Crypto Currency: An Illusion

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Abstract

As the economy develops; there will be new inventions and innovation. Over the period of time the mode of exchange like, money, currencies have changed. The currencies in the forms of gold, copper, steel, aluminum coins, paper money, plastic money and now online tradable currencies. The modern versions of currencies which are traded and exchanged only through computer system are called as crypto currency. It is newly introduced by an unknown person and being in to existence since 2009, a decentralized digital cash system. This is an online transaction between peer to peer (P2P) and managed by miners, who in turn get crypto currency for their services. It is very confidential, works only through secret passwords. It has a distinct feature, advantages, and disadvantages. There are many types of crypto currencies across the globe, but most known are Bit coin and Ripple. Seeing its disadvantages many countries have banned from circulation in their countries, some argue that these are not the currencies but are commodities. These are not regulated and hence there is no approval from Indian Central government and RBI. Crypto currencies are very volatile; hence Indian Government has warned people not to trade in Bit coin. A committee has been set up to study the merits and demerits, to introduce in India in the name of Laxmi Crypto currency, for making cash less society. This paper will throw light about the meaning, features, risks involved, trading system, advantages and disadvantages of crypto currencies.

Keywords — *Bit Coins, Exchanges, Wallets, miners, virtual currencies (VC).*

I. INTRODUCTION

A. Crypto Currency

A distributed, decentralized digital currency based on cryptographic principles, it acts as a currency. Money of the future, global phenomenon, banks, governments, corporate is aware of its existence and importance. "Virtual currencies, have captured the imagination of some, struck fear among other, confused the rest". Satoshi Nakamoto is an unknown inventor of Bit coin. A P2P electronic cash system, which uses P2P network to prevent double spending, a complete decentralized with no server or central authority, a decentralized digital cash system, a payment network with accounts, balances, transaction. Payment network has to solve to prevent double spending; one entity spends the same amount twice, done by a central server who keeps record

about the balances. Every person of the network to do this, have a list with all transactions to check if future transactions are valid or an attempt to double spend. If the peers disagree about only one single, minor balance, everything is broken hence absolute consensus is required, a central authority to declare the correct state of balance. A digital asset designed to work as a medium of exchange using cryptography to secure its transactions, control the creation of additional units, verify the transfer of asset[a subset of digital currencies, alternative currencies, virtual currencies.] Bit coin is the first decentralized crypto currency (alt coins) a blend of bit coin alternative. Its derivatives use decentralized control against centralized electronic money or central banking systems. The decentralized control for using bit coin's, block chain transaction database as distributed ledger. It uses cryptography for security, difficult to counterfeit, an organic nature, not issued by any central authority, immune to government interference or manipulation, but users have used for illegal activities like money laundering, tax evasion. Due to the success of bit coin, at present there are more than 1300 crypto currencies in the world. It has limited entries in a database hence no one can change without fulfilling the basic conditions. A P2P electronic cash system, a digital cash, to prevent double spending, totally decentralized with no server or central authority, to prevent that one entity spends the same amount twice, done by a central server who keeps record about the balances, every single entity of the network to do this job, have a list with all transactions to check if future transactions are valid or an attempt to double spend, need absolute consensus. The intention is to have consensus without a central authority. The transaction is known immediately by all, gets confirmed, confirmation is essential, if unconfirmed, it is pending and can be forged, confirmed transactions cannot be forged, it can't be reversed, becomes part of unchangeable record of historical transaction of block chain. Only the miners can confirm transactions, stamp a legit, spread in the network, after confirmation every party has to add to database, miners are paid crypto currencies for their duties. In the future, we will see national governments take large steps towards instituting a cashless society, transactions using centralized digital currencies, and the decentralized crypto currencies will be increased in all sectors. Decentralized produced by the entire system by all, at a rate which is defined when the system is created and will be publicly known. Technical system is

created by crypto currency owner, particularly Satoshi an inventor of Bit coin. The safety, integrity, ledger balances are maintained by a community of mutually distrustful parties called miners, parties using computers to help validate, time, stamp transactions, recorded in their ledgers. The system is to reduce the production of physical currency, stop the total amount of currency from circulation, compared with currencies in financial institutions or hoarded, crypto currencies are difficult for seizure by law.

1) Features

i. Crypto currency is a digital money, created from code, ii. Free of all governmental oversight, economy is monitored by a peer to peer (P2P) internet control, iii. Is an encrypted string of data or a hash, encoded to signify one unit of currency. Due to revolutionary properties they have become a success, provoked enthusiasm and fascination. They are digital gold, secure form political influence, will increase value over time, fast and comfortable means of payment across globe, recognized to serve as means of payment for black markets, used for payment, used as a means of speculation and store of small value the payment aspects, dynamic, fast growing for investors and speculators.

Types	Description
Peer to peer	P2P Transfer occur when one person pays another person using a mobile device, the device uses either a pre-loaded app or a browser based app to initiate, authenticate and transfer funds.
In person	In person purchases are initiated using, a mobile device where the buyer and seller are in person.
Remote	Remote payments are made when a buyer purchases goods/services using a mobile device, but the buyer is not physically present with the seller and the good are not immediately delivered like e-commerce.

2) Advantages

i. easy to transfer funds between 2 parties in a transaction, ii. Helps for the use of public and private keys for security reasons, iii. Fund transfers are done with minimal processing fees, iv. Block chain to store an online ledger of all transactions v. providing a data structure for this ledger exposing to a limited threat from hackers and can be copied across all the computers running bit coin software. vi. Currency can exist that preserves, facilitate exchange vii. More transportable than hard metal, viii. Outside the influence of central banks and governments. Ix. Can be divided into smaller units like rupee and paise, x. Ripple [Japan crypto currency] use market cap of cross border. Ripple has convinced big institutions to

use. Xi. Ripple completes the transaction within 10-15 seconds.

3) Disadvantages

i. are virtual and no central repository, ii. Balance can be wiped out by a computer crash if a backup copy of the holdings is not existing, iii. Prices are based on supply and demand, iv. The rate at which it is exchanged for another currently can fluctuate widely, v. can be hacked, vi. When the price goes up so much it moves the focus from the technology to speculation.

4) Criticism

i. compared to pyramid schemes, economic bubbles, ii. Speculators will increase price artificially iii. Compared with deceptive practice, iv. currency is generated by the founders prior to mining code are released, v. many banks refuse to offer services to virtual currency companies, vi. It can be permanently lost from local storage due to malware, data loss due the destruction of physical media, vii. lost crypto currencies removed forever from markets, vii. The number of merchants accepting this is low, ix; due to advanced technology the set up cost of miners is high, x. irreversible transactions after a number of blocks confirm the transaction, xi. Lacks in comparison to credit cards, and the consumer protection fraud, xii. Being digital currencies, managed through advanced encryption techniques, hence many governments are cautious, fearing their lack of central control they could have on financial security. Xiii, Ripple does not require mining, other use proof of stake algorithms, xiv. Traditional financial products have strong consumer protections, xv. If bit coins are lost or stolen, there is no intermediary with the power to limit consumer losses, xvi. It is prone to money laundering. Xvi. Widespread use would make it more difficult for statistical agencies to gather date on economic activity used by governments to run economy, they pose a challenge to central banks, control over important functions of monetary and exchange rate policy.

5) Miners

Are the coordinators, invest some work of computers to qualify , find a chopping, a product of cryptographic function, connecting the new block with predecessor .After finding a solution a miner can build a block and add to the block chain, for his services, get crypto currencies credited to his account, only when be created when the miner solve a crypto graphic puzzle, as the difficulty of puzzle increases the amount of computer power the whole miner's invest, only a given amount of crypto currency token that can be created in a given amount of time, part of the consensus no peer in the network can break. It has network of peers, each has a record of the complete history of all transactions, and balance of every account, a basic public key cryptography, after sign, a

transaction is broadcasted in the network, known immediately by the whole network, then gets confirmed. Confirmation is important, if unconfirmed then it is pending and can be forged, once confirmed it sets stone and not forgeable, can't be reversed, part of block chain. Only miners can confirm transactions stamp them as legit, spread in the network, every node has to add to database, become part of the block chain.
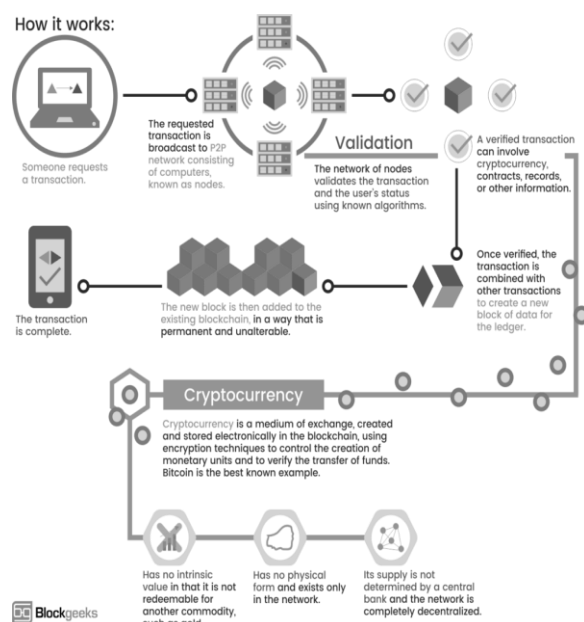
6) Legality

varies from country to country, some have explicitly allowed their use and trade, others have banned or restricted. China central bank banned the handling of bit coins by financial institutions, in Russia though legal but it is illegal to actually purchase goods with currencies than Ruble, in US they will treat as property for tax purposes, commodities and not as currencies, subject to capital gain tax.

7) Safety

Mt.Gox declared bankruptcy, as it had lost $473 million of their customers bit coin due to theft, hence bit coin prices fell from $1160 to 400. Money laundering, theft, company tagged the stolen currency, to lock them in the hacker's wallet .In US they are labelled as virtual assets, ambiguous classification puts mounting pressure on law enforcement agencies to adapt to the shifting drug trade of dark net markets. Networks display a lack of regulation attracting users seeking decentralized exchange ,for using currency, lack of regulations enabling criminals who seek tax evasion, money laundering, transactions through the use and exchange of alt coins are independent of formal banking systems, make tax evasion simpler. Charting taxable income is based upon recipient reports to the revenue service, hence difficult to account for transactions made using crypto currencies,

a mode of exchange that is complex and impossible to track, anonymity offered can serve as a simple means to launder money.

8) Capitalization And Fundings

initial coin offering (ICO) an unregulated means , through which funds are raised for a new venture, used by start-ups to bypass rigorous and regulated capital raising processes . ICO's are sold to early backers in exchange for legal tender or other crypto currencies, time, stamping crypto currencies use different time stamping schemes to avoid the need for a trusted third party to timestamp transactions, are added to the block chain ledger. Each participant is a miner, without any economic incentive other than enabling own transactions, it scales automatically as it gets used more. These are used outside existing banking and governmental institutions, exchanged over the internet. It is more than $600 billion.

Indices;

to follow the development of the market, indices keep track of notable crypto currencies, their cumulative market value. Crypto index CRIX; is a conceptual measurement developed by statisticians, market is frequently changing with the continuous creation of new crypto currencies, infrequent trading of existing ones, the number of index members is adjusted quarterly according to their relevance on market as a whole. CCI30 index of 30 crypto currencies with the biggest market capitalization, weighted based on the square root of their smoothed market capitalization, revised quarterly basis using an exponential weighted moving average of the capitalization.

II. PROPERTIES

A. Revolutionaly

A decentralized network of peers keeping a consensus about accounts, balances, a currency than the numbers in bank account. Numbers are more than entries in a database, narrative of human development under which have other flight to flight, a separation of money and state, entries about token in decentralized consensus databases. Crypto currency means the consensus keeping process is secured by strong cryptography, are built on cryptography, not secured by people or by trust but by math.

B. Transactional

i. irreversible, after confirmation it cannot be reversed, if a hacker stole them then no safety net, ii. Pseudonymous; neither transactions nor accounts are connected to real world identities; receive bit coins on addresses which are randomly seeming chains of 30 characters, iii. Fast and global, transaction are propagated immediately in the network, confirmed in minutes, happen in a global network hence completely indifferent of physical location, iv. Source; funds are locked in a public key cryptography system,

hence the owner of the private key can send, v. Permission less; no need to ask to use, software can be download for free. MONETARY; i. controlled supply; limit the supply of the tokens; supply in every given moment in the future can be calculated ii. No debt but bearer; the fiat money on bank account is created by debt, numbers seen on ledger represent debts like I owe You, don't represent debts but are money as hard as coins of gold. Permission less, irreversible, pseudonymous means of payment is an attack on the control of banks, governments over the monetary transaction, cant hinder , cant prohibit to accept a payment, can't undo a transaction.

C. Bit Coin

The first and most famous crypto currency used as a global means of payment , de facto currency of cybercrime like dark net markets. RIPPLE; less popular managed by XRP of Japan, a network to process IOUs, it does not serve as a medium to store, exchange value, but a token to protect the network against spam. LITE COIN; silver to the digital gold bit coin, faster than bit coin, larger amount of token, new mining algorithm, properly tailored, facilitates the emergence of other crypto currencies used its codebase make more lighter. MODERO; a kryptonite algorithm, add privacy features, in bit coin every transaction is dominated in the block chain and the trail of transactions can be followed. The market is fast, wild, new crypto currencies emerge, early adopters get rewards, investors lose money, many promises are made, few survive for some months, people believe and invest, then get robbed by speculators. In next few years they will gain legitimacy due to business protocol, micropayments, overtake remittance tool, there will be financial businesses as no fee, immediate ability to move money around, some utilize for block chain technology, which provides the largest benefit. These currencies will change the world, it will protect against the devaluation of national currency. Many realize that this invention has the potential to draw their control away, as global economies inflate and markets exhibit signs of recession, turn to bit coin as a hedge against fiat turmoil and an escape against capital controls. Bit sane presents the most technologically advanced platform, offers a minimalistic, user friendly interface for maximum usability, provides super-fast. Execution of trade transactions, take security seriously, state of the art security, for network protection.

D. Darknet Markets

crypto currency can be used in controversial settings like online black markets (silk road). The present version is silk road 3.0, which is used in online dark markets, leading to a subsequent decentralization of online dark market , now the dark markets has increased from 4 to 12, amount of drug listing increased from 18 to 32 thousands, dark net

markets are a legal challenge. Major crypto currency exchanges: (Y=Yes. N=No. NA=Not Available.)

Types	Country	Fiat money	Bit coin	Alcuin's	Commodity	Trade Fee %	Decentralized
Btc.sx	UK	N	Y	N	N	0.5	N
CEX.IO	UK	Y	Yes	Yes	Yes	0.2 - 7	No
Bacchanal	China	Y	Y	Y	N	0	N
Coin check	Japan	Y	Y	Y	N	- 0.05 - 0.15	N
Coin floor	UK	Y	Y	N	N	0.08 - 0.55	N
Coin base	USA	Y	Yes	Yes	No	1	No
GDAX	USA	Y	Y	Y	N	0.1- 0.25	N
Gemini	USA	Y	Y	N	N	- 0.15 (rebate) - 0.25	N
Kraken	USA	Y	Y	Y	N	0.05 - 0.50	N
LocalBitcoins	Finland	Y	Y	N	N	1	Y
Luno	South Africa	Y	Y	N	N	0 - 1	N
ANX	Hong Kong	Y	Y	Y	N	0.3- 0.6	N

OVER THE COUNTER (OFF THE EXCHANGE) trading are more flexible and convenient. OTC is more institutions taking the trades off the exchange, a desk to perform at moderate expenses. The quotes given by OTC trading desks are in line with the main

bit coin trading desks. Traders would fill large orders with multiple smaller orders outstanding in the public order book to avoid predatory pricing .NOTABLE OTC DESKS;

Title	Country	Fiat money	Bit coin	Alt coins	Trade fee %	Settlement	Minimum limit.
Bitfinex. com	Hong Kong	N	Y	Y	0.1 - 0.2	NA	NA
it Bit	Singapore	Y	Y	N	0.1 per transaction	T+0	100
Coin floor	UK	Y	Y	N	0.1 - 0.3	T+0	NA
Octagon Strategy	Hong Kong	Y	Yes	Yes	0.1-0.5	T+0	NA
LocalBitcoins	Worldwide	Y	Y	N	0.0001 - 0.0010 BTC per outgoing transfer	NA	NA
Bit stamp	UK	Y	Y	N	0.1 - 0.35	NA	NA
BitX	Singapore	Y	Y	N	0.1	NA	250

E. Wallet

stores the public and private keys, used to receive or spend crypto currency, contain many private/public key pairs, there are many crypto currency, currency itself is not in the wallet. Bit coin, crypto currencies derived from wallet then decentrally stored and maintained in a ledger publicly available. Each crypto currency has a private key, with this it is possible to write in the public ledger and spending the associate crypto currency. While choosing wallet, the owner will have access to the private keys, can potentially access to the crypto currency, and trust the provider to keep in safe. Downloading a crypto currency wallet from a wallet provider to a gadget does not mean that the owner is the only one who has a copy of the private keys, can install a wallet on a phone and to have access to the same wallet through their website. For receiving access to the receiving wallet is not needed, the sending party should know the destination address, anyone can send to an address, but only the party who has the private key of the address can use it. Mnemonic sentence from which the root key can be generated, then private keys can be recreated, these words are written down and stored on a physical in other locations. When the private keys which are the backup are lost then crypto currency is lost forever, no back door, for web wallet the private keys are managed by the provider, hence while owning the one's trusted with managing the private keys should be selected carefully. Encrypted copy of the wallet be kept in a trusted place, they come in different forms like cross platform application installed on computer, telephone. While using a web wallet the private keys are managed by a trusted third party. Some provide to use 2 factors for extra security, then key logger is not enough for a hacker to steal, exchanges link the user's wallet to their centrally managed wallets. When the user wants to enter or exit from exchange, then the transaction is written on to the public bit coin block chain to initiate or verify a transaction then the wallet connects to a client or node on the network to process the request. All clients can verify transactions directly on a local copy of the block chain, light weight clients consult full clients. The types of wallets and their functions are as follows.

Hardware. Wallet	Actual bit coin transaction from a web based exchange to a hardware wallet, these are considered the most secure, the private keys never leave the physical wallet, keys are created, live=sign transactions, die=are deleted inside the hardware wallet. It uses the mnemonic sentence for backup to avoid electronic storage the mnemonic sentence, write down and store in physical different location, storing the backup electronically lowers the security level to a software wallet level, user can physically press the wallet to sign a transaction, worst might be a computer is infected with malware and the amount, destination address can be changed by a hacker before it was signed inside the hardware wallet, but the private keys remain safe inside the hardware wallet. Without the private key a signed transaction cannot be altered successfully, some display where the user can enter a pin to open the wallet, where the transaction can be verified before being signed, while reading a mnemonic sentence from the physical display of the wallet a screen capture of an infected computer will not reveal the mnemonic sentence.
Watch only	Can keep track of all transactions, only the public key is needed, key can be kept safe in another location.

Multi signature	Multiple users have to sign with their private key for a transaction out of that wallet.
Brain	Someone remembers the information to generate the private and public key pairs like mnemonic sentence.
Hot and cold	Hot are connected to the internet , cold are not. Hot wallet; crypto currency can be spent at any time. Cold wallet has to be connected to the internet first, it is vulnerable to an attack, software wallets where the device is turned on or the wallet software is running are considered hot wallets and not connected is cold wallet.
Deterministic	A single key can be used to generate an entire tree of key pairs, is the root of the tree. Mnemonic sentence/word seed is human readable for expressing the key used as the root, algorithmically converted into the root private key. Words in order will generate the exact same root key of 24 words. All the addresses having different private keys, but all be restored by that single root key, the private keys to every address given out can be recalculated when the root key is given. The root can be recalculated by feeding in the work seed, mnemonic sentence is the backup of the wallet, if the wallet supports the same technique, then the backup can also be restored on a third party software or hardware wallet.
Non deterministic	Each key is randomly generated on its own accord, not seeded from a common key, any backups of the wallet must store each and every single private key used as an address and a buffer of 100 for future keys that may have already been given out as addresses but not received payments yet.

BIT COIN TRADING; is profitable, the market is new, fragmented with huge spreads, arbitrage and margin trading are widely available. Volatility and bubbles gives new users and investors a chance, news cause more people interest, the price rises until the hype fades, little barrier for entry. For trading, verification is not required, it is online trading. Bit coin trading is exciting, unique, global, not fiat currency (price is not directly related to the economy, policies of any country, uncertainty and panic has driven to increase in price. It trades 24/7, hundreds of exchanges around operate 24/7, no official exchange and price, creating arbitrage opportunities. It is volatile, rapid, frequent price movement, daily chart shows the spot multiple days with swings of 5% ⩾, volatility creates opportunity to make profit. For exchanges consider regulation and trust to protect funds. For location to deposit fiat currency, exchange that accepts payments. For fees; what % of each trade is charged is checked. For liquidity, large traders will need a bit coin exchange with high liquidity with good market depth. Be careful of many trading risks, leaving money on an exchange is risky hence choose good exchanges like Kraken. New traders should start trading with small amounts, learn bit coin trading strategies, understand market signals, study live price charts of all major exchanges.

III. STEPS IN CRYPTO CURRENCY TRADING

Anyone can send or receive any amount of money with anyone else, anywhere conveniently and without restriction. Understand own risk tolerance, as there will be significant volatility in the price and valuation of bit coin over the coming years, it will become a core part of the financial system.

Learn how block chain works.	Block chain technology has the potential to redefine transactions, change everything, a growing list of record (blocks), linked, secured using cryptography. Are resistant to modification of the data, server as a public ledger of transactions between two parties, the traditional way of sharing documents with collaboration is to send a Microsoft word document to another recipient, ask to save the document, make revisions to it, send back, wait to receive a return copy, make changes to the document, locked out of editing it until the other person is done with it, all parties have access to the same document at the same time, most up to date version of that document is visible, editable by all parties. It is like a distributed block chain ledger. The real version is verified by analyzing blocks on multiple computers and taking the average. The decentralized, transparent nature makes block chain highly secure and impossible to hack, a hack to one ledger would cause a discrepancy in the entire network hence will be ignored. To hack the ledger, hack all the computers on a network at the same time to change the average, hence larger the network, the more stable the currency, payment systems require third party intermediaries like Google, face book, banks, government agencies to process transactions, require high fees for doing so. It allows for faster direct payments between individuals and can support micropayments. Block chain solves the problem of manipulation.

Learn the top currencies.	More than 1000 types of crypto currency that sell for more than $1, many are penny stocks range, don't trade them, bit coin has highest value and transactions. Bit coin cash (new) spinoff the original bit coin block chain (old), old version has 8 times more market cap.		exchange, then conversion fees are charged. If bank payment are chosen the funds takes 4-5 days to settle, locked in the market price of BTC at the time of purchase. It is guaranteed that price regardless how long the funds take to settle, buy the bit coin at that time and saves them for in a virtual vault, releases in account once they receive the funds from bank.
Understand the risk involved.	Amongst asset class, bit coin is the most volatile, being new it faces challenges, trend of bit coin is upwards, hence trading risk will be there. Prices are impacted by public sentiment about the currency; fluctuate as companies, financial institutions make decisions, sensitive to regulatory changes. China barred all banks and financial institutions from doing business related to ICO trading, ICO is an unauthorized fund raising tool opening the door to financial scams. High risk, high reward in trading. Like cash in hand the safety of bit coins depend on own diligence. Bit coins cannot disappear; the transactions are permanent and are refunded by the recipient. Do business with known people, organizations, transactions are stored publicly and permanently on a network, anyone can see the balance, address. Only the exchanges, the parties involved in the transaction can attach the addresses to a real person, the transactions are anonymous.	Learn about GDAX.	Once transacted a few bit coin on coin base, learn more advanced trading platform [global digital asset exchange]. It uses the same login and password as coin base, can transfer currency between the two platforms, GDAX features interface with real time pricing data, order book, carting tools, trade history, simple buy/sell order process. Transaction fees are 0.1-0.25% for takers (buyers), 0% for makers (sellers), fee varies based on monthly trade volume. The advantage of the coin base system, it is simple, instant, order is guaranteed to fill in exchange for a higher fee. GDAX market ,the maker order is free, but risk the order not getting filled and having to set a new price.
Read bit coin news every day.	Without fail learn about bit coin and other crypto currencies, many books, web sites, exchange reports, price list etc. have to be gone through for full understanding.	Study the charts to find trends.	Collect as many coins as possible, at right prices, build a strong diversified portfolio of crypto assets to hold, buy at lows and earn profit. Enter/exiting positions gradually in case the lows get lower or the highs get higher. do not buy/sell in big emotional or reactionary swoops, do not trade more than a few times a week to keep fees down and give bets a chance to perform. If price is over or undervalued then take moving averages, which are plotted on stock charts to help smooth out volatility, point out the direction a stock may be trending. Chart shows historical prices, volume data, and detailed visual representation of the bid and asks prices over a range of prices. Moving the cursor over the prices to select a price to create order. The goal of charts are to determine the direction of the currency over a period of time, prices at which wish to buy, sell the currency before it takes a correction. Time horizons for investment are; short term, 7-14 days, medium term 1-2 months, long term 6-12 months. If the frequency of trading increases, then the fees will be more hence the profit will be less.
Open a brokerage account.	Open account with trusted, well known exchanges for transaction. A digital wallet for dealings, their I Phone, Android app make sending currency, tracking prices simple. Exchanges shall meet all the regulatory requirements of the country.		
Fund the account.	After creating an account, verify identity by uploading a picture of drives license/passport. Can fund the account. For new payment method, go to settings, payment methods on the dashboard, choose a bank account, credit/debit card. The banks account has higher limits, but takes more time . The credit/debit card has lower limits, takes less time. For bank account verify 2 deposit amounts on account,. Charges are 4% processing fee for credit card transaction.		
Buy and sell.	After funding the account , buy some bit coins, full or part, makes it easy targets for speculation. Coin base does not charge to transfer bit coin from one to the other user, which is the point of block chain, but to transfer money to or from an outside	Set limit orders, be patient.	Once ready to place an order, accept the market price, set limit order. Limit orders provide investors and traders with a means of precisely entering a position without being victim of fluctuating prices. If the

	price dips the order is automatically executed, if it is good till cancelled (GTC) order, it will remain open till manually cancelled. Once the limit order is set, be patient. Give the price time to fluctuate, testing highs and lows, see if limit order catches a buyer/seller. No hurry to cancel limit orders, resist the urge to rapidly change limit order prices.. Investors will set multiple limit orders at consecutively lower prices to take advantage of a big sell off or take some profit when the price tests a new high.

TRADING BIT COIN VS BIT COIN INVESTING; the active trading of bit coin as an occupation for additional income, it is similar but distinct from investing in bit coin, an investment in bit coin is a long term undertaking, with multiple goals like portfolio diversification, fiat risk hedging etc. Investors are insensitive to price volatility and unlikely to exit their positions, barring some dire eventuality. Traders maintain short-term positions, staying in a trade for a maximum of a few days. Traders are price sensitive, striving for perfect entry and exit prices, abandoning their positions immediately if they prove unprofitable. TRADING ADVANTAGES; for trading bit coin is superior to other instruments, like stocks, commodities. i. it is highly volatile, allows for high percentage profits without leveraging, large price moves, traders are more common in bit coin than other instrument, may eschew the increased risk and expense of leverage strategies for high profits from small moves, ii. Trades 24/7 and active round the clock as the volume is distributed, iii. The cheapest, quickest and convenient to trade, exchange fees are minimal compared to traditional exchanges, deposits or withdraws are accomplished within hours from anywhere iv. Less stringent requirements for personal information if deposits and withdrawals are handled exclusively in bit coin.

MONEY MANAGEMENT; capital preservation is important, set the risk and the loss level, never commit more amount in trading account. Never risk more than 5% on a single trade, if trading well ,the size of trade steadily grows and trading account swells. If unsuccessful, at least losses are kept to a minimum, allowing time to adjust trading plan. PROFIT TARGETS AND STOP LOSSES; trade without exit strategy is disaster, determine beforehand the price at which to cut losses if the market moves contrary to expectation, stop loss helps to survive in the market. Limit losses below 25% of position size, a stop loss is placed wisely at which price has reversed previously, the more the times it is better. The profit target; are the level at which profit is expected when price behaves as expected, best placed slightly before previously significant levels. If prices exceed expectations by penetrating significant previous levels and maintain a strong trend thereafter, consider for a trailing stop, a moving on profits. Know breakeven point, the price at which to exit a trade without incurring any loss due to trading fees, exiting at breakeven than wasting time and energy on monitoring a flat market, discipline in stop losses, targets is the best way to manage greed and fear. Put stop loss, profit target orders immediately after each trade. RISK AND REWARDS RATIO; if a stop loss of negative by 25% in combination with a profit of positive 50% affords a risk reward ratio of 1;2, one good trade compensates for two bad trades, a trader's odds of success are roughly even on each trade, selecting trades which satisfies 1;2 ratio should ensure consistent profitability over time. Markets are unpredictable; losses are anticipated, guarded against through proper position sizing. Hang around traders online or in person and will discover countless, also contradictory. Buy low and sell high advocates buying when prices are low and selling when prices are high. The subjectivity is the term low and high, whatever the current price represents, the value can be assessed within the context of historical levels and expected future performance. Buy fear, Sell greed, sell high and buy low, reverse is applicable when going short. For the buyer there is a seller, transactions occur because sellers consider the price high and buyers consider it low. Sustained price moves result from either buyers or sellers being more aggressive in crossing the spread, whichever side is collectively more willing to pay the difference between bids and ask prices to initiate a trade, will move price in required direction. Bull & bear market. TIME FRAME; traders employ timeframes, scalpers trade on 5 minute or lower timeframe, tick charts record every single trade without reference to time. Day traders wind up the position every day, swing traders (trend traders) maintain positions for days, weeks, months. TRADING MISTAKES understand the risks and mistakes to avoid losing money. For trading , store money with a trusted exchange, for trading only deposit to make a trade, then get money off the exchange. People get introduced to fake crypto currencies, except original bit coin other crypto currencies have come and gone, making much loss to the investors. Do not be too greedy for quick profits, go through all details before trading, do not come in to the trap of rumours.

IV. CLARIFICATION FROM THE RBI, FINANCE MINISTER AND THE SUPRECOURT ABOUT THE VIRTUAL CURRENCIES AND BIT COIN

The RBI has cautioned the users, holders and traders of VC, bit coins and about the potential financial, operational, legal, customer protection and security related risks that they are exposing themselves to (24.12.2013), advises that it has not given any license, authorization to any entity to operate such schemes or deal with bit coin or VC, any

user, holder, investor trader etc. dealing with VC will be doing at their own risk. A group of people who are looking at fiat crypto currencies, for non-fiat crypto currencies like bit coins, not comfortable with them. Are working with a group of experts to look into fiat crypto currency, a digital currency that could serve as an alternative to the Indian currency. At present crypto currency is a violation of the country's existing foreign exchange norms, the conversion of bit coins into foreign exchange does not currently fall under the purview of the central banking institution, making such transactions highly unsafe, vulnerable to cyber-attacks. In India at present there are 50000 bit coins wallets, 700-800 are operated daily. To better regulate crypto currency usage in the country, the government has appointed interdisciplinary committee for submitting official report, the committee consisting of nine members, each from RBI, SEBI, SBI, NITI AAYOG,ED etc. Mulling over the implementation of KYC norms to ensure safe transactions of crypto currencies, government might legalize virtual currency with proper policy in place, the RBI will monitor the use of these in the country more efficiently, for minimizing the risk of security breaches and vulnerabilities. Finance minister cautioned investors to be wary of VC like bit coin; VC's are like Ponzi schemes with no legal tender and protection (29/12/2017). The Supreme Court has sought the response of the RBI and the government on a PIL seeking to regulate the flow of crypto money, to ensure that the same to be made accountable to the exchequer. Recently the price of one bit coin had reached US $12500, which is now the matter of suspicious activities of the speculators. There is no legal authentication for crypto currencies in India, the transactions are subject to speculation and cybercrime.

V. HOW TO REGULATE CRYPTO CURRENCIES IN INDIA

There is a concern about the trade of crypto currency, many are investing, hence a regulation is required to safeguard them, RBI is letting the technology to play out in the market while the stakes are low, allowed the emergence of a beginning in India to develop block chain technology. Now it is stalling the growth of the industry by creating legal ambiguity. Block chain technology is a departure from the centralized institutions, which regulate decentralized future. Retrofit existing regulations on crypto currencies, block chain based applications, will prove to be inadequate and philosophically are an absurd choice. It is not clear whether crypto currencies are financial assets or investments, finance minister has clarified that they are not currency or legal tender. Court sponsored interventions, are ill suited for block chain, requiring considerable original academic thought and investigation. If regulated as a fiat currency, then will be subject to the control of a central bank, and foreign exchange regulations.

Regulating as a security ,then very few forms of crypto currencies will mirror such features, if as a commodity then under extant laws. The US commodities and futures trading commission consider VC as commodities allowing more freedom in dealing with crypto currencies as they are less regulated than to currencies and securities. More concerns about block chain technology are used for money laundering purposes. Block chain networks are built on widespread consensus, hence regulation will also be through consensus, should suit the developing world. If the rise of bit coin or other crypto currencies are to go by, bans or other stifling measures will be difficult to enforce. The RBI is preparing policy on the use of crypto currency, even though it is banned in China and Russia, how India will legalize in India has to be watched , considering a proposal to introduce its crypto currency similar to bit coins, the proposal was discussed by a committee of government officials, setting up and running block chain for financial services and its usefulness, called Lakshmi a digital currency that could serve as an alternative to the Indian rupee. India regards crypto currencies as a violation of the foreign exchange norms, conversion of bit coins into foreign exchange does not currently fall under the purview of the central banking institution, transactions are highly unsafe and vulnerable to cyber-attacks.

VI. RBI LAUNCH IT'S OWN CRYPTOCURRENCY

Government is taking note of an indigenous virtual currency range in line with bit coin, it has received the nomenclature of Laxmi Coin. As government does not recognize non-fiat crypto currency forms, RBI is looking for fiat crypto currencies, which is officially launched by the designated authority. A vacuum is created and can be filled when the policymakers come out with own VC form to follow the legal route to be given the title of a fiat crypto currency. It is an alternative to the traditional Indian rupee will require amendments in the present currency Act to proceed in its action path, which in turn will increase the time lag of converting this crypto currency dream into a hard rocking reality. It will fall under RBI, looking at fiat crypto currencies, will be an alternative to the Indian rupee, as banks are trying blocking chain as a technology and to make block chain work, it would need some crypto currency. Law makers feel it is of importance to provide this form with a solid legal backing rather than going with the flow , accepting digital craze with open arms to safeguard against momentary setbacks,. It is not yet been officially launched, but many websites posing as Laxmi coin and asking people to invest in it by buying these coins. More countries are coming out with their own crypto currencies. Originally launched in 2012, it has been stuck in the legal formalities entrapping several non-fiat currencies around the world. A fiat currency that has

no intrinsic physical value, value is established by the government decree. Most national currencies are fiat currencies as their values are dictated by the government. Non fiat currencies like gold standard have been effectively phased out, as they require adequate physical stockpiles to maintain value. Bit coin blur the boundaries between fiat and non-fiat, they do not have any physical value, and not controlled by the government. It has created uncertainties about their role in the modern financial system. RBI said the government is uncomfortable with non-fiat currencies like bit coin. The future of Laxmi coin a non-fiat crypto currency is uncertain. It is a digital crypto currency, will have a total 30 million coins that will use block chain technology to function, the 2014 actions of RBI against Laxmi coin exchanges forced to off launch till they get explicit approval and consent from the RBI. Crypto currency stems from the application of block chain technology to streamline financial services, the technology is complicated, the potential of using block chain technology in banks and financial institutions. As block chain requires a crypto currency to function, government lacks trust in non-fiat ones like bit coin, the launch of a digital alternative to the present rupee may be on the cards. With the consent of RBI, Laxmi coin could be placed. The introduction of new currency will require amendments in currency act, as it would place the coin under government regulation hence uncertain if the new digital currency would still be considered a crypto currency, which is free of control and regulation. If this coin is achieved the status of legal tender, would facilitate a drastic change in the way financial transactions are conducted. It will augment financial and online consumer transactions, a fiat crypto currency would simplify transactions. Micropayments using laxmi coin would benefit to have access to debit/credit cards. ICO for Laxmi coin might come up by 1.03.2018, it is likely to fall in the domain of the RBI, the government might make some amendment in the currency act. If the report appears to be true then this will be a time consuming process.

Bankers across the globe are worried about their jobs, will discredit an idea that is owned by all citizens of the world and not by any government or institutions for VC, as there is no central bank or monetary authority. Value is based on speculations, legal status is not there, puts a natural limit for its progression, usage of VCs for illicit and illegal activities has been reported as very large. Investing in digital currency is full of pitfalls, due to high return from bit coin there is more spur in transactions. Bit coins are not backed by any tangible asset but are based on demand, and not on underlying asset, value is measured by demand and supply, much opacity behind operations, suspense continues about the creator.

VII.CONCLUSSION

Seeing the overall risk involved in the crypto currency system, it is advisable not to invest in this, but can opt as a trading activity in the form of derivatives. It is even not good to hedge the risk against these currencies. Seeing the overall risk involved in it, the RBI, SEBI and the Finance Ministry has strictly warned the investors to stay away from these investments. If people lose their money due to volatility, then they themselves have to be blamed. Hence better avoid and stay away from this.

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