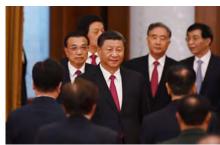
Social Listening:

Cryptocurrency Analysis











"ENODO Global has the most sophisticated technical indicator for the cryptocurrency market." "Sentiment-based decision-making can be a great indicator considering that the cryptocurrency market is still relatively new, and many investors are still exposed to the "herd effect"

SOCIAL LISTENING

OVERVIEW

Astronomical returns in the cryptocurrency market generate excitement with investors, however, the decentralized unregulated, and highly volatile nature of cryptocurrency prevents investors from making prudent investments based on sound fundamentals. To fill that void, ENODO Global built a customized Cryptocurrency Matrix that uses social listening, advanced data analytics, AI, and machine learning to aggregate disparately-sourced market signals and produce timely, accurate, sentiment-based investment indicators. The matrix establishes a valuation framework based upon proven capabilities that delivers investors a competitive advantage by providing the ability to accurately measure and forecast an asset's intrinsic value and determine their value trajectory in near real-time.

KEY FINDINGS

- Public perception is the leading indicator and the single most important factor in determining the value of cryptocurrency
- There is a direct correlation between public sentiment and cryptocurrency valuations
- Cryptocurrency valuations are highly influenced by specific events and individuals (e.g., <u>Paul Tudor Jones</u>, <u>China mining crackdown</u>, <u>El Salvador default currency</u>, <u>Tesla announcement</u>)
- ▷ Asset values are commonly based on speculation

DATA ANALYTICS

Analysts applied a customized data collection and analysis platform to obtain and synthesize over 4.9 million data points in English, Spanish, German, French, Arabic, Mandarin, Portuguese, and Hindi from January 1, 2021 to June 13, 2021. Data sources included 1.7 million news sites, 1.1 million Tweets, 923,827 Facebook posts, 512,092 RSS Feeds, 312,422 Instagram posts, 201,739 YouTube comments, 133,028 TikTok videos, 91,431 YouTube comments, and 26,287 Parler posts to produce this analysis.

CRYPTOCURRENCY MATRIX

Delivers an intuitive, visual representation of the aggregated cryptocurrency data set and is designed to measure the performance of the top five (5) cryptocurrencies. The matrix ranks individual cryptocurrencies by volume of discussions and a customized index that is produced from a proprietary algorithm based on positive, negative, and neutral sentiment polarities of each data point. In addition, it reveals the trending topics associated with each coin, which are measured by percentage of overall discussions.

The matrix also reveals the trending topics associated with each cryptocurrency, which are measured by the percentage of overall discussions and illustrates the direct correlation between public perception and an asset's valuation. Most importantly, it delivers unique insights for cryptocurrency investors. For example, Litecoin is the best investment option due to its operating speed that is 4X faster than Bitcoin and its neutral sentiment (38%)—the highest among its competitors, which creates the greatest opportunity to shape perception.

Social Listening: Cryptocurrency						(
Volume Sentiment Cryptocurrency Index Topic Modeli				Topic Modeling (%)					
Number of Discussions	Rank	Positive	Negative	Neutral	Index	Rank	Topic 1	Topic 2	Topic 3	Other
2,314,081	1	37%	53%	10%	-0.1778	3	Cyberattack Ransom [51%]	Bitcoin Conference [26%]	Tax Loophole [11%]	12%
812,820	2	43%	38%	19%	0.0617	1	Pricing Bubble [43%]	900% Increase in Value [24%]	Elon Musk [18%]	15%
762,308	3	32%	42%	26%	-0.1351	2	FBI Seizure [53%]	Record High Price [21%]	Elon Musk [16%]	10%
313,432	4	25%	37%	38%	-0.1935	4	Bitcoin Alternative [48%]	Lower Price [21%]	Low Trading Volume [17%]	14%
298,201	5	24%	67%	9%	-0.4725	5	Frozen Accounts [41%]	Money Laundering [29%]	Binance Smart Chain [16%]	14%
	Number of Discussions 2,314,081 812,820 762,308 313,432	Number of Discussions Rank 2,314,081 1 812,820 2 762,308 3 313,432 4	Number of Discussions Rank Positive 2,314,081 1 37% 812,820 2 43% 762,308 3 32% 313,432 4 25%	Number of Discussions Rank Positive Negative 2,314,081 1 37% 53% 812,820 2 43% 38% 762,308 3 32% 42% 313,432 4 25% 37%	Volume Sentiment Number of Discussions Rank Positive Negative Neutral 2,314,081 1 37% 53% 10% 812,820 2 43% 38% 19% 762,308 3 32% 42% 26% 313,432 4 25% 37% 38%	Volume Sentiment Cryptocur Number of Discussions Rank Positive Negative Neutral Index 2,314,081 1 37% 53% 10% -0.1778 812,820 2 43% 38% 19% 0.0617 762,308 3 32% 42% 26% -0.1351 313,432 4 25% 37% 38% -0.1935	Volume Sentiment Cryptocurrency Index Number of Discussions Rank Positive Negative Neutral Index Rank 2,314,081 1 37% 53% 10% -0.1778 3 812,820 2 43% 38% 19% 0.0617 1 762,308 3 32% 42% 26% -0.1351 2 313,432 4 25% 37% 38% -0.1935 4	Volume Sentiment Cryptocurrency Index Number of Discussions Rank Positive Negative Neutral Index Rank Topic 1 2,314,081 1 37% 53% 10% -0.1778 3 Cyberattack Ransom [51%] 812,820 2 43% 38% 19% 0.0617 1 Pricing Bubble [43%] 762,308 3 32% 42% 26% -0.1351 2 FBI Seizure [53%] 313,432 4 25% 37% 38% -0.1935 4 Bitcoin Alternative [48%]	Volume Sentiment Cryptocurrency Index Topic Modeling (9 Number of Discussions Rank Positive Negative Neutral Index Rank Topic 1 Topic 2 2,314,081 1 37% 53% 10% -0.1778 3 Cyberattack Ransom [51%] Bitcoin Conference [26%] 812,820 2 43% 38% 19% 0.0617 1 Pricing Bubble [43%] 900% Increase in Value [24%] 762,308 3 32% 42% 26% -0.1351 2 FBI Seizure [53%] Record High Price [21%] 313,432 4 25% 37% 38% -0.1935 4 Bitcoin Alternative [48%] Lower Price [21%]	Volume Sentiment Cryptocurrency Index Topic Modeling (%) Number of Discussions Rank Positive Negative Neutral Index Rank Topic 1 Topic 2 Topic 3 2,314,081 1 37% 53% 10% -0.1778 3 Cyberattack Ransom [51%] Bitcoin Conference [26%] Tax Loophole [11%] 812,820 2 43% 38% 19% 0.0617 1 Pricing Bubble [43%] 900% Increase in Value [24%] Elon Musk [18%] 762,308 3 32% 42% 26% -0.1351 2 FBI Seizure [53%] Record High Price [21%] Elon Musk [16%] 313,432 4 25% 37% 38% -0.1935 4 Bitcoin Alternative [48%] Lower Price [21%] Low Trading Volume [17%]

Data Analytics: Analysts collected over 4.9 million data points in English, Spanish, German, French, Arabic, Mandarin, Portuguese, and Hindi from January 1, 2021 to June 7, 2021 that included 1.7 million news sites, 1.1 million Tweets, 923,827 Facebook posts, 512,092 RSS Feeds, 312,422 Instagram posts, 201,739 YouTube comments, 133,028 TikTok videos, 91,431 YouTube comments, and 26,287 Parler posts to produce this analysis.

Table 1. Cryptocurrency Matrix

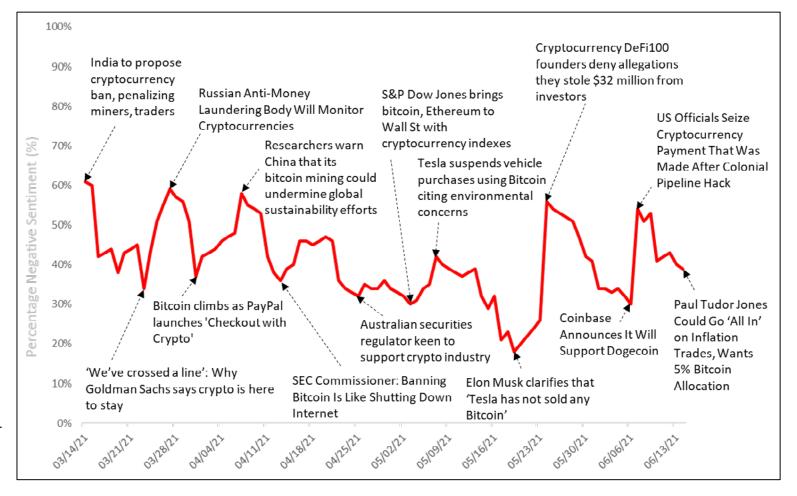


Figure 1. Trend Analysis

TREND ANALYSIS

Data from the matrix is used to produce in-depth analyses and tailored reports, which includes near real-time trend analysis. Figure 1 provides a visual representation of negative public sentiment associated with cryptocurrency conducted over a three month period. It illustrates major events that impacted public sentiment, the direct correlation between specific events and public perception, and highlights the volatility of the cryptocurrency market—29% average fluctuation each month.

SENTIMENT ANALYSIS

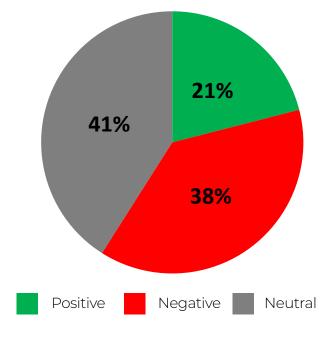
Measured public perception and attitudes associated with crypto-currency from a data set of global discussions between January 1, 2021 to June 9, 2021:

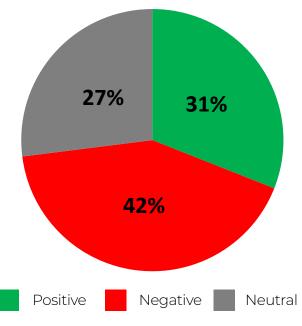
Global:

- Positive sentiment (21%) is linked to interest in trading cryptocurrency during the COVID pandemic
- Negative sentiment (38%) is attributed to concerns about cryptocurrency price volatility and its long-term stability
- Neutral sentiment (41%) is linked to a lack on knowledge or understanding about cryptocurrency—specifically transactions

U.S.:

- Positive sentiment (31%) is linked to interest among millennial investors (e.g. <u>WallStreetBets</u> on Reddit)
- Negative sentiment (27%) is attributed to concerns regarding illicit activities associated with cryptocurrency (e.g. bitcoin ransomware payments)
- Neutral sentiment (42%) is linked to ambiguity; however, it provides an opportunity to shape public perception associated with individual cryptocurrencies





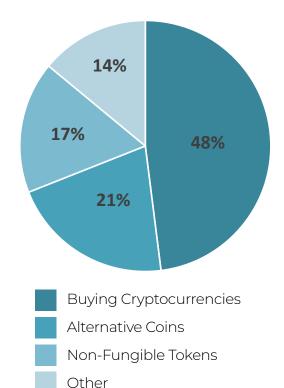


"In a May 2021 report titled 'Crypto: A New Asset Class?', we see financial giant @GoldmanSachs u-turn on its previously pessimistic sentiment of cryptocurrency as a potential institutional asset class."

TOPIC MODELING

Revealed the top four (4) most discussed topics associated with cryptocurrency in the United States:

- Buying Cryptocurrencies:
 48% commented on buying individual coins (e.g. Litecoin)
- Alternative Coins:
 21% discussed alternatives to
 Bitcoin
- Non-Fungible Tokens:
 17% expressed interest in using cryptocurrency to buy NFTs
- Other (14%)



"#Bitcoin now a legal tender in El Salvador...just the beginning. Cryptocurrency and all its counterparts will be utilized heavy here in the very near future."



VOLUME OF DISCUSSIONS

Analyzed each cryptocurrency and ranked them based on the volume of discussions:

- Bitcoin generated the highest volume of discussions
- ▶ 46% of all discussions on cryptocurrency
- Popularity influenced by celebrities and institutional investors (e.g. Paul Tudor Jones)
- ▶ Increasing acceptance globally (e.g. El Salvador)

	Volume			
Cryptocurrency	Number of Discussions	Rank		
Bitcoin	2,314,081	1		
Dogecoin	812,820	2		
Ethereum	762,308	3		
Litecoin	313,432	4		
Binance Coin	298,201	5		
Other	401,229			

Table 2. Volume of Discussions

"Bitcoin continued on a volatile course on Friday after the top banking regulator proposed to classify the flagship crypto as the riskiest of assets."

"Crypto is characterized as the Wild West of financial markets at the moment – even though US regulators have been trying to rein in the sector, their attempts have been underwhelming."

"#cryptocurrency is just getting started.
Even though its becoming mainstream, we are still VERY early to the party."

SENTIMENT

Measured the positive, negative, and neutral sentiment polarities for the five (5) leading cryptocurrencies:

- Negative sentiment is driven by uncertainty in making investment decision
- ▶ 67% of all price changes linked to popularity
- Positive sentiment is not indicative of performance
- ▶ Dogecoin is influenced by speculation by rich "play traders"
- Neutral sentiment provides investors the ability to shape public perception (e.g. increase asset value)

"The price of
Bitcoin dropped
below \$35,000 on
Saturday as continued
pressure by the
Chinese authorities on
cryptocurrency mining."

	Sentiment			
Cryptocurrency	Positive	Negative	Neutral	
Bitcoin	37%	53%	10%	
Dogecoin	43%	38%	19%	
Ethereum	32%	42%	26%	
Litecoin	25%	37%	38%	
Binance Coin	24%	67%	9%	

Table 3. Cryptocurrency Coin Sentiment

CRYPTOCURRENCY INDEX

Used a proprietary algorithm to create an Identified trending topics associated Index that ranks individual coins based on public sentiment:

- Dogecoins #1 ranking is influenced by its popularity and market speculation
- Litecoin and Binance Coin are not as popular among high-frequency traders
- > Offers superior value for customers (e.g. Litecoin trading is 4X faster than Bitcoin)

TOPIC ANALYSIS

with each cryptocurrency and weighed them based on volume of discussions:

- Security and pricing consistently rank among the top two (2) topics across all cryptocurrencies
- Key influencers significantly impact the popularity of cryptocurrencies
 - ▷ Elon Musk's Tweets have a direct impact on volume of discussions. sentiment, and price



"Obscure Cryptocurrency Uranus token sees 75,224 Percent Increase in Trading Volume Because of Elon Musk"

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	Cryptocurrency Index			
Cryptocurrency	Index	Rank		
Bitcoin	-0.1778	3		
Dogecoin	0.0617	1		
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Litecoin	-0.1935	4		
Binance Coin	-0.4725	5		
Other				

	Topic Modeling (%)						
Cryptocurrency	Topic 1	Topic 2	Topic 3	Other			
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Table 4. Cryptocurrency Index

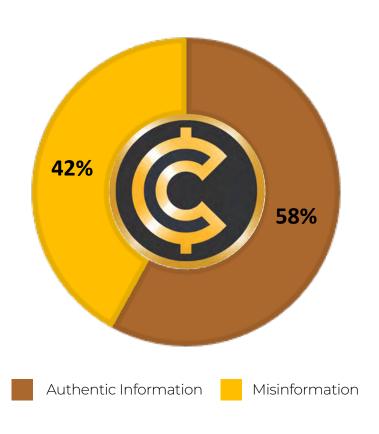
Table 5. Cryptocurrency Topic Modeling

"One of our favorite quotes from Warren Buffett, and it applies perfectly to the crypto landscape." Market movements are highly dependent on sentiment, use that to your advantage"

MISINFORMATION

Identified how misinformation is used to shape and influence public perceptions across different social media platforms:

- 58% of information on cryptocurrencies were posted by fake accounts, bots, and trolls
 - ▶ 43% were "Crypto Bots" that bought cryptocurrencies on behalf of investors
- 42% were posted by cryptocurrency investors
 - ▶ 67% reacted to social media posts by individuals (e.g. Elon Musk's Tweets on Bitcoin)







"The rise of #technology is always ripe with speculation. That's what #cryptocurrency is; technology. Don't lose sight of underlying fundamentals, technology always beats speculation."

"Placing a valuation on cryptocurrency is difficult now and may always be challenging, given the extreme volatility of the asset."



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