A Study on awareness and attitudes towards Crypto currency among college students

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Abstract:

Adoption on any new technology is basically influenced by awareness and attitude. Awareness is the basic element to make people use the technology. Attitude is a secondary element to increase the use of technology by people. It is always the students and youngsters who easily adopt technology and this study is conducted with college students studying various courses like engineering, medicine, science, arts and humanities. The objectives of the study were to verify the influence of attitude on adoption of cryptocurrency, the influence of awareness on adoption of cryptocurrency and the influence of awareness on attitude towards cryptocurrency. The hypotheses were framed according to the objectives of the study and all the hypotheses were accepted on the basis of p values using PLS SEM. The results of this research study concludes that awareness level on cryptocurrency is high but attitude towards adopting cryptocurrency is low due to various factors like volatility, regulation and so on. People's perception on using cryptocurrency as an exchange medium will change if properly regulated by the regulatory bodies and also the common people has to be educated on the same.

Keywords: Crypto currency, Awareness, Attitude, Bitcoins, Adoption of Cryptocurrency

1.Introduction

The transformation from Barter system to Fiat Currency has taken many Centuries wherein the remodelling of fiat currency to cryptocurrency took only decades. Cryptocurrency the most debated topic at present throughout the world has gained more prominence recently regarding its regulation and usage as a exchange medium. Cryptocurrencies are secured by cryptography and the transactions maintained in block chain technology.

Physics of money have transformed the paradigm of human life. The human race started exchanging goods for goods, later traded against salt, stone weapons and so on, then traded with gold, and currently the currency exchange system is in practise. The block chain technology is expected to remodel the entire existing financial system and transpose the global business models.

Crypto currency was introduced by the sydonym sathoshi nakamoto on 2009. After that many crypto currencies are introduced in the market. Approximately 10365 crypto currencies has been issued so far. Crypto market is not yet created or regulated by any central authority even though it has gained trust of many people because of its tremendous value appreciation. Few country's accept and recognize the crypto currency for the exchange where many countries are in indecisive mode. Few countries proactively have understood the risk of accepting crypto as a currency and so issued their own digital currency to stabilize their economic conditions.

While several determinants have been examined to test adoption, attitude and awareness always inclined to be the most usual antecedent to elucidate actual behaviour. This is partially because of the various technology adoption models that influence the mentioned determinants. Thus, this research study aimed at calculating the awareness level and attitude of college students towards cryptocurrency and how these may result to eventual decision to adopt. This research study will be supporting in providing baseline information on the possible determinants that measure the level of success in the introduction of new innovative exchange systems such as the topic understudy. In addition, the results of the study will also substantiate valuable information to throw light on the possible extent of crypto currency adoption, based on identified awareness and attitude, in developing economies like India.

2. Review of Literature

Money makes the world of business turn around. Still money is higher than cash. Many other forms of payment like debit and credit cards differ, not always positively, from traditional guise of money. The similar applies for cryptocurrencies like Bitcoin (Trautman 2014; Vigna and Casey 2015), SETLcoin (Bajpai 2016), Liberty Reserve (Spiegel 2016), Ether (Extance 2015), Solar Coin, or further 'social' altcoins (Kleineberg and Helbing 2016).

As because the advantages and disadvantages of plastic money are soberly and widely debated, the argumentation about e money is more abundant mercurial; the topic entice less combatants but flares high temperament. For both the defenders and detractors, decentralized digital currency tempt the end of the world as we are already aware of it: the former reprehend cryptocurrencies as downright evil (Krugman 2013) as they can simplify nefarious

commerce (e.g., weapons, drugs, and sex) and since they frequently avoid public ordinance or regulation. The latter shower cryptocurrencies as a solving tool to few of the most crucial societal ailments (e.g., poverty, debt crises, and hyperinflation) of the present economic system (Vigna and Casey 2015). Both sides accord, however, on the fact that because of their digital nature and global proclamation, cryptocurrencies have the capacity to be much more inescapable than any previous forms of money.

The first and foremost precisely functional cryptocurrency, Bitcoin, was constructed in 2009 and has been gaining velocity and momentum ever since, although the bitcoin community is fractioned into two later. One sector is promoting the primal idea of a bounded cryptocurrency and a second fraction fighting for growth by making Bitcoin more of a conventional currency (Economist 2016). Although Bitcoin was discussed high in business media fast and wide, scholarly literature materialized only step by step thereafter; the first grant to appear was not until 2011 in the Journal of Internet Banking and Commerce (Jacobs 2011).

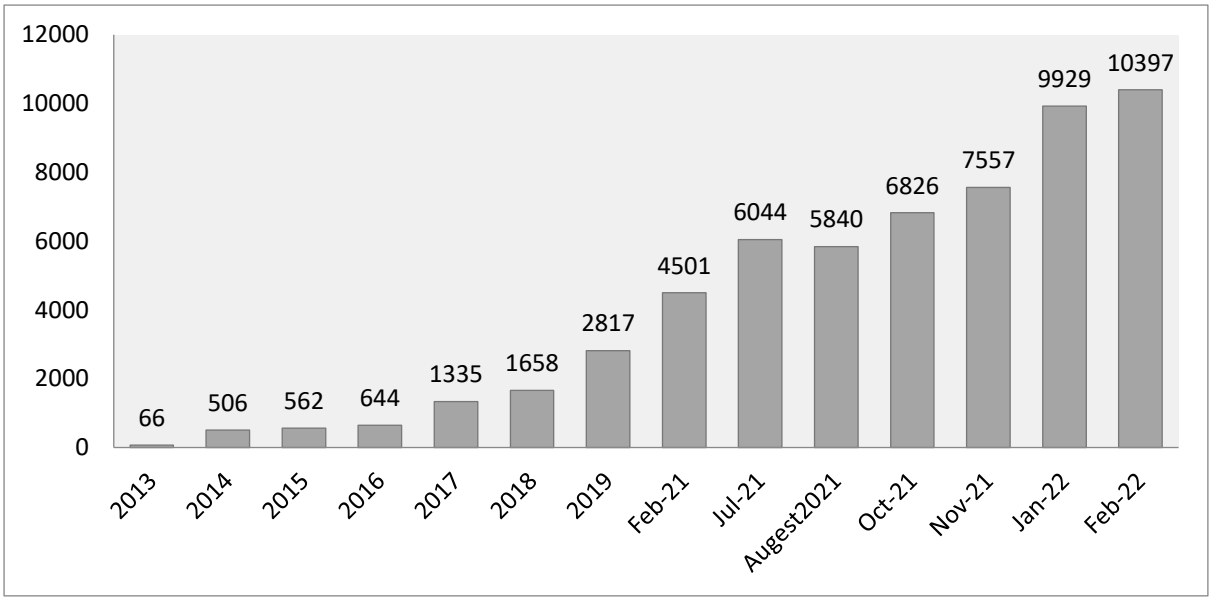
Most and maximum of the cryptocurrencies can be purchased in exchange for conventional currencies (or for other cryptocurrencies), both online and offline at various trading platforms and at certain ATMs respectively. Initially cryptocurrencies came into being through various processes of ‘‘mining.’’ Similar to the physical process of extricating the raw materials for bullion, the digital currencies ‘mining’ demands the input of effort and/or equity. This means that a user is forced to employ time and computing power to participate in generating a ‘‘ledger’’ of transactions recording and documenting all transactions with a ‘altcoin’ (alternative digital coin). Generating currency and verifying payment are thus linked together. It is necessary that all cryptocurrencies need credible attestation that a prescribed amount of value has been transferred between parties in order to avoid fraud, (Tendermint 2014).

Though, the future price of Bitcoin, as like any other kind of cryptocurrency, will essentially depend on the breadth and width to which consumers use it and how traders , merchants and so on are likely to accept it. This raises a very important query on whether such technology will result positive utilization from both ends of the exchange transaction (S. Schuh and O. Shy,2016). In the case of the Philippines, the adoption rate of cryptocurrencies fetched only at 2.9% which is only second to Singapore at 3.3% (L. Subido,2013). In addition, it is found that, only half of the US adult population are aware about cryptocurrencies, like Bitcoin, by the end of 2015, thereby insisting requirement of another decade to make the majority of the consumers become aware of its existence (S. Schuh and O. Shy,2016). Bohr and Bashir,2014 technology awareness highly influences the adoption of cryptocurrencies.

The debate and discussions on the status of cryptocurrency is presently growing on the scientific literature pages and in the public discourse and media. However, it continues to remain an open question whether cryptocurrency should be treated as money and whether it could perform all of the functions of money. The latter is due to the fact that only those tools that can perform functions dictated by the market can be retained as money in the economy (Abramova, M.A.).

The Cryptocurrency Market

There are nearly over 10,000 as of 2022 - a severe increase from just a handful of digital coins in 2013. However, a large portion of these crypto currencies might not be that significant. Due to the open creation process of a crypto currency, it is relatively easy to make one. Indeed, it is believed that the top 20 crypto currencies make up nearly 90 percent of the total market.



SOURCE: https://www.statista.com/statistics/863917/number-crypto-coins-tokens/

Crypto currency Regulatory Landscape

Cryptocurrency and Crypto markets are not fully regulated through out the globe. The countries that have regulated Cryptocurrency include United Kingdom, Singapore, Indonesia and Canada. Philippines, Switzerland, Germany, Australia, the Netherlands, Thailand, and South Korea are among the countries that have controlled cryptocurrencies rather than outright banned it.

The United States of America has regulated cryptocurrencies in several states, while others are exploring legislation. The city of New York has proposed a conditional licencing system to make it simpler for virtual currency start-ups to operate. Wyoming has already passed legislation authorising the establishment of a bank dedicated to enable businesses to safely and legally store digital assets. Oklahoma has presented legislation allowing government organisations to use, sell, and exchange cryptocurrency. In transactions involving virtual currencies or digital assets, the US Treasury Department's Financial Crimes Enforcement Network has produced a draught law mandating virtual currency providers to keep records and verify the customer's identification. Future tactics to curb illicit bitcoin use proposed by the US Department of Justice include increasing law enforcement awareness and skill in cryptocurrency technology to conduct investigations more effectively.

The Countries that have banned cryptocurrencies are Ecuador, Macedonia, Saudi Arabia, Morocco, Qatar, Vietnam and Bolivia.

SOURCE:https://www.mondaq.com/india/fin-tech/1044546/global-cryptocurrency-regulatory-landscape?

3.Methods

This research is an empirical research to study the awareness and attitude on cryptocurrency among college students. A structured questionnaire tool consisted of 13 items, four measures the level of awareness on cryptocurrency by respondents while the remaining nine estimates their attitude towards the same, all in a 5-point Likert Scale. were circulated among 400 students of SRM Institute of Science and Technology and 300 responses were collected. It is always the youth population adopting technology fast and are highly prone to using new innovations. Hence the population for the study are the college students and the convenience sampling techniques was used to conduct the survey. Cronbach alpha value which is above the cut-off 0.7, confirms the reliability of constructs. PLS SEM was used to test the following hypothesis.

Hypothesis:

H1 : Attitude positively influences adoption of Cryptocurrency

H2 : Awareness positively influences adoption of Cryptocurrency

H3 : Awareness positively influences attitude towards Cryptocurrency

4. Results and Discussion

The student respondents belong to various subject areas like engineering, medicine, management and so on. The survey was conducted during the period January 2022 to March 2022.Out of total respondents, 73.9 % are already investors in equity market and 40.1% of the respondents have confirmed that they will convert their equity investments to cryptocurrencies. I preferring cryptocurrency as a mode of payment, 34.1% of the respondents deny it due to regulation constraints, 29.6% don't prefer because of very low level of acceptance as exchange, 23.74% don't agree due to recent scams and 12.6% prefer only fiat currency due to high volatility in cryptomarket. 25.4 % of respondents are existing users of cryptocurrency, 50% have an idea to use crypto's in future and 24.6% don't want to use Crypto currency.Only 12% of the respondents have understood cryptocurrency very well. All the respondents have heard and known about cryptocurrency through media, Newspapers, magazines, social media and so on. The data were treated using appropriate statistical tools done to measure the awareness and attitude towards cryptocurrency among students.

Table 1 Awareness level on Cryptocurrencies

Indicators	MEAN	SD	Description
I have adequate knowledge of blockchains, hash graphs, and other technology supporting crypto currency.	4.3	0.32	High Awareness Level
I could judge the differences between crypto tokens and cryptocoins.	4.61	0.23	High Awareness Level

I knew the platforms such as Omni, waves Ethereum, and NXT.	4.65	0.45	High Awareness Level
I knew that crypto currencies operations happen in an independent and open network.	4.45	0.33	High Awareness Level
Over-all	4.325	0.3325	High Awareness Level

The mean values in Table 1 represents that overall awareness of the respondents is high intimating that the respondents are highly aware of the existence of such currency. In fact, they are highly aware of the cryptocurrency's platforms such as Ethereum, NXT, Omni, and waves (Statement 3) and have expressed knowledge on the difference between crypto coins and crypto tokens (Statement 2). Moreover, these respondents also express high awareness on how cryptocurrencies operate in an open and independent network (Statement 4). In his understanding of the vital role of awareness in the function of cryptocurrencies, Velde,2013 offered a primer which excellently provides the technical mechanics of Bitcoin. Further, he explained that Bitcoin and other virtual currencies have struggled for credibility with the general public for many possible reasons. Perhaps most importantly, virtual currencies are difficult to comprehend because they are new, unfamiliar and technologically complicated compared to existing payment methods. This has swayed most potential users to avoid exploring the potentials of the currency.

Table 2 Attitude on Cryptocurrency

Indicators	MEAN	SD	Description
I accept that crypto currencies can be casted off as a exchange medium	3.25	0.43	Positive Attitude
I trust that crypto currency technology can be put in use to make smart contracts	4.25	0.33	Positive Attitude
I accredit that crypto currencies can be used as hedging tools.	4.50	0.75	Positive Attitude
It is easy to do online transactions using crypto currencies.	4.30	0.65	Positive Attitude
I believe that it is possible to replace fiat money with crypto currencies.	2.25	0.54	Negative Attitude
It is possible that crypto currency, would eliminate a monetary regulator like a central bank.	2.25	0.45	Negative Attitude
I believe that crypto currencies will eliminate the need for banks.	2.15	0.44	Negative Attitude
I recognize that business transactions will transform due to crypto currency.	4.25	0.81	Positive Attitude
I am sure that crypto currencies might debar the want of financial intermediaries like money	3.15	0.62	Positive Attitude

gram international ,western union and so on.			
Overall	3.37	0.56	Positive Attitude

The mean values in Table 2 represents that overall attitude of respondents towards cryptocurrency is neutral. Though the respondents agree cryptocurrency as medium of exchange, smart contracts, hedging tool, business transaction transformation tool and eliminate financial intermediaries, they deny accepting crypto currency instead of fiat money, which would put an end to banking system.

Table 3 Hypothesized path Results

Paths	T statistics	P values	Hypothesis accepted / Rejected
Attitude positively influences adoption of Cryptocurrency	2.573	0.010	Accepted
Awareness positively influences adoption of Cryptocurrency	4.413	0.000	Accepted
Awareness positively influences attitude towards Cryptocurrency	4.456	0.000	Accepted

All the paths proposed in the hypothesized model are significant as the p values are less than 0.05. Hence attitude is the most influential factor to increase the adoption of cryptocurrency. Awareness also influences the adoption of Cryptocurrency as well as attitude which in turn influences adoption of Cryptocurrency.

5. Discussion

Swathy Shukla & Akshay A (2019),People commonly are aware of the Cryptocurrency and they want to see it as part of their investment portfolio as it gives good return. But they don't prefer to invest in Cryptocurrency due to regulatory limitations from Government and regulatory authorities. If regulatory authorities and Government of India will come forward to regulate its transaction and use in Financial market, it can bring change in entire investment portfolio. It is well known that Cryptocurrency is the result of all new century innovative technologies, and many countries have already regulated and modulated its use in day to day business and many countries are in process to regulate its transaction in crypto market. So, Indian Government along with its regulatory authority should take necessary steps to regulate the Cryptocurrency transactions as investment option.

Similar to previous research, this study is done to examine the impact of awareness and attitude on cryptocurrency adoption. As all the hypothesis are accepted, the result concludes that attitude and awareness play a significant role towards adoption of cryptocurrency. The world of money transactions have faced so many transitions in exchange systems wherein all systems were successful for atleast a nominal period. This study results say that almost all the

samples of the population are aware of cryptocurrency but it is only their attitude which prevents them from using cryptocurrecy. The negative attitude towards cryptocurrency is due to high volatility in crypto markets and the risk of financial losses arising on inclination to high volatility. People have trusted banks for decades together and it is hard to make them believe on an economy without central banks, regulating bodies , banks and so on.

Future Research

The research can be done with various group of students, belonging to different regions and different education domains. The same study can be performed with various age groups and also including more other constructs that is related to adoption of cryptocurrency. Also the study can be performed using various technology adoption models like TAM, TPB, IDT, UTAUT, TRA and so on. A comparative study among different cryptocurrencies with same instrument could find the reasons for variation in acceptance level of various cryptocurrencies.

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