

“CRYPTOCURRENCY – COULD IT BE A MENACE TO THE SOCIETY”

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Received: 06 Aug 2018

Accepted: 10 Aug 2018

Published: 27 Aug 2018

ABSTRACT

In 2008, there was a financial crisis throughout the world and economy was severely affected by it, it was also known as the great the depression. This incident led to the emergence of peer to peer form of virtual currency backed by block-chain technology. Satoshi Nakamoto published a white paper about how blockchain could be use to initiate virtual currency and eradicate the problem of double spending, Thereafter the very first bitcoin was introduced which was peer to peer, anonymous, and encrypted form of virtual currency, which is backed by the blockchain technology – This technology act as a ledger which records every single transaction happening via bitcoin, Blockchain inherently challenges to replace all forms central authority with a decentralized, peer-to-peer, and open source trust protocol.

KEYWORDS: *Longer Run, Bitcoin Currency Exchanges*

INTRODUCTION

Cryptocurrency – crypto means encrypted or hidden which means it cannot be read by the normal human without any using decryption tools, and currency is the legal tender used by the people for the buying of goods and services. Cryptocurrency is a digital and encrypted form of soft currency, which can only be used at online stores and e-commerce for the purchase and selling of goods and services.

Cryptocurrency is the decentralized, volatile form of currency, which means that it can neither regulated nor controlled by the government of any country. This currency USP is that it's anonymous in nature, i.e. the when the transaction happens the sender and receiver don't know who the receiver is and who is the sender due to its strong cryptographic methods.

LITERATURE REVIEW

Benedikt Eikmanns (2015) - This research paper talks about the volatility of a cryptocurrency thus affecting the trust of the users, due to the high volatility of currency people don't trust on currency, thus volatility has a major impact and defers the users from adopting this currency.

William J. Luther (2015) – This paper talks about the future of this currency, the author concludes that future of the cryptocurrency could not be predicted due to switching cost, network cost, excessive regulation of the currency. Although the author believes that it could only be helpful if blockchain technology is adopted in a longer run, thus it will reduce the cost of the transaction.

Campbell R. Harvey (2014) – Author focusses on the problems which would hinder the growth of cryptocurrency, one those are the issue of volatility due to the small size of digital currency market size. Also, due to the anonymity, it promotes illegal activities on the dark web.

Reuben Grinberg (2011) – Author raises the issue of government regulation, that if it's centralized it would create a monopoly. Thus, the government would have an upper hand on controlling the money, thus it also reduces the anonymity. Which is one of the USP of it another issue like tax evasion and banking without charter are various other issues link with it.

Danton Bryans (2013) – Author talks about the legal issues of money laundering where it makes little since to regulate entities other than Bitcoin currency exchanges. Increased pressure on users will only serve to increase the cost of enforcement in the long run. It says that enforcement of the law could prevent money laundering. Due to the high nature of anonymity, it's close to impossible to track the sender due to encryption techniques.

Rainer Böhme, Nicolas Christin, Benjamin Edelman, and Tyler Moore (2015) – Authors says that cryptocurrency could be used to replace credit and debit card industry because transactions could be processed directly without any intermediary, also due to its disruptive nature, it would hold the growth of banks. Also, in a technically advanced era, due to the availability of various other types of coins competition would soar.

Michal Polasik (2017) – Author claims through his study that price fluctuation is still a problem, although it doesn't yield dividends, cash flows, or earnings. It talks about the supply and demand of the currency. Also, the technology has not reached masses or it has not been adopted by a majority of the people, thus making it a small market. Also, the legal issues related to it and many countries banning the currency due to anonymity nature.

Ferdinando M. Ametrano (2016) - Bitcoin is changing the global economic and political environment of the world, people have used the barter system and moved to money from past many years. Now it's the time to move onto a good money aka cryptocurrency. As people would move to cryptocurrency, the demand for fiat currency would reduce thereby lead to depreciation, thus slowly and gradually cryptocurrency would replace it and thus generating more demand and stability in the market.

Garrick Hileman (2016) – Cryptocurrency is evolving slowly and eventually grow over the period of time, bitcoin mining has increased to a greater extent in the countries like India, China despite giving several warnings to people by the government of India and China respectively. Although bitcoin does not have immediate potential it is likely to increase in the future in the international market.

RESEARCH METHODOLOGY

The aim of this research is to provide the insight and impart knowledge to the readers about the cryptocurrency it's implication on society and speculating whether it would be a menace to the society or not, how benefits of this technology could be utilized in more effective and efficient manner. And what changes have already occurred due to the emergence of cryptocurrency, problems people are facing during its adoptability. This study will help in analyzing the scope of the crypto-currency going forward.

Research Objectives

- Status of cryptocurrency and how it is blending with the current scenario.
- How it is being adopted by the consumers.
- Changes occurring due to its adoption and adaption.

The research objectives heavily depend on the users and their adoptability towards the cryptocurrency, thus it is very important to have the right amount of education, so that consumers are equipped with the knowledge so that to avoid the consequences due to the virtual form of currency and ultimately help in providing better decision making, because being ignorant could lead to miss opportunity or also avert the dangers associated with it.

CORRELATION

Correlations

Table 1

		purchase cryptocurrency if volatility reduced?
	How old are you?	
Pearson Correlation	1	.139
Sig. (2-tailed)		.034
N	117	117
Pearson Correlation	.139	1
Sig. (2-tailed)	.034	
N	117	117

The correlation has been done between age vs the purchase of cryptocurrency (if volatility is reduced), there is a positive correlation between the two factors, and thus, if age is increased the probability of buying

cryptocurrency will increase as the volatility is reduced. At the young age, people have a tendency to experiment more and more, so they tend to invest more (irrespective of fluctuation), thus doesn't care about the money as they experiment to get better ROI. But as the age progresses, people start their family thus saves more for their family, whereas if the price or fluctuation is reduced people tend to purchase when the price of such commodity is stable.

Correlations

Table 2

	could_crypto_be _a_menace	crypto_govt_inte rvention
Pearson Correlation	1	.398**
Sig. (2-tailed)		.000
N	117	117
Pearson Correlation	.398**	1
Sig. (2-tailed)	.000	
N	117	117

** . Correlation is significant at the 0.01 level (2-tailed).

Government intervention would create ruckus in the cryptocurrency world, as it would kill the privacy of the people, if cryptocurrency is regulated by the government, there will be no difference between normal fiat currency as price will be regulated by the govt., the main feature of cryptocurrency is peer to peer anonymous transaction would be in danger, thus if government intervention increases, it will eventually lead to the menace. Recently, the Government of India has announced that banks will not allow any transactions based on cryptocurrency. There is a positive correlation between the two variables. The value is ~ 0.400, which tells that there is a significant correlation between the variables.

REGRESSION

Security

H₀: There is no relation between cryptocurrency a menace to the society and security.

H₁: There is a relation between cryptocurrency a menace to the society and security.

Low-Cost Transaction

H₀: There is no relation between cryptocurrency a menace to the society and low-cost transaction. **H₁:** There is a relation between cryptocurrency a menace to the society and low-cost transaction. **Government Intervention**

H₀: There is no relation between cryptocurrency a menace to the society and government intervention.

H₁: There is a relation between cryptocurrency a menace to the society and government intervention.

Volatility

H₀: There is no relation between cryptocurrency a menace to the society and Volatility

H₁: There is a relation between cryptocurrency a menace to the society and Volatility

Now hypothesis for different variables have been decided, now by comparing a significant value with that of alpha, we would decide that whether to accept the null hypothesis or reject that.

Confidence Interval = 95% i.e. Alpha = 0.05.

Table 3

	Coefficients ^a		Standardized Coefficients		
	Unstandardized				
	B	Std. Error			
(Constant)	1.261	.290		4.348	.000
crypto_security	-.088	.087	-.121	-1.010	.314
crypto_lowcost	.193	.115	.205	1.678	.096
crypto_govt_interventio					
	.256	.083	.331	3.080	.003
N					
crypto_volatile	.072	.085	.091	.850	.397

Dependent Variable: Could_Crypto_Be_A_Menace

Now comparing the significant value of every variable with that of alpha value i.e. 0.05 in order to check that whether to reject the hypothesis or whether to accept that in order to find the relation between various factors and the consumer purchasing behavior.

If the significant value is less than that of alpha value, we would be rejecting the null hypothesis.

Government Intervention

The significant value is less than that of alpha so we would be rejecting the null hypothesis. **(0.03<0.05)**

This is being interpreted that there is a relationship between government intervention and cryptocurrency a menace to society i.e. government influence into cryptocurrency does lead to menace to society.

Talking about **security, low-cost transaction, and volatility**, the significant value is greater than 0.05 i.e. alpha values so we would be accepting the null hypothesis. As per the analysis **security, low-cost transaction and volatility** would not be a menace to society.

REGRESSION MODEL

$$Dependent\ variable = [Standardized\ coefficient\ Beta\ (independent\ variable)]$$

$$could_crypto_be_a_menace = (Minus) \ -.121* \ crypto_security \ +.205* \ crypto_lowcost \ +.331* \ crypto_govt_intervention \ +.091* \ crypto_volatile$$

Interpretation

The regression model has provided with the information that how dependent variable i.e. consumer purchase behavior changes with change in different independent variables.

With the regression model equation, while comparing the influence of different independent variables over the consumer purchase behavior, all the independent variables have a positive impact over dependent variable except for the security of cryptocurrency.

Security: If there is more security towards the cryptocurrency, there are chances that people would actually buy the cryptocurrency, thus people have a frame of mind that their currency is secured and it cannot be stolen or lost. Higher the security, lesser problematic for the people. Also, cryptocurrency works on the block-chain principle, which is highly secured and practically impossible to hack.

Low Cost Transaction: The cryptocurrency transactions are cheaper than normal online bank transaction, websites like IRCTC, Book My Show, Swiggy and other national and international websites incur high transaction fee, which is an unnecessary spend done by the user, thus, if transactions are made using cryptocurrency, the fee is relatively lower than the usual. Thus reduce the mental pressure and reduce the problem for an individual.

Government Intervention: Government intervention would create ruckus in the cryptocurrency world, as it would kill the privacy of the people, if cryptocurrency is regulated by the government, there will be no difference between normal fiat currency as price will be regulated by the govt., the main feature of cryptocurrency is peer to peer anonymous transaction would be in danger, thus if government intervention increases, it will eventually lead to the menace. Recently, the government of India has announced that banks will not allow any transactions based on cryptocurrency.

FINDINGS

Objectives

- *Status of cryptocurrency and how it is blending with the current scenario.*
- *How it is being adopted by the consumers.*
- *Changes occurring due to its adoption and adaption.*

People definitely have basic knowledge about the crypto-currency, yet they still have to understand that it's not just any other type of investment opportunity but it has to offer more and more to its users. Many users know the basic fundamental criteria of the cryptocurrency – they do and know the how online transactions are performed, which clearly tells that they have basic knowledge of computers or the mobile banking.

Our first objective which talks about the status of cryptocurrency and how it is merging and blending with the society and the current scenario tells that yes, people are willing to perform online transaction, the data shows that 93.16% people do online transaction which is the basic essential requirement for cryptocurrency, also 52.99% people have started keeping online wallet or some kind of online banking, which shows that people really know how to handle and run an online bank and handle the e-banking solutions. People are also eager to invest in cryptocurrency as 47.01% people said yes that it is a new investment opportunity for them to increase their wealth. People earlier used to depend a lot on the hard cash, which used to create a problem during travelling and also had security issues associated with it. But due to the emergence of plastic money, the scenario has changed, the issue of carrying money has reduced drastically and a problem of money theft has reduced drastically, but there is still a chance of card cloning and theft. But these kinds of problem are taken care by the cryptocurrency, as it's a most secured form of currency available right now, with maximum encryption security. Thus 33.08 % People also think that e-commerce websites like Amazon.com and Flipkart should start adopting cryptocurrency in India also. Which not only replace the credit and debit cards system but it will also have lower transaction fees during the whole transaction.

Also, People use various international banks to send and receive money across the world, which generally takes time and leads to higher transaction fees, thus ending paying huge amount of their hard-earned money, but with the cryptocurrency there is no issue of transacting the huge amount of money, because it's a peer to peer form of transaction, thus there is no middle-men required and there are no conversion charges dealt with it.

Secondly, our another objective was *to know how people are seeing and speculating the cryptocurrency*, most of the responses that are received are generally neutral or below neutral for example people fear about the cryptocurrency being an illegal asset, thus most of the people might like to invest in it but due to security, political and economic issues, they would opt out by not investing, results shows that out of 117 people, only 19 people think that they don't have fear of illegality, other issues like government regulations- what if it ends up-regulated by the government, thus, our each every transaction will be traced by the government, all our personal information will be taken up the by the government, which would kill the essence of it and kill the purpose of the currency, also, prices will be under the control of the government.

People who have not yet purchased the currency are only seeing it as a bogus/ cheat scheme to loot people's money, out of 117 people, 20 people think that it's not a scam, rest have given neutral or negative responses to it. People also say that they would only purchase the cryptocurrency if and only if, there is a less volatility/ and less price fluctuations, people don't want to suffer losses from their hard earned money, thus they want to play it safe, it has been seen that *there is a positive correlation between age vs the purchase of cryptocurrency (if volatility is reduced), there is a positive correlation between the two factors*. Thus, if age is increased the probability of buying cryptocurrency will increase as the volatility is reduced. At the young age, people have the tendency to experiment more and more, so they tend to invest more (irrespective of fluctuation), thus doesn't care about the money as they experiment to get better ROI. But as the age progresses, people start their family thus saves more for their family, whereas if the price or fluctuation is reduced people tend to purchase when the price of the commodity is stable.

Thirdly, changes which are occurring due to its adaptation most of the people also think that it's the new investment opportunity, but it's only restricted to for the investment purpose right now. In foreign countries the cryptocurrency is used while traveling abroad, the people pay heavy taxes at the money exchange due to which they generally have to cut out on their expense, but crypto-currency on contrary, have a universal price all over the world. Thus, cryptocurrency could be used to exchange fiat money internationally relatives at lower fees, which not only saves the money but also allows you to pay lower taxes. Also, recently many start-ups have emerged with their various goals and motive, to drive ahead, the investors could invest and fund these start-ups with cryptocurrency, because network fee and transaction fee are relatively higher in some countries, to avoid that investors could fund cryptocurrencies to avoid higher transaction fees.

In some countries, both large and small retailers accept cryptocurrencies as a form of currency, especially in Germany where it is legal to perform a transaction, although this number is relatively low, the trend has been started. People could also purchase these currencies to increase their worth of wealth, where the government cannot block the access or take a margin out of it. Also, people look at it as an investment option, many financial institutes and traders have seen it as a potential source of income due to volatile nature. Big companies like Amazon, Microsoft etc. have started accepting payments in the form of bitcoins, where countries like USA, Japan, have installed bitcoin ATMs to people could trade bitcoins from their as cryptocurrencies are legal in such countries.

Government intervention would create ruckus in the cryptocurrency world, as it would kill the privacy of the people, if cryptocurrency is regulated by the government, there will be no difference between normal fiat currency as price will be regulated by the govt., the main feature of cryptocurrency is peer to peer anonymous transaction would be in danger, thus if government intervention increases, it will eventually lead to the menace. Recently, the Government of India has announced that banks will not allow any transactions based on cryptocurrency.

Being backed by Block-chain technology, tend to eradicate the problem of double spending of money, uses the online 256-bit encrypted secured ledger to store transaction, every single transaction is being recorded in online ledger, which cannot be decrypted easily, thus it is highly secure, any kind of theft from block-chain could not take place theoretically.

RECOMMENDATION

While traveling abroad, the people pay heavy taxes at the money exchange due to which they generally have to cut out on their expense, but cryptocurrencies on contrary, have a universal price all over the world. Thus, cryptocurrency could be used to exchange fiat money internationally relatives at lower fees, which not only saves the money but also allows you to pay lower taxes.

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