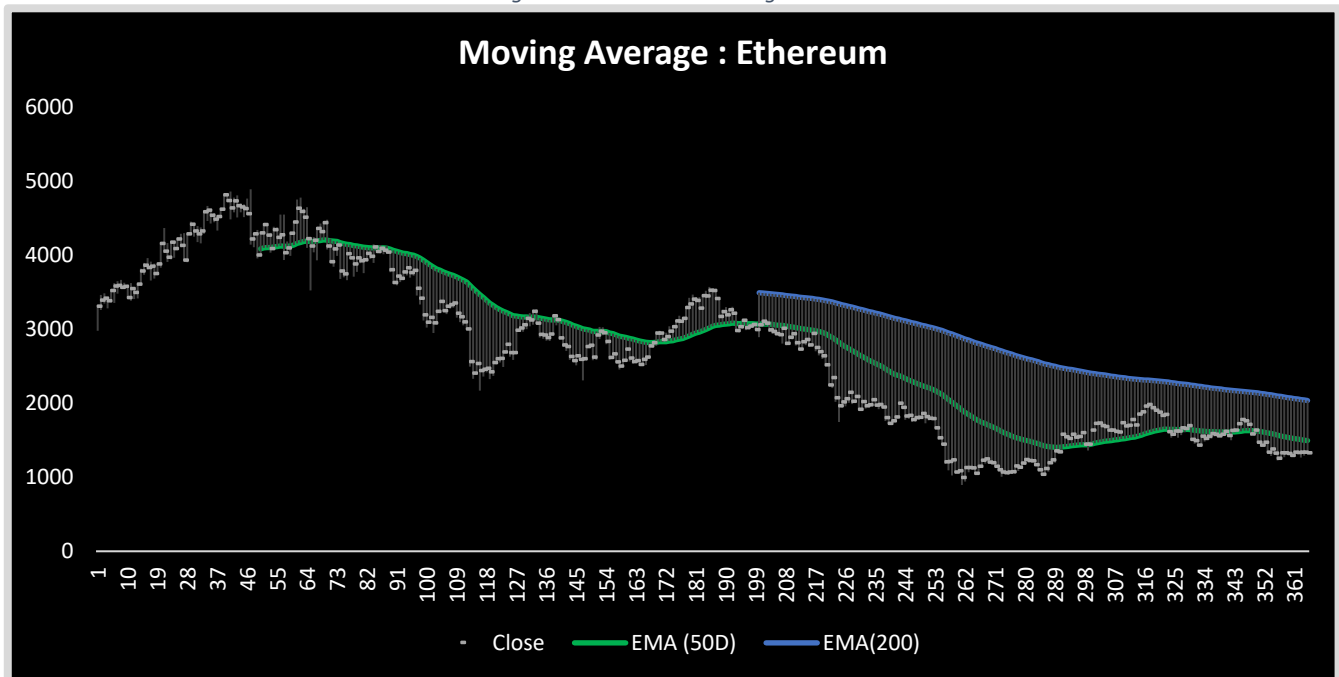


Figure 12: Ethereum - Moving Average

Note: The above generated graphs were calculated and made on excel with the price data set of the crypto.

APPENDIX - C : Analysis of Polka Dot

About the coin :

Polka dot is a next-generation blockchain protocol that is a uniting ground for a whole network of purpose-built blockchains, permitting them to function smoothly together at scale as Polka dot allows any type of data to be shared between any type of blockchain, it unleashes a wide range of real-world use cases.

Polka dot offers a distinct advantage over existing networks, including heterogeneous sharding, scalability, upgradeability, straightforward administration, and cross-chain composability.

Calculations:

Metrics	Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	$[100 - (100/\{1 + RS\})]$	51.7
Exponential Moving Average (EMA)	Closing price x multiplier + EMA (previous day) x (1-multiplier)	7.104 (50D*) 12.67 (200D*)
Simple Moving Average (SMA)	$(P_1 + P_2 + P_3 + \dots + P_n)/n$	6.71 (20D*)
Bollinger Band: Upper Band	Upper Band: $MOV_{20} + (2 * 20 \text{ Standard Deviation of Close})$	Figure 14: Polka Dot- Bollinger Band Figure 14: Polka Dot- Bollinger Band
Bollinger Band: Lower Band	Lower Band: $MOV_{20} - (2 * 20 \text{ Standard Deviation of Close})$	

*Note: The above calculations have been made from 1/10/2021 to 30/09/2022

Table 3: Technical Analysis of Polka Dot

Graphs :

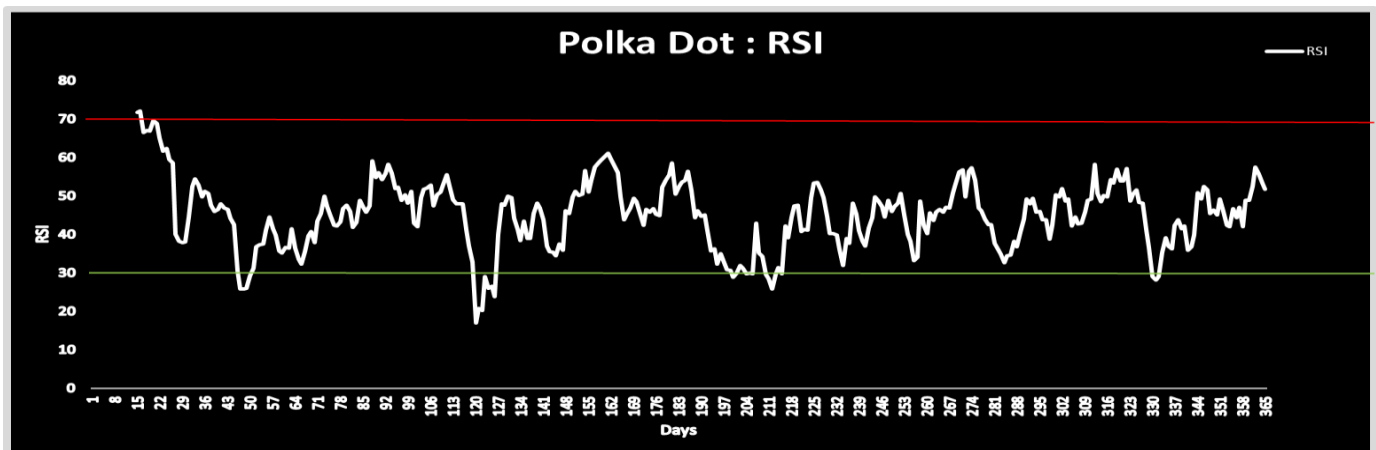


Figure 13: Polka Dot - Relative Strength Index

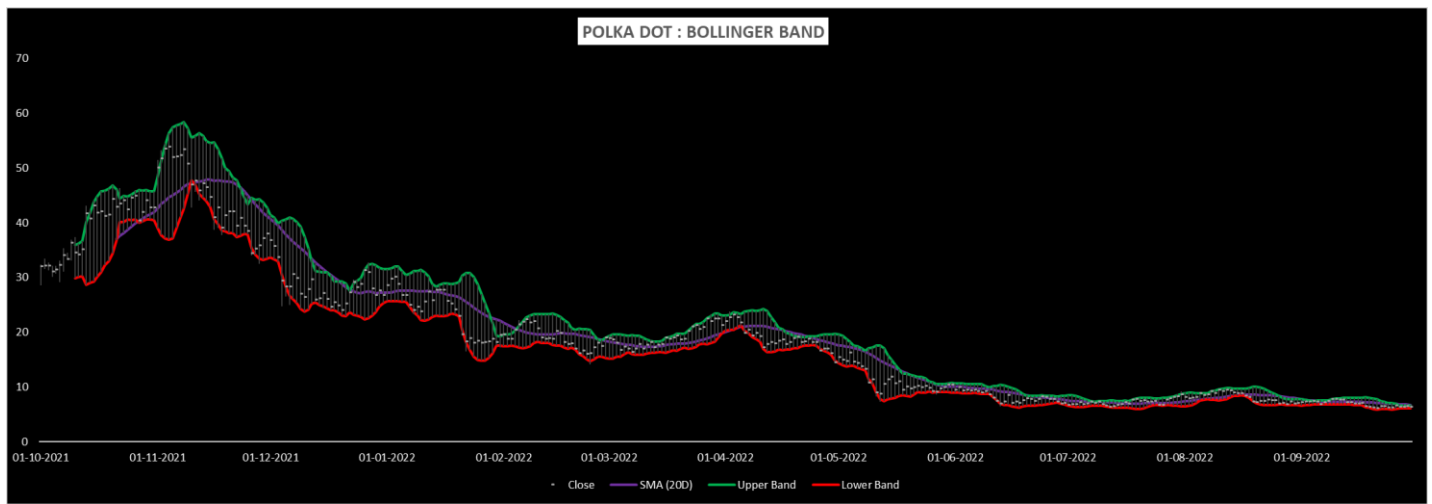


Figure 14: Polka Dot- Bollinger Band

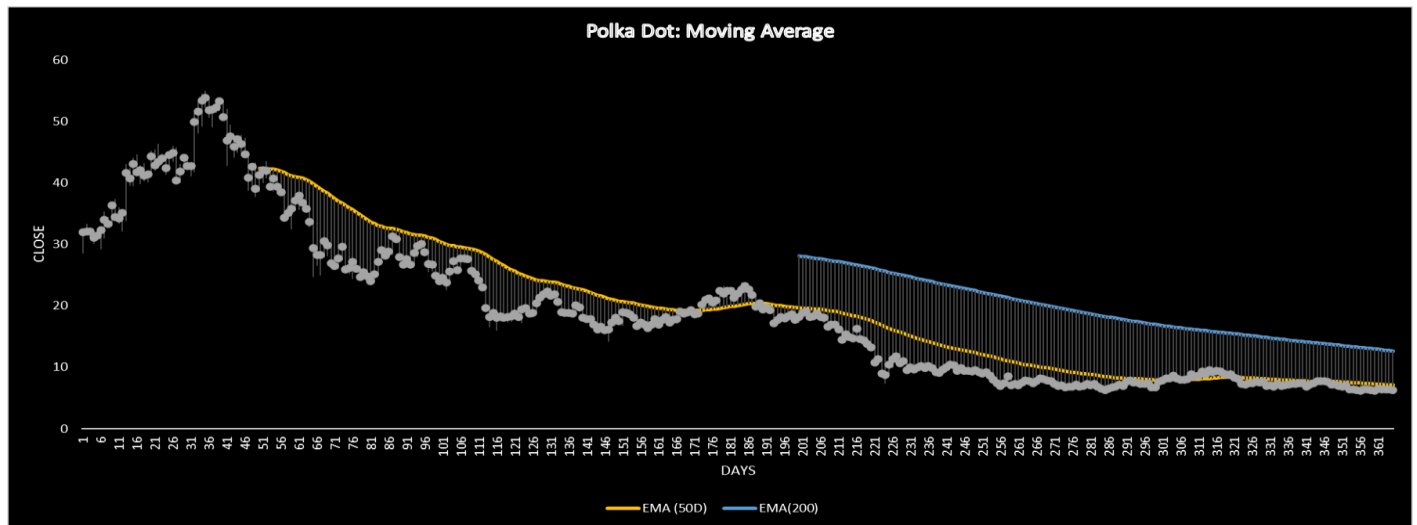


Figure 15: Polka Dot - Moving Average

APPENDIX – D: Analysis of Power Ledger

About the coin :

The Power Ledger Platform is a transparent, and interoperable energy trading platform that helps a basket of energy applications, with an exchangeable frictionless energy trading token called Sparkz. The Power Ledger Token is the enabler for the Power Ledger environment with custom private trading applications creating Sparkz in exchange for POWRs. Fiat currencies are used to buy and redeem sparkz on trading platforms hosting closed-loop exchanges for energy and Sparkz.

Metrics		Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	Strength	$[100 - (100/\{1 + RS\})]$	46.9
Exponential Average (EMA)	Moving	Closing price x multiplier + EMA (previous day) x (1-multiplier)	0.213 (50D*) 0.299 (200D*)
Simple Average (SMA)	Moving	$(P_1 + P_2 + P_3 + \dots + P_n)/n$	0.195 (20D*)
Bollinger Band: Upper Band		Upper Band: $MOV_{20} + (2 \times 20 \text{ Standard Deviation of Close})$	Figure 14: Polka Dot-Bollinger Band
Bollinger Band: Lower Band		Lower Band: $MOV_{20} - (2 \times 20 \text{ Standard Deviation of Close})$	

Table 4: Power Ledger Calculations

Graphs :

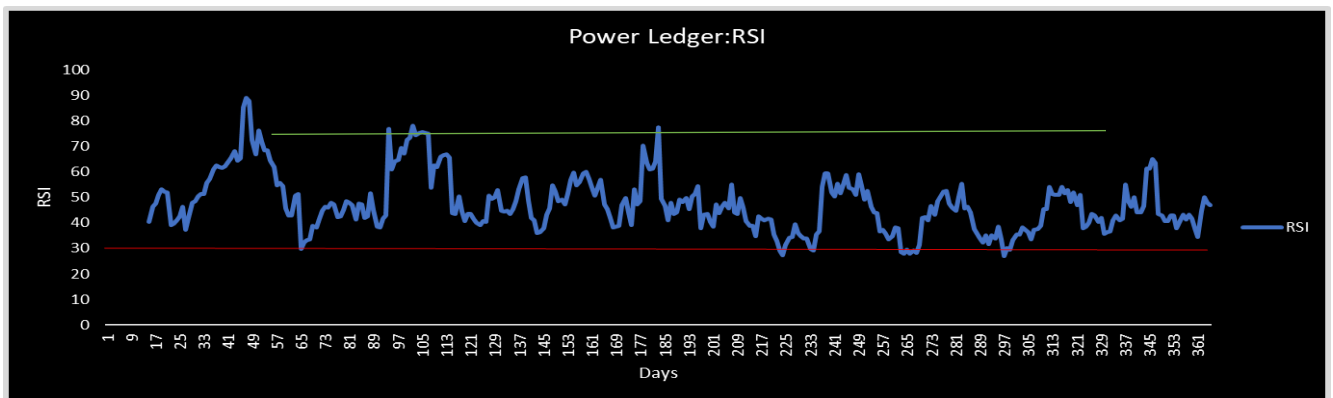


Figure 16: Power Ledger- RSI

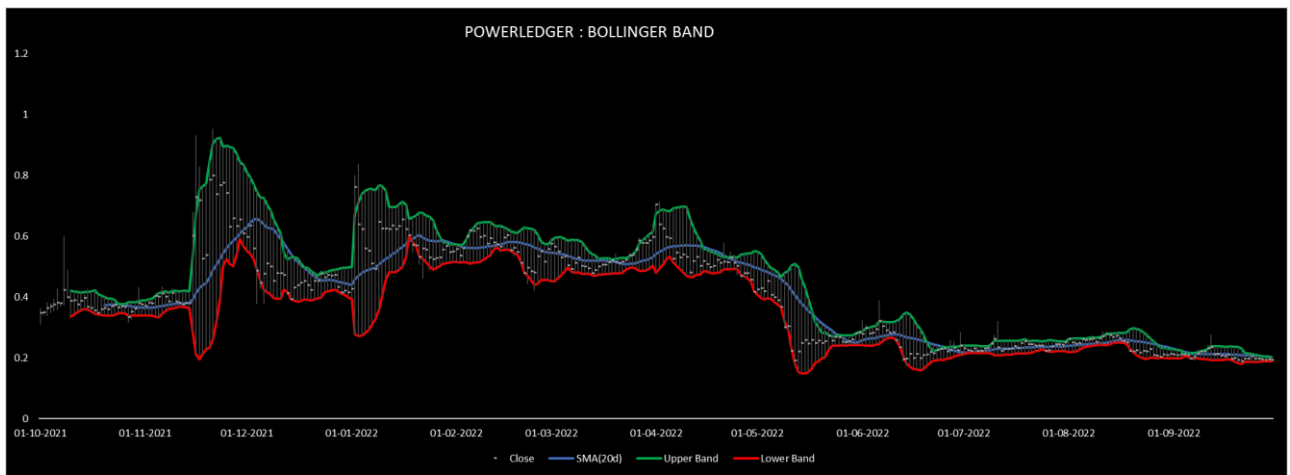


Figure 17: Power ledger - Bollinger Band

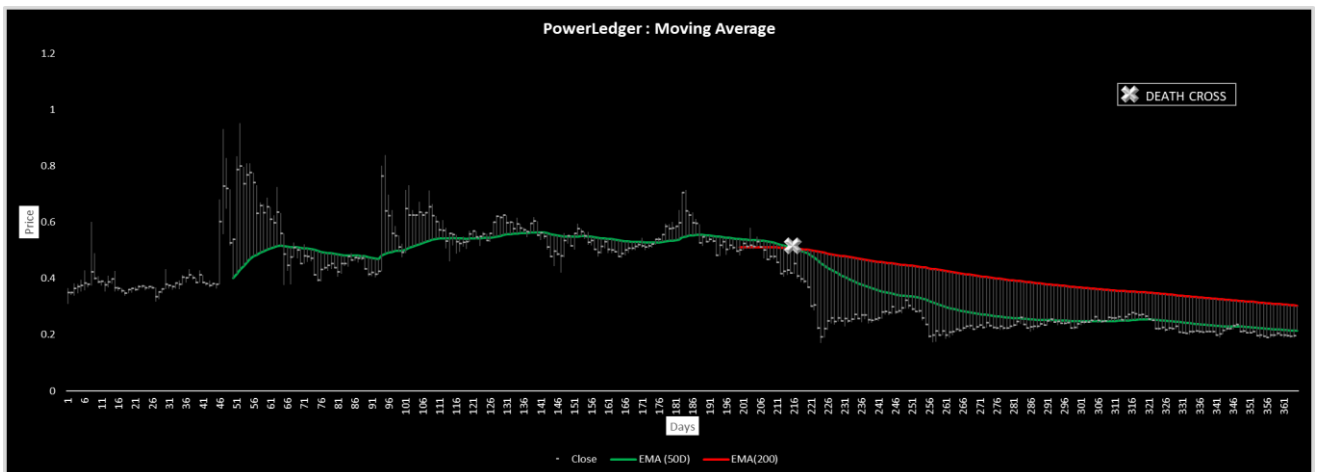


Figure 18: Power Ledger - Moving Average

APPENDIX – E : Analysis of Polygon

About the coin :

Polygon is a decentralised Ethereum scaling platform that allows developers to build scalable user-friendly dApps with low transaction fees without compromising on security. Polygon trusts in Web3 for all (Polygon, 2022). Polygon (previously Matic Network) is the first well-organized, easy platform for Ethereum scaling and infrastructure development. Its core component is Polygon SDK, a modular, flexible framework that supports building multiple types of applications (CoinMarketCap, 2022).

Calculations:

Metrics	Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	$[100 - (100/\{1 + RS\})]$	38.933
Exponential Moving Average (EMA)	Closing price x multiplier + EMA (previous day) x (1-multiplier)	0.805 (50D*) 1.002 (200D*)
Simple Moving Average (SMA)	$(P_1 + P_2 + P_3 + \dots + P_n)/n$	0.751 (20D*)
Bollinger Band: Upper Band	Upper Band: $MOV20 + (2 \times 20 \text{ Standard Deviation of Close})$	Figure 14: Polka Dot-Bollinger Band Figure 14: Polka Dot-Bollinger Band
Bollinger Band: Lower Band	Lower Band: $MOV20 - (2 \times 20 \text{ Standard Deviation of Close})$	

Table 5: Polygon Calculations

Graphs :

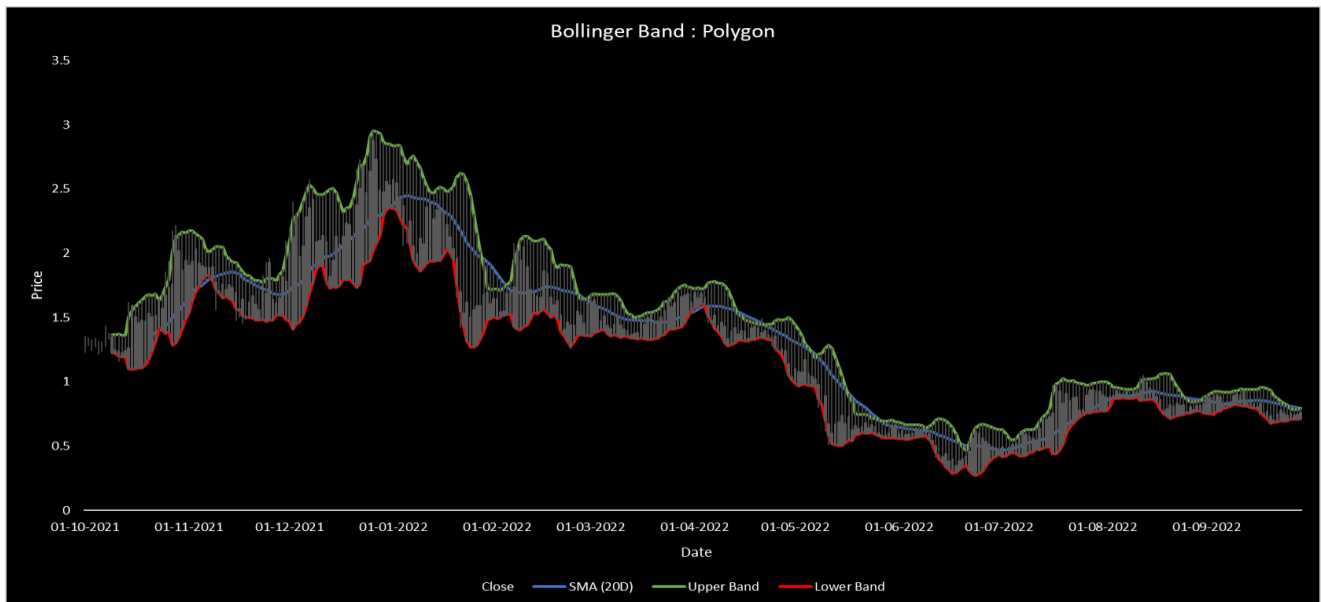


Figure 19 : Polygon - Bollinger Band

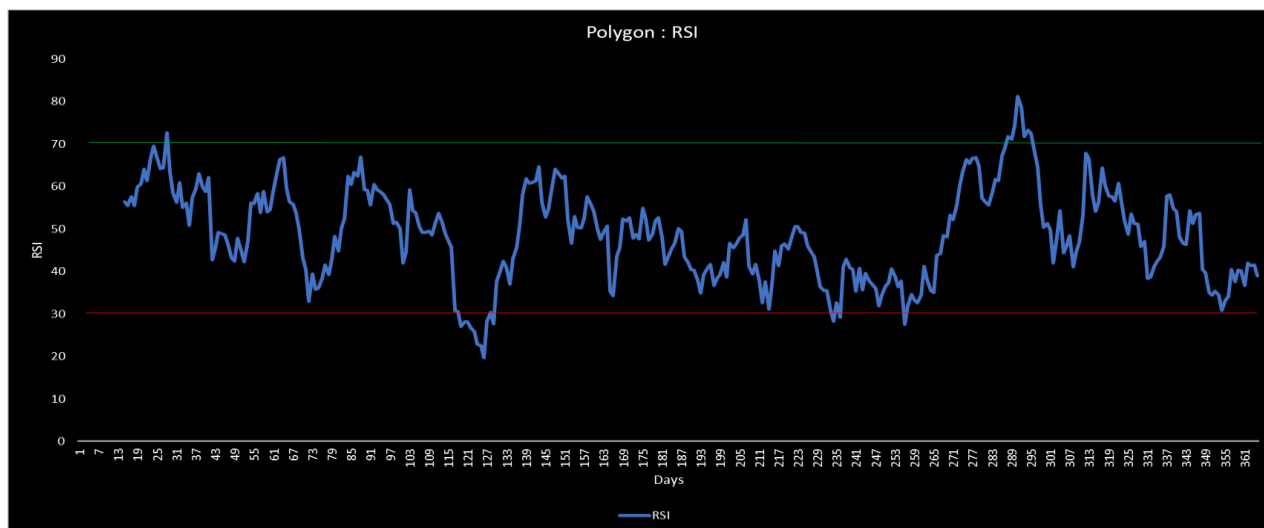


Figure 20 : Polygon - Relative Strength Index

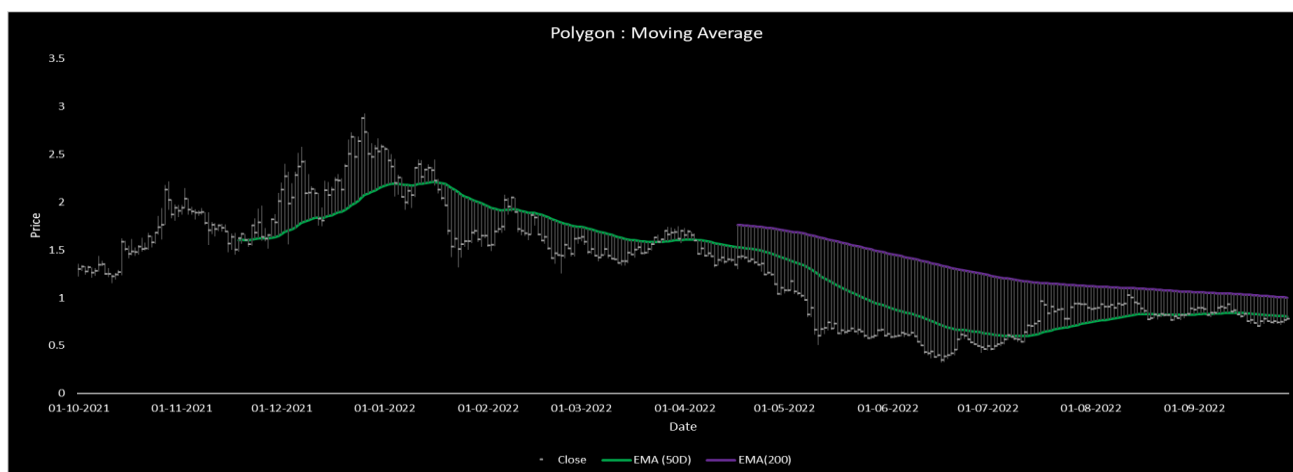


Figure 21: Polygon - Moving Averages

APPENDIX – F: Analysis of IOTA

About the coin:

IOTA is a distributed ledger but isn't actually a blockchain. It is a proprietary technology is called as Tangle, a system of nodes that confirm transactions. The foundation behind this platform says this offers far greater speeds than conventional blockchains — and an ideal footprint for the ever-expanding Internet of Things ecosystem. IOTA's aim is to become the de facto platform for executing transactions between IoT devices. (CoinMarketCap, 2022).

Calculations:

Metrics	Formula	Calculations (as on 30/9/2022)
Relative Strength Index (RSI)	$[100 - (100/\{1 + RS\})]$	65.052
Exponential Moving Average (EMA)	Closing price x multiplier + EMA (previous day) x (1-multiplier)	0.288 (50D*) 0.483 (200D*)
Simple Moving Average (SMA)	$(P_1 + P_2 + P_3 + \dots + P_n)/n$	0.286 (20D*)
Bollinger Band: Upper Band	Upper Band: $MOV20 + (2 \times 20 \text{ Standard Deviation of Close})$	Figure 14: Polka Dot-Bollinger Band Figure 14: Polka Dot-Bollinger Band
Bollinger Band: Lower Band	Lower Band: $MOV20 - (2 \times 20 \text{ Standard Deviation of Close})$	

*D denotes days

Table 6: IOTA Calculations

Graph:

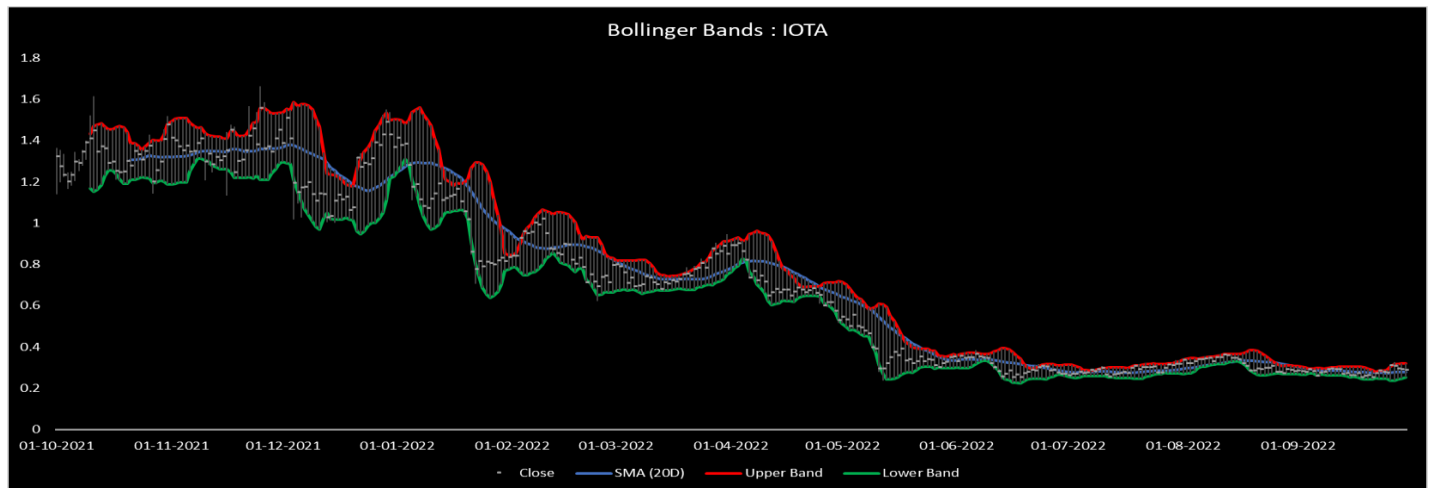


Figure 22: Bollinger Band - IOTA

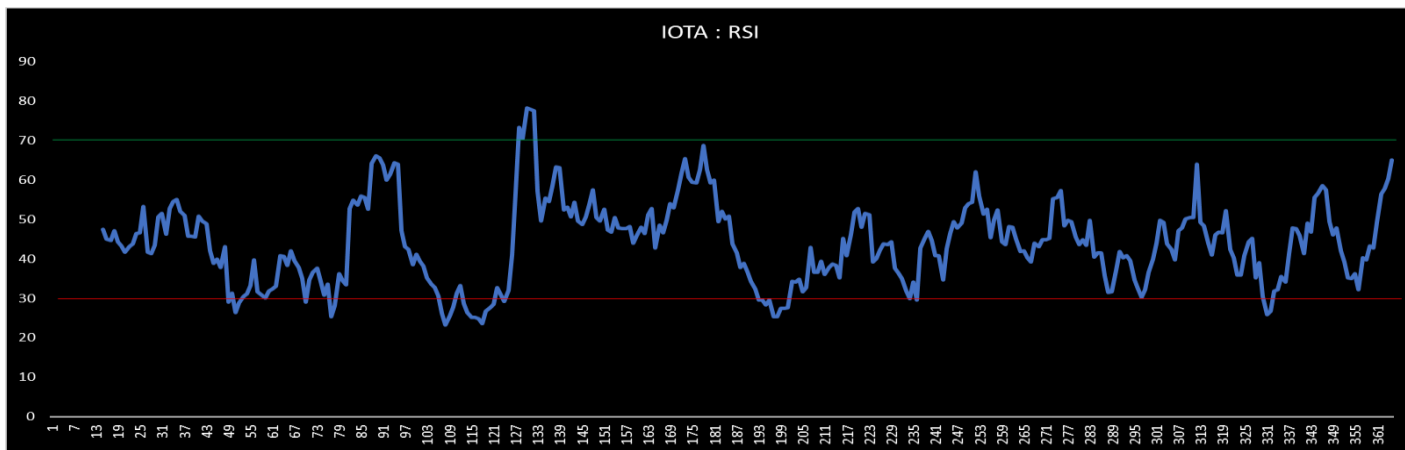


Figure 23: Relative Strength Index - IOTA

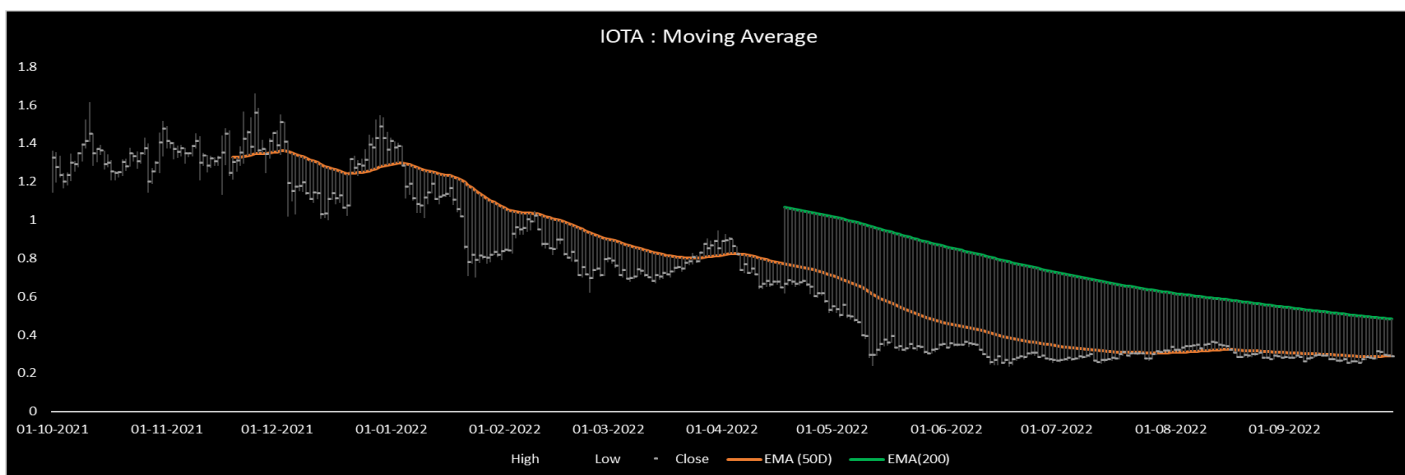


Figure 24: IOTA - Moving Average

APPENDIX – G: PORTFOLIO Analysis

Coin	Quantity	Amount Invested	Coin PRICE as on 1st Oct	Purchase Value	Coin Value as on 31 Oct	Holding Value	Profit / Loss
BITCOIN	131.7827	2500000	18,970.62	25,00,000.00	20795.3200	27,40,463.94	2,40,463.94
ETHEREUM	1914.0954	2500000	1306.1	25,00,000.00	1630.4500	31,20,836.84	6,20,836.84
POLKA DOT	240770.4650	1500000	6.23	15,00,000.00	6.8200	16,42,054.57	1,42,054.57
POLYGON	1581944.7400	1500000	0.9482	15,00,000.00	0.9281	14,68,202.91	-31,797.09
POWER LEDG	5205622.0700	1000000	0.1921	10,00,000.00	0.2076	10,80,687.14	80,687.14
IOTA	3479471.1200	1000000	0.2874	10,00,000.00	0.2640	9,18,580.38	-81,419.62
TOTAL		10000000				1,09,70,825.78	9,70,825.78

Figure 25: Portfolio Dashboard

Metrics	Bitcoin	Ethereum	Polygon	Polka Dot	Power Ledger	IOTA
Portfolio Weights	25%	25%	15%	15%	10%	10%
Mean	0.21%	0.65%	0.60%	0.21%	0.23%	-0.39%
Variance	0.000285033	0.000809428	0.000878	0.0006	0.000597663	0.000434
Correlation	0.97403042		0.977066591		0.968247309	
Covariance	1632358.645		0.254316018		0.000826278	
Portfolio Variance	0.000122629		0.00005055		0.000016443	
Risk free rates	0.25%		0.10%		0.20%	
Portfolio Sharpe Ratio	0.062309144		0.30802		0.293465081	
Portfolio Mean	0.32%					

Figure 26: Portfolio Analysis

The crypto have been classified on the basis of the market cap with Bitcoin and Ethereum being on the top with an allocation of 25% of 10M, the mid cap coins being Polygon and Polka Dot with a 15% of allocation and the small cap coins – Power Ledger and IOTA with a weight of 10% each. The crypto were purchased on 1st Oct 2022 at a low price and to understand the level of risk involved with Large, Mid and Low cap assets – Portfolio variance has been calculated.

COINS	WEIGHTS	STANDARD DEVIATION	WEIGHTED STANDARD DEVIATION	DAILY AVERAGE RETURN	EXPECTED YIELD RATE(YEAR)	MONTHLY YIELD RATE
BITCOIN	25%	0.016882916	0.004220729	0.21%	53.46%	6.36%
ETHEREUM	25%	0.028450441	0.00711261	0.65%	162.55%	19.35%
POLYGON	15%	0.023955324	0.003593299	0.60%	150.17%	17.88%
POLKA DOT	15%	0.029632962	0.004444944	0.21%	53.56%	6.38%
POWER LEDGER	10%	0.024447143	0.002444714	0.23%	57.36%	6.83%
IOTA	10%	0.020830382	0.002083038	-0.39%	-99.03%	-11.79%
TOTAL	100%					
EXPECTED PORTFOLIO RETURN (YEARLY)	80.394362304341500%					
EXPECTED PORTFOLIO RETURN(MONTHLY)	9.5707574171835200%					
PORTFOLIO VARIANCE	1.72%					
Notes:	ETH	IOTA	POLKA DOT	POLYGON	POWER L...	BTC
M1	0.0141335	0.008788814	0.015721493	0.010897465	0.01549978	0.0155479
M2	0.000297375					

Figure 27: Risk and Expected Return Calculation

Covariance						
	ETH	IOTA	POLKA_DOT	POLYGON	POWER_L...	BTC
ETH	11271.19	-0.036816	17.19794	4.808819	0.579332	56239.33
IOTA	-0.036816	0.000150	0.001393	-0.000184	3.30E-05	1.216201
POLK...	17.19794	0.001393	0.052026	0.005499	0.001287	104.3631
POLY...	4.808819	-0.000184	0.005499	0.002810	0.000249	24.05010
POW...	0.579332	3.30E-05	0.001287	0.000249	5.31E-05	3.225561
BTC	56239.33	1.216201	104.3631	24.05010	3.225561	325756.7

Figure 28: Variance-Covariance Matrix

Note: This table was calculated on **EViews** by the author with data source from CoinMarketCap,2022.

APPENDIX- H : ASSET SELECTION CRITERIA

Head	Large Cap Crypto	Mid Cap Crypto	Small Cap Crypto
Assumptions	> \$10 Billion	\$1 Billion to \$10 Billion	< \$1 Billion
Risk Level	Less	High	Vulnerable to dramatic swings
Investor	Risk Averse	Risk Averse	Risk Averse
Time Horizon	Short- Term	Short- Term	Short- Term
Total Amount in \$'s	10,000,000		
% Of Allocation	50%	30%	20%
Amount Allocated in \$'s	500,000,000	300,000,000	200,000,000

Figure 29: Asset Selection Criteria

Since Dentistry.co.uk first published a story about Dentacoin in mid-December, it's stock price rose by around 900%, only for this figure to pretty much half (at the time of writing).

Prices for all crypto can be very volatile. There is already talk of a cryptocurrency bubble that is due to burst. With dentacoin bouncing around quite radically, we are not convinced that there are enough people who believe in the product to keep its price high. Though its proponents claim that cryptocurrency is 'mined' using complex mathematical formulae, they are reluctant to call it a commodity.

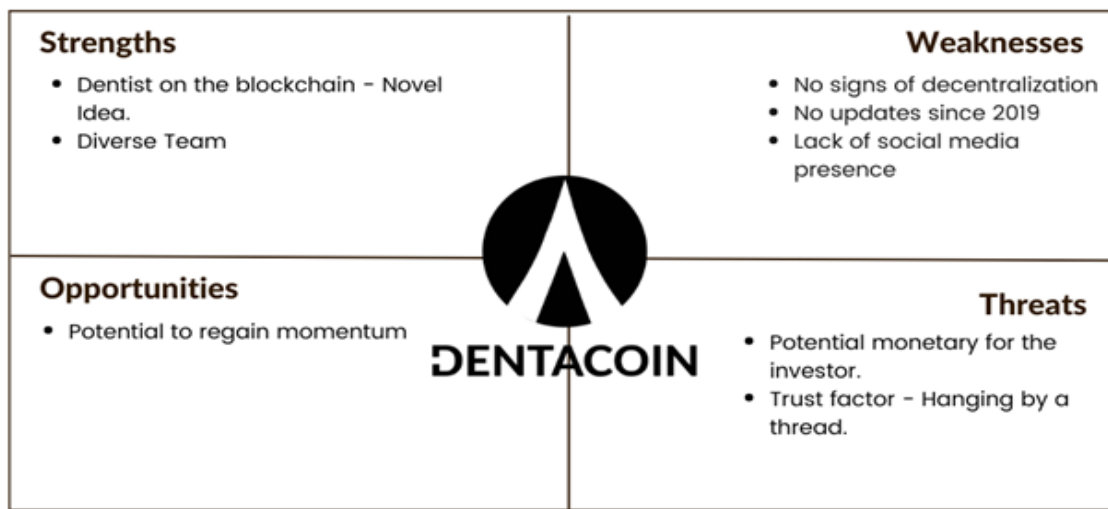


Figure 30: SWOT - Denta Coin

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