Abstract –

This paper is an analysis of digital currencies, including cryptocurrencies, and their potential as monetary instruments. The analysis shows that the concept of a digital currency is a fallacy. Currency, in the form of coins and banknotes, can be viewed as a physical representation of a monetary unit of account. Currency cannot be digitized, as this would inevitably mean creating a financial record keeping system based on accounts. Cryptocurrencies are not currencies at all but accounting systems for non-existent assets. Central bank digital currency would practically mean bank accounts at the central bank. Whether the public should have access to such accounts, and whether monetary transactions should be allowed to be made anonymously or privately, are questions of policy and unrelated to cryptocurrencies or their underlying technology.

Objective –

To understand the importance as well as to explore more into digital currency.

Introduction –

Cryptocurrencies are digital currencies that make use of cryptography to regulate the creation and transactions of exchange units. Generally, cryptocurrencies are completely decentralized in the sense that they are not created by any central authority and so, in principle, are immune to central-bank interference. At present, it is estimated that the transaction volume in cryptocurrencies exceeds 100 million USD per day. Cryptocurrencies such as bitcoin, ethereum, litecoin have recently both gained and fallen rapidly in value. Such price volatility is presumably driven by changes in the policy and practices of private firms and individuals as well governments that affect their supply; as well as sentiment and linkage factors not directly related to their fundamental value. Cryptocurrencies have understandably attracted a plethora of attention from investors, regulators and the media, with attention from academia correspondingly growing.

What is Technical Analysis (TA), Fundamental Analysis and Why Are They Important in Crypto Investing / Trading -

Technical Analysis (TA) describes analyzing historic price and volume trends to predict the future price movements of assets. This form of analysis is accomplished by applying mathematical calculations called "**technical indicators**" to the historic and current price and volume data of an asset to detect and analyze trends (to preform "**trend analysis**"). Although this data can all be considered algorithmically, it is common for analysts to apply these indicators to charts (thus creating a way to analyze trends visually; to preform "**chart analysis**"). Popular technical indicators used by technical analysts include potentially familiar terms like Moving Averages (MA), Elliot Waves (EW), and the Relative Strength Index (RSI).

For example, in the image below, a version of the average price of Bitcoin over 12 and 26 days is plotted on the chart below to offer a visual of the direction of Bitcoin's price (specifically this chart looks at 12 and 26 day exponential moving averages to give us a sense of how they are converging and diverging). Technical analysis can also analyze other data, for example open interest in futures trading. For simplicity's sake this page page refers to all trends studied by technical analysts as "price and volume" trends.

The Core Concept Behind Technical Analysis. The core idea here being:

1. What has happened in the past can give us an idea of what will happen in the future (it allows us to calculate odds, not see the future of course).

2. The next wave of investors will tend to follow the trends of the last wave.
3. Human behavior in markets is somewhat predictable.
4. Therefore, studying factors like past volume and price trends along side the current volume and price, can tell us about the likelihood of future volume and price trends.
5. Since the above is true, it can help to plot everything on a chart to get a quick and simple visual of potential paths the price might follow.

Different Types of Digital Currencies -

Bitcoin - has broken down of both moving averages and the small trendline support. This shows that the sellers have the upper hand in the short-term. However, if the bulls manage to scale the price back above the trendline and the moving averages, it will indicate demand at lower levels. The longer the price remains below the downtrend line of the descending triangle and the moving averages, the greater are the chances of a retest of the critical support zone of $5,900–$6,075.

A break out of the downtrend line and $6,831.99 can propel the pair to $7,400, which in turn might act as a strong resistance. We expect the BTC/USD pair to make a decisive move within the next week. As the price is close to our buy levels, we suggest traders hold the long positions with the stops at $5,900.

Ethereum - has been trading between $200 and $250 since Sept. 14. The moving averages have flattened out which shows a balance between the buyers and the sellers.

The 50-day SMA is a critical overhead resistance that hasn't been scaled since May 24. A break out of this level will be the first indication of the start of a new uptrend that will pick up momentum on a close (UTC time frame) above $322.57.

On the downside, if the bears force the price below $200, the ETH/USD pair can retest the recent low of $167.32. We shall wait for buying to resume before recommending any long positions on it.

Ripple - is currently in the center of the range of $0.4255–$0.625. The 20-day EMA is a strong support, below which the cryptocurrency can drop to $0.4255.

A consolidation after a sharp run-up is to be expected. The XRP/USD pair might resume its uptrend if it breaks out and sustains above $0.625.

Both moving averages are sloping up and the RSI is still in the positive territory, which is a bullish sign. Therefore, the traders can hold the long positions with the stops at $0.42.

Litecoin - continues to trade inside the range of $49.466–$69.279. A consolidation after a long downtrend shows that selling has exhausted but the buyers are still not back in full force.

Small rallies, close to the upper end of the range attract profit booking by the short-term traders and drops to the bottom of the range attract buying.

If the bulls break out of the range, we anticipate the start of a new uptrend. However, if the bears manage to sink the LTC/USD pair below the bottom of the range, the downtrend will resume. The traders can wait for a break out of the range to turn positive. Until then, it is best to remain on the sidelines.

IOTA - has been trading inside a range of $0.5000–$0.6170 since Sept. 6. An attempt to break out on Sept. 21 could not sustain and prices turned back the very next day.

Both moving averages are flat and the RSI is marginally in the negative zone. This shows a state of equilibrium between the bulls and the bears.

The IOTA/USD pair will turn bullish if it sustains above $6.5 and will turn bearish if it slumps below $5. It is difficult to predict whether the pair will break out or break down. Traders who don't have a position should wait for the breakout to sustain before initiating any fresh positions. Others, who are long, should keep a stop loss at around $4.6.

Technical Analysis doesn't analyze the fundamentals of an asset (although any analyst worth their salt will ALSO do this). Instead, TA is centered around charting and using technical indicators to better predict the likelihood of short-term, medium-term, and long-term trends based on historic and current price and volume data. Here we must stress that technical analysis isn't about certainty, it is about finding future likelihoods based on past trends.

OVERCOMING THE PITFALL: Cryptocurrencies implement many important ideas: digital payments with no central authority, immutable global ledgers, and long-running programs that have a form of agency and wield money. These ideas are novel yet based on sound principles. Entrepreneurs, activists, and researchers have envisioned many powerful applications of this technology, but predictions of a swift revolution have so far proved unfounded. Instead, the community has begun the long, hard work of integrating the technology into Internet infrastructure and existing institutions.

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