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INVESTIGATION ON PROBLEMS AND PROSPECTS IN CRYPTOCURRENCY

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Abstract

The rapid progress of information and communication technology has facilitated the online integration of various daily chores, leading to enhanced efficiency and adaptability. The exponential growth in internet users has sparked the emergence of virtual currencies, known as cryptocurrencies, facilitating seamless financial activities such as buying, selling, and trading. This study examines the future expectations of consumers about cryptocurrencies. The phrases "crypto" and "currency" are merged to create the term "cryptocurrency." The dictionary definition of cryptography is not publicly disclosed. Since its establishment in 2009, cryptocurrency has been utilised to fulfil the needs of individuals seeking secure and anonymous digital transactions, facilitated by a reliable third-party middleman, and independent of government regulation. Cryptography is employed to enable the safe transmission and interchange of digital tokens. The objective of this research study is to investigate if the Crypto currency Bill has effectively resolved the issues related to virtual or Crypto currency funds. In order to accomplish this, the writers will initially provide a brief overview of the concept of cryptocurrency before delving into an analysis of the various challenges and obstacles associated with it. Bitcoin transactions are facilitated by blockchain technology, which presents its own set of benefits and drawbacks. This essay will discuss the present legal standing of Cryptocurrency in India, along with associated security apprehensions. For instance, the risks linked to malware and security, data theft, gold mining, and the lack of a centralised regulating authority. The legal position of cryptocurrencies in several countries has been briefly discussed to offer a more precise viewpoint. Although the "Crypto currency and Regulation of Official Digital Currency Bill 2019" had many provisions for regulating cryptocurrency, it failed to be enacted as a law.

Keywords: ***Cryptocurrency, Challenges, Digital tokens, and Bit coin***

Introduction

A cryptocurrency refers to a form of digital or virtual currency that is safeguarded by encryption, making it highly resistant to counterfeiting or double-spending. Most cryptocurrencies are held on decentralised networks that utilise blockchain technology, a distributed ledger maintained by many computer networks. Cryptocurrencies, by virtue of not being issued by a singular authority, possess inherent resistance to government manipulation or intervention. Cryptocurrencies are digital systems that facilitate secure online transactions and are valued based on virtual "tokens" that are represented by entries in a system ledger. The term "crypto" encompasses several cryptographic techniques and encryption algorithms, such as hashing functions, public-private key pairs, and elliptical curve encryption, which safeguard these inputs. Money functions as a medium of trade because we collectively agree to use it as a form of payment for goods and services. Sellers agree to accept money for their products, while workers agree to receive payment for their services. Money functions as a convenient instrument for recognising and communicating value in accounting.

A national digital currency, managed by a central bank, that use encryption techniques to authenticate financial transactions and determine the creation of all physical cash in circulation. Bitcoin was the inaugural cryptocurrency to be acknowledged as innovative. In 2009, a someone named Satoshi Nakamoto, who chose to remain anonymous, issued a white paper introducing Bitcoin. Before the inception of bitcoin, numerous endeavours to introduce digital currencies with an encrypted ledger into the market proved to be fruitless. Using bitcoin allows for the preservation of anonymity in transactions, ensuring that the identities of the individuals involved remain undisclosed. Currently, the most prominent examples of digital currency include Bitcoin, Ethereum, and others. The bitcoin market initially had modest growth, but then suddenly accelerated at a significantly higher pace. Although crypto currencies provide numerous advantages, such as facilitating new digital payment methods and establishing a unique currency with specific applications, they currently lack a suitable framework or regulatory system to control their operations. India had a significant increase in interest in digital currencies between 2012 and 2017, as a result of the widespread use of cryptocurrencies in Western countries. This led to the formation of several cryptocurrency exchanges in India. Coin Safe, Uno coin, Koinexs, Pocket Bits, and other similar platforms are some examples. Unexpectedly, the values of cryptocurrencies started to skyrocket, and their allure expanded swiftly.

RBI Guidelines

In 2013, as virtual currencies such as Bitcoin became more popular in India, the Reserve Bank of India released a press statement to warn the public about the hazards associated with engaging in transactions with these currencies. In February 2017, the RBI was compelled to issue a press statement once again, reaffirming the concerns raised in 2013 regarding cryptocurrencies. This action was prompted by the increasing popularity of these digital currencies and the transactions conducted by a large number of Indian users. In November 2017, the Indian government formed the Inter-Ministerial Committee. The group was initially founded with the goal of analysing various challenges linked to Virtual Currency and offering practical ideas for implementation. The committee's conclusive report, submitted in July 2019, recommended the prohibition of private cryptocurrencies in India.

OBJECTIVES OF THE STUDY

1. To fully understand the concept of cryptocurrency, it is important to grasp its functioning, the various types that exist, and the dominant role played by Bitcoin.
2. To analyse the potential, challenges, and legal status of cryptocurrencies. The main characteristic of cryptocurrency technology is its digital payment network and protocol.
3. To determine the primary barriers to the acceptance of cryptocurrencies, including potential hazards.

RESEARCH METHODOLOGY

The main data sources utilised in this study consisted of articles published by renowned writers, books, websites, research journals, and other secondary sources.

INVESTING WITH CRYPTOCURRENCY

Cryptocurrency lacks support from a central bank or government. The valuation of a cryptocurrency is not contingent upon the commitments made by a central bank or the government, in contrast to the majority of conventional currencies such as the US dollar. Storing your bitcoin online does not provide you with the same level of security measures as a bank account. Government insurance does not cover funds stored in online "wallets," in contrast to bank accounts in the United States. Cryptocurrencies are highly volatile and can see abrupt and substantial price changes. An investment of one thousand dollars today may depreciate to a mere one hundred dollars tomorrow. There is no guarantee that the value will increase if it decreases. Cryptocurrencies are not a foolproof investment due to various factors. There are no assurances, as is the case with any investment opportunity. There is no guarantee that your investment will generate profits. Individuals who guarantee you a profit or return are likely to be fraudulent individuals. Investing in a cryptocurrency may not be prudent, regardless of its popularity or endorsement by celebrities. Not all cryptocurrencies or the corporations that behind them is same. Evaluate the commitments that the company is making regarding their cryptocurrency prior to making a decision to invest in it. To perform an online search, utilise the name of the company, the specific cryptocurrency, and relevant keywords such as review, scam, or complaint. Examine the search results for several pages.

PROTECT YOUR MONEY AND AVOID INVESTMENT SCAMS:

Scammers are engaging in identity concealment by impersonating websites and fabricating counterfeit social media identities. Investors should consistently exercise vigilance in detecting bogus accounts by carefully scrutinising the material, assessing the dates of establishment, and evaluating the extent of engagement. Exercise vigilance when it comes to domain names and enhance your understanding of online account security to ensure that investors do not inadvertently collaborate with a deceitful entity.

None Scammers often employ deceptive testimonials purportedly written by satisfied clients. These endorsements create the perception that the promoter is reliable since they show that they have achieved significant profits in the past and that new investors would also experience financial benefits similar to prior ones. However, it is common for scammers to author the reviews instead of genuine satisfied consumers.

There is no text provided. Scammers sometimes entice new investors by promising secure, lucrative, and assured profits within relatively brief timeframes, which may be measured in hours or days rather than months or years. Given that all investments inherently have a certain level of risk and potential rewards are typically linked to the level of risk involved, these representations often indicate fraudulent activity. Discover additional information regarding the unmistakable indicators of investment fraud. There are no legal protections in place for transactions conducted using cryptocurrency. Both debit and credit cards are protected by legal measures in the event of any mishaps. For example, your credit card issuer provides a protocol to aid you in recovering your funds in the event that you choose to challenge a transaction. Cryptocurrencies typically lack such protective measures.

Payments conducted using cryptocurrency are typically irreversible. In general, while making a bitcoin payment, it is unlikely that you would receive a refund unless the recipient voluntarily returns the funds. Prior to making a payment for a bitcoin transaction, it is advisable to conduct thorough research on the seller in order to ascertain their reputation.

There is no text provided.Transactions involving cryptocurrency are commonly referred to as anonymous. However, the situation is not as straightforward as it may seem. Cryptocurrency transactions are typically recorded on a publicly accessible ledger called a "blockchain." This is a comprehensive record of all bitcoin transactions, starting from the moment of payment and ending at the moment of receipt. The block chain may potentially include the transaction value as well as the wallet addresses of both the sender and recipient as part of its published information.

Aside from the market risks linked to speculative assets, cryptocurrency investors should also be mindful of the following dangers:

User risk: In contrast to traditional finance, bitcoin transactions cannot be reversed or cancelled after they have been received. Approximately 20% of all bitcoins are currently inaccessible as a result of lost passwords or erroneous sending addresses, according to certain estimations. Eighteen

Regulatory hazards arise from the uncertain regulatory status of certain cryptocurrencies. Governments are currently attempting to regulate these cryptocurrencies as either securities, currencies, or both. The abrupt implementation of strict regulations could pose difficulties in the sale of cryptocurrencies or lead to a significant decline in prices throughout the entire market.

Counterparty Risks arise when investors and merchants entrust exchanges or other custodians with the responsibility of safeguarding their coin. Should theft or loss occur due to the actions of these third parties, it could lead to the complete loss of one's investment.

Management Risks: The absence of consistent laws leaves little safeguard against deceitful or unethical management activities. Numerous investors have incurred significant financial losses due to management teams that were unable to provide a product.

Programming risks: Numerous investment and lending platforms employ automated smart contracts to govern the transfer of user deposits. Investors utilising these platforms bear the risk that a software error or vulnerability in these programmes could result in the loss of their money. Market manipulation continues to be a significant issue in the bitcoin industry, when important individuals, organisations, and exchanges engage in unethical behaviour.

Cryptocurrency faces the problem of having a low value.

Unofficial fiat currency, unlike official fiat currency, lacks government backing or metal reserves. Despite the claimed functional benefits of cryptocurrencies, such as distinctive characteristics or tangible incentives, the commercial feasibility of these properties relies on other interconnected aspects. These include the disciplines of behavioural economics, technology, and the magnitude of financial investments.

LACK OF A CENTRAL AUTHORITY To Supervise

Due to the absence of intrinsic value, cryptocurrencies are very susceptible to fluctuations in their worth. Consequently, it is necessary for a central authority to oversee the decentralisation of the network in order to regulate transactions. The term "decentralised nature" denotes the absence of intermediaries in the operation of Bitcoin and other cryptocurrencies, resulting in the physical absence of cash. Transaction participants are provided with it, while complete anonymity is not assured. Transactions in this context are inherently irreversible.

Despite the persistent endeavours of governments worldwide to exert authority over the network, these endeavours have been unsuccessful. Central authority intervention may lead to legal consequences. In the absence of a regulatory authority to address the intricacies that may arise in a dispute regarding cryptocurrency ownership, investors would face a state of disorder.

Activities related to criminal behaviour

Unofficial virtual currencies have the capacity to deceive customers, particularly those who are easily influenced. An instance in India recently revealed a fraudulent activity where "Gain Bitcoin" was found to be involved in a scam worth INR 2000 crore. The plan enticed clients by offering them a return on investment in the form of Bitcoin. Subsequently, it was revealed that it was a Ponzi scheme. In addition, a different virtual currency, distinct from Bitcoin, was utilised to compensate the ROI, however its value depreciated rapidly.

The genesis of money laundering

Cryptocurrencies have significantly broadened the scope for money laundering and other illicit activities. Due to their inherent decentralisation, authorities encounter challenges in making decisions. When malware infiltrates participants' personal accessories, it becomes simpler for crooks to exploit the vulnerabilities of customers who are not very knowledgeable about technology. Consequently, criminal syndicates may exploit these cryptocurrency transactions for their unlawful purposes, posing a significant threat to any nation.

Data loss

Due to the decentralised nature of bitcoin transactions and their lack of a physical location, they can be retrieved at many nodes. Any device that sustains physical damage or is compromised through vulnerability exploitation has the potential to generate substantial financial losses due to the loss of transaction-related data.

Not enough

Literacy refers to the ability to read and write proficiently. A primary impediment to the adoption of bitcoin settlement in India is the dearth of understanding regarding cryptocurrencies and blockchain technology. Academics have consistently observed that digital assets, including bitcoin and cryptocurrencies, are vulnerable to many types of exploitation. This factor plays a crucial part in determining the varying levels of success experienced by start-ups and financial technology enterprises operating in this area.

RISKS POSED BY MALWARE AND SECURITY

Every system has inherent vulnerabilities. Exploiting these vulnerabilities, hackers can potentially generate a substantial amount of digital currency, leading to broader socioeconomic consequences. After obtaining access, these malevolent people can exploit a minor vulnerability in wallet addresses to generate counterfeit virtual currency. For instance, in the computer game World of Warcraft (WoW), users evade the game's regulations by purchasing virtual currency from questionable sources and engaging in money laundering. Cybercriminals vigilantly monitor these websites with the intention of defrauding unsuspecting users, resulting in substantial financial losses without any tangible gain.

Concerns regarding cryptocurrency systems

These systems are similar in that they are capable of generating an unlimited amount of virtual currency and distributing it among online groups. It refers to the similar activity of central banks in producing money, but unlike central banks, they are not limited by supply and demand. Virtual currency providers, such as Second Life, with the capability to manipulate the value of Linder Dollars and distribute an unregulated amount with the intention of boosting their profits and deceiving consumers.

The effects of actual monetary systems

The correlation between these cryptocurrencies and the use of legal tender in their acquisition indicates the disturbance in the supply and demand of legal fiat. As the usage of virtual currency increases for buying real or virtual goods and services, the likelihood of macroeconomic instability also rises. Additional disruptions may arise due to a decrease in the demand for the legal currency caused by these pauses. Contrary to the previous statement, a peer-to-peer virtual currency exchange for actual cash can increase the demand for money. These changes have a direct impact on the current monetary systems.

The Hazards of Gold Mining:

Money farming is a well recognised practice in China and other developing countries, where individuals participate in social games like World of Warcraft (Wow) with the purpose of acquiring money. The true wealth is acquired through the exchange of this amassed gold. The bulk of affected gamers are inept and inexperienced individuals who do not fully immerse themselves. Due to the lack of regulation, these transactions pose a higher risk and incentivize participation in unlawful behaviour.

Fluctuations in the values of virtual currencies

Virtual currencies are completely governed by market dynamics and can experience devaluation due to market sentiment, unlike legal currencies which are backed by the guarantee of central banks. Put simply, when the value of a virtual currency unit decreases, there will be a reduction in the number of units accessible for that same currency unit. This phenomenon is becoming more prevalent in exclusive internet forums.

CONCLUSIONS

Cryptocurrency has revolutionised digital payments by offering a private and non-third-party method. It has emerged as a new payment system and a distinct kind of currency that has the potential to replace traditional fiat money. Although bitcoin has been steadily increasing in popularity, its acceptance by the general public remains relatively modest as it does not meet the typical person's expectations. Today, only a small number of individuals would consider cryptocurrencies as their sole choice for making payments in the future. The main barriers to the general acceptance of cryptocurrencies persist in their lack of conformity with the existing regulatory framework, encompassing concerns of financial integrity, consumer protection, tax compliance, monetary policy alignment, and liquidity volatility. While many financial institutions are allocating significant funds to adopt cryptocurrencies as a payment method, its widespread recognition is still limited. Recently, banks have started using digital technology to lower the expenses associated with providing liquidity to real-time gross settlement (RTGS) systems. This also improves the efficiency and reliability of payments, as well as the overall financial system. The Indian government appears to disregard numerous favourable attributes of cryptocurrencies. The prospect of achieving large returns on cryptocurrency assets amid an economic slump has attracted numerous Indian investors. If India implements well-crafted legislation, the bitcoin business has the potential to see substantial growth and prosperity. India is home to a substantial population of bitcoin merchants. A complete ban on cryptocurrencies is not a viable choice for competitive economies in the current era of rapid technological advancement.

Reference

Website

1. *Report of the Committee relating to cryptocurrencies, Department of Economic Affairs, Ministry of Finance (2019)*
2. *Why India's Cryptocurrency boom is problematic? By Mimansa Verma (July 2021) (https://scroll.in/article/999433/why-indias-cryptocurrency-boom-is-problematic) [Last visited on 09h November 2021]*
   Internet and Mobile Assn. of India v. RBI, (2020) 10 SCC 274.
3. *What are the Legal risks to Cryptocurrency investors? By Nathan Riff (October 2021) (https://www.investopedia.com/tech/what-are-legal-risks-cryptocurrency-investors/) [Last visited on 09th November 2021]*
4. *Recent Amendment to Schedule III of the Companies Act, 2013 – Whether a steptowards recognition and regulation of virtual currencies/cryptocurrencies in India? (https://www.scconline.com/blog/post/tag/cryptocurrency-and-regulation-of-official- digital-currency-bill-2021/) [Last visited on Nov 09, 2021]*
5. *Cryptocurrency in India- Nation's newpower but with Regulations Regulation of Cryptocurrency: a comparative analysis of Indian and Japanese position:*
6. *Cryptocurrencies: way forward for India by Ms Veeral Mehta (https://blog.ipleaders.in/cryptocurrencies-way-forward-india/) [Last visited on 09th November 2021].*
7. *https://blog.ipleaders.in/key-insights-legal-framework-cryptocurrency-india/*
8. *https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=39435*
9. *(https://www.analyticsinsight.net/cryptocurrency-in-india-nations-new-power-but-with-regulations/) [Last visited on Nov 09, 2021]*
10. *(https://blog.ipleaders.in/regulation-of-cryptocurrency-comparative-analysis-of-Indian-and-Japanese-position/) [Last visited on 9th Nov 2021]*
11. Paramasivan, C., & Ravichandiran, G. (2024). Payment banks—A new milestone for banking penetration in India. *International Journal of Financial Engineering*, 2350062.
12. Paramasivan, C., & Kamaraj, R. (2015). Public sector banks performance and contribution on Pradhan Mantri Jan Dhan Yojana in India., International Journal in Commerce, IT & Social Sciences, Volume 2, Issue 6