



A STUDY ON AWARENESS AND PERCEPTION OF CRYPTOCURRENCIES IN AHMEDABAD

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ABSTRACT

Bitcoin was first introduced by an anonymous programmer in Japan in the year 2009. It is a global cryptocurrency based on block chain technology. For its operations intermediaries like banks and financial institutions do not play their role. It is a decentralized currency. Many countries are using Bitcoin as a mode of investment. But because of its high volatility and concern towards risk, Indian government has many a times warned the usage of bitcoin. India has still not legalized its usage. This paper focuses on studying the awareness regarding cryptocurrencies among people and their perception towards cryptocurrency and especially Bitcoin in Ahmedabad. The study is based on the results obtained after conducting the survey in Ahmedabad. The analysis is done using SPSS. User's awareness and perception is linked with various demographic factors like age, gender and occupation. It also focuses on user's opinion about risk and security of bitcoin. The perception of respondents is checked regarding Bitcoin's acceptability in future.

KEYWORDS: Bitcoin; cryptocurrency, decentralized

1. INTRODUCTION

Technology is changing the way businesses function. It has also shown its impact on personal living of the people globally. People are buying and selling the products using internet. Even payment for the transactions is completed using internet. Banking and financial sector has also accepted the latest developments in technology for the day to day functioning. People have now reduced their visits to banks, and standing in a queue for deposits and withdrawals are not seen now. One such recent development found in the banking sector is of cryptocurrency. Cryptocurrency is a digital asset framed to work as a medium of exchange. It uses cryptography to secure financial transactions, control the creation of additional units and verify the transfer of assets. Cryptocurrencies use decentralized control as opposed to centralized currency offered by Central Banks. Bitcoin is one of such cryptocurrency. It is the first such currency found by Japanese unknown group named Satoshi Nakamoto. It works as a decentralized currency which does not require any intermediary.

2. LITERATURE REVIEW

(Wang, 2014) Bitcoin is digital decentralized currency working on no central authority issues new money or tracks transactions. Bitcoins are generated in a “mining” process where network participants, called “miners”, use the computing power of hardware to solve the computationally complex problems. In particular, bitcoins are a “reward” for problem solution. Bitcoin is based on Blockchain technology. Blockchain can be considered as a shared public ledger, which includes all transactions conducted in bitcoins.

(Anu Singhal, 2014) Author has described that bitcoin has potential to replace traditional money. In order to do that, it must first be a more secure form of money. Government should get involved in making the policies for protection against theft so that it can remove its highly volatile stage.

(Joseph Bonneau, 2016) In this paper, author stated that Bitcoin has emerged as the most successful cryptographic currency in history. Within two years of its quiet launch in 2009, Bitcoin grew to comprise billions of dollars of economic value despite only cursory analysis of the system’s design. Since then a growing literature has identified hidden-but-important properties of the system, discovered attacks, proposed promising alternatives, and singled out difficult future challenges. Meanwhile a large and vibrant open source community has proposed and deployed numerous modifications and extensions.

(Krugman, 2013) In this article, author has considered the Bitcoin as a very good medium of exchange, but it does not store the value at reasonably stable level. Gold preserves value, while its value is limited by technology of its mining and its limited supply in mining sites.

(Josef Bucko, 2015) Here the author explained the principles of all cryptocurrencies. The author explained the advantages of holding cryptocurrencies like low fees, no intermediary, etc. and disadvantages like high volatility, e wallet theft chances etc. The author has also compared the volatility of various virtual currencies.

(Stefan Bornholdt, 2014) Bitcoins have emerged as a possible competitor to usual currencies, but other crypto-currencies have likewise appeared as competitors to the Bitcoin currency. Here author show that the Bitcoin currency in itself is not special, but may rather be understood as the contemporary dominating crypto-currency that may well be replaced by other currencies.

(Pavel Ciaian, 2016) In the research paper titled “The digital agenda of Virtual Currencies :Can Bitcoin become a global currency?” the author studied the characteristic features of Bitcoin as compared to traditional money, the benefits and disadvantages of using Bitcoin is also checked. It was found from the research that out of all the features the extreme price volatility is one of the distinct features that affect the use of Bitcoin. The drivers of Bitcoin are found which may impact

such an extreme price volatility of Bitcoin. The drivers like market forces of Bitcoin supply and demand, Bitcoin attractiveness and global macroeconomic and financial developments were examined and time series model is used for analysing the data from 2009-2014. It was found that Bitcoin attractiveness indicators are strongest driver followed by market forces. As long as price of Bitcoin is driven by speculative investments it will be difficult for Bitcoin to compete with the fiat currencies.

(Scott Schuh, 2016) Here the author of the research paper titled “U.S. Consumers’ Adoption and Use of Bitcoin and Other Virtual Currencies” surveyed about the awareness and adoption of Bitcoin in U.S. According to the Survey of Consumer Payment Choice (SCPC) about half of the U.S. consumers have heard of Bitcoin or any of the Virtual Currencies. About 1 percent or less of the U.S. Consumers has ever adopted virtual currency. Awareness, adoption and use of virtual currencies are correlated with various demographic and economic characteristics of consumers. Demographic factors like age, income, gender, education are affecting the use of Bitcoin in U.S. Also those who are users of credit cards and debit cards are more likely to use Bitcoin as a mode of payment. The reasons for using and not using Bitcoin were also surveyed. People are more finding Bitcoin as a source of investment rather than as a payment instrument. Volatility is also one of the factors that limit its usage.

(Allexia Madox, 2017) This paper outlines an ethnographic research agenda that considers how the social uptake and use of crypto currencies such as Bitcoin represents alternative views towards value exchange. This paper focuses on three main areas of inquiry. The first one considers the use of Bitcoin as methodological and community question that can be informed by ethnographic approaches to the study of digital community. Bitcoin will bridge the gap of socio-economic inequalities within the context of digital community. The second areas consider the implication of Bitcoin use to payment systems particularly as a vehicle for transnational value exchange. Social adoption of crypto currencies is also studied. Lastly the ethnographic study is being done to find the level of trust that can be found in technical affordances of Bitcoin technology and how it relates to cyber theft, cyber fraud and consumer protection.

(A. Seetharaman, 2017) In this research paper the author studied the impact of Bitcoin as a world currency. The impact of Bitcoin technology, Bitcoin Regulation, Bitcoin Economy and Bitcoin currency on USD as a world currency using PLS method. The study concluded that using Bitcoin technology to become a legitimate currency will have a positive effect on its adoption, regulation of Bitcoin will help its growth, and Bitcoin must be brought under regulatory bodies which will positively increase the usage and adoption. Crypto-currency technology makes the transfer of

Bitcoin easy and secure, the increase in number of service providers of Bitcoin will increase its usage and its availability as currency will have an effect on USD currency.

3. CONCEPTUAL FRAMEWORK

Bitcoin is also one of the virtual currencies. It is an independent online monetary system which consists of features of both cash as well as online payment systems like credit card, debit cards. Bitcoin is a digital currency created in 2009 by a Japanese developer named Satoshi Nakamoto. Its existence is dependent on the workings of a distributed IT system taking the form of a vast peer-to-peer network, connecting programs (i.e. Bitcoin clients) implementing the Bitcoin protocol on individual computers worldwide. Bitcoin transaction consists of cryptographically signed transfer of funds from one public key to another. Its functioning does not depend upon any centralized issuing bodies like central bank or government but its value is created by the users of bitcoin since the total number of bitcoins is limited. Crypto currency is a digital asset. It can be used as a medium of exchange. It is a kind of digital currency. It works on the basis of block chain technology.

RESEARCH PROBLEM

On the basis of literature studied, cryptocurrencies seems to be well in demand by the people globally. But because of security issues and government warnings, Indian users are not able to use Bitcoin. Even in last couple of months Bitcoin price has remained highly volatile. There is a major decrease in the price of Bitcoin globally. In line with this the objectives of this research paper includes:

1. To understand the awareness about the existence of bitcoins and other cryptocurrencies
2. To evaluate the perception of people for bitcoin as a future currency

4. RESEARCH DESIGN AND METHODOLOGY

Descriptive research design is the method used. The main goal of this type of research is to describe the data and characteristics about what is being studied. This research paper is based on collecting primary data collected through survey. Secondary data is collected from various research article and publications. Survey is conducted using a structured questionnaire consisting of various closed ended questions related to awareness and perception of Bitcoin. The data is collected using convenience sampling method and the respondents are restricted to Ahmedabad city only. The awareness of the respondents is checked using demographic profiles like age, gender and occupation. The difference between demographic profile of respondents and awareness and perception about bitcoin is checked using statistical methods.

SCOPE AND LIMITATIONS OF THE RESEARCH

The scope of the research is limited to conducting the survey and collecting the data from people in Ahmedabad only. The sample size is also restricted to 67 respondents only.

5. RESEARCH ANALYSIS

The objective of this research is to find the awareness and perception about virtual currency and especially Bitcoin which is the most known virtual currencies globally. From the data collected it is found that only 6 respondents are unaware about cryptocurrencies which amounts to 9% of the respondents being unaware and majority of the respondents are aware about cryptocurrencies which includes 61 respondents making a huge 91% of the respondents out of the total being aware about the cryptocurrencies.

Figure 1: Pie chart showing awareness about cryptocurrencies in Ahmedabad

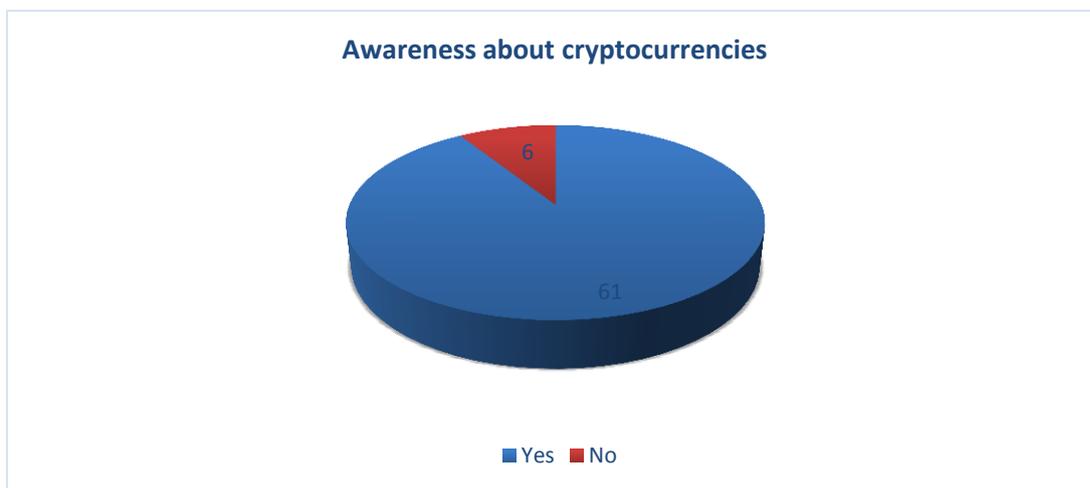
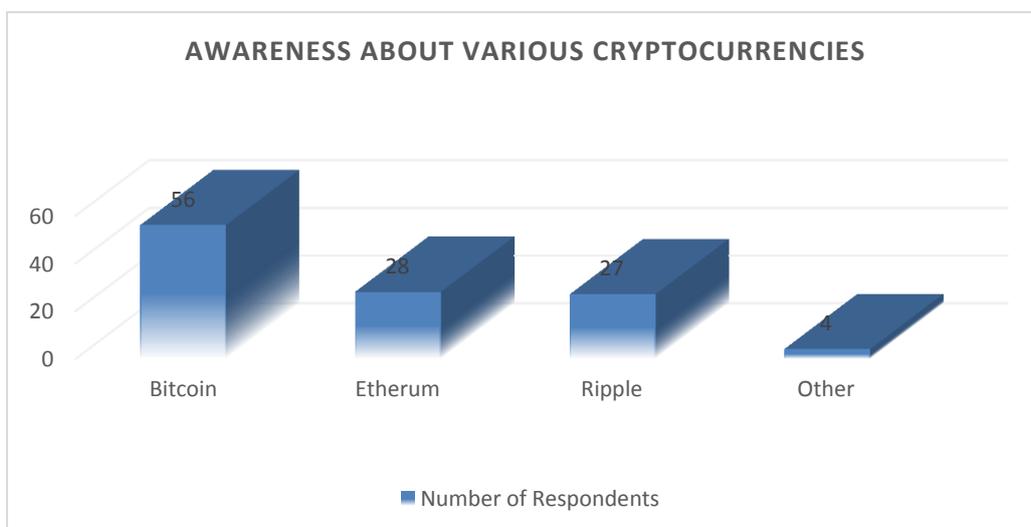
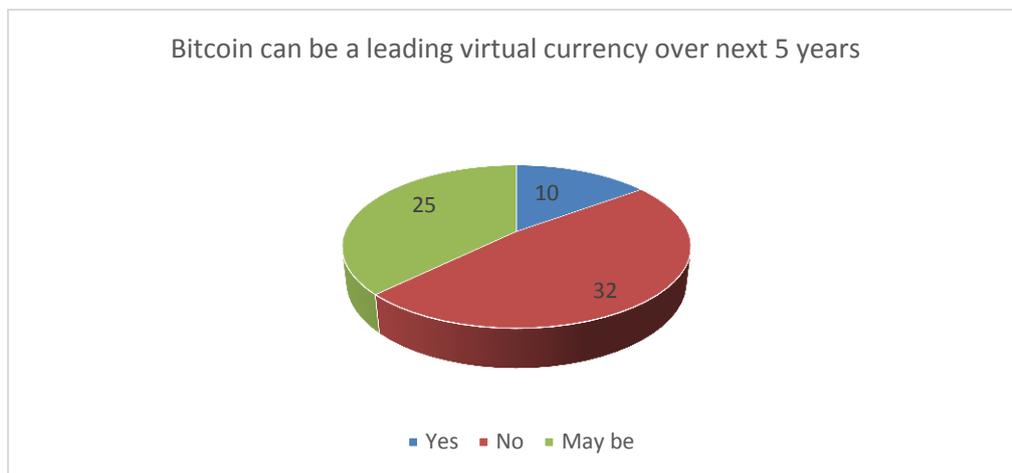


Figure 2: Bar chart showing awareness about various cryptocurrencies in Ahmedabad



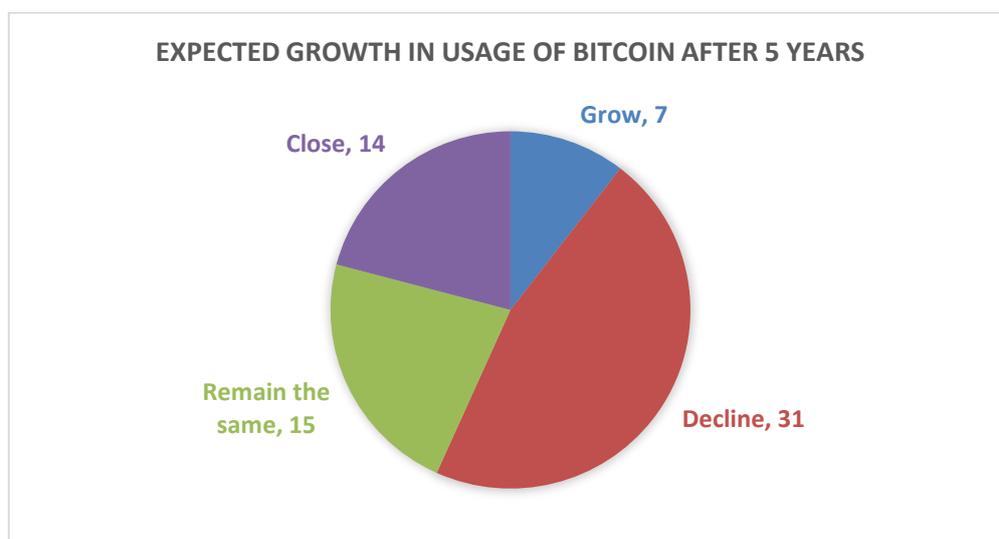
From the above diagram it can be observed that 56 respondents are aware about bitcoin and the next virtual currency known is Ethereum and ripple which counts to 28 and 27 respondents respectively.

Figure 3: Pie chart showing whether bitcoin can be a leading virtual currency over next 5 years



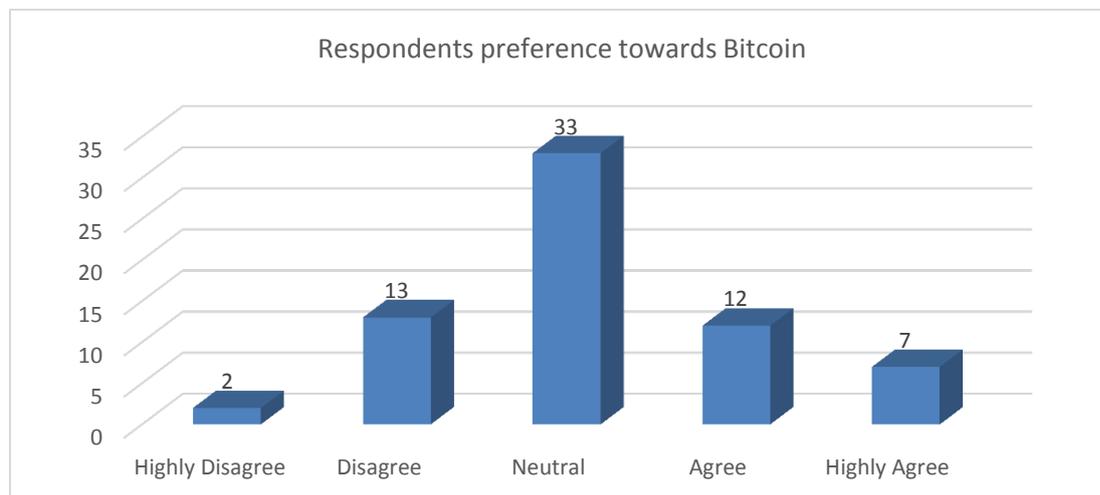
Respondents view especially about Bitcoin can be seen from the above pie diagram which indicates that respondents are of the view that bitcoin cannot be a leading virtual currency over the coming period of time. 32 out of the total respondents believe that it is hard for the virtual currency like Bitcoin to be accepted by the public at large. Respondents believe that the future of bitcoin is near to decline and close. 31 respondents are of the opinion that the future of bitcoin is at decline and 14 respondents are of the opinion that in the near future, bitcoin will not be used. This is because Government has time to time declared Bitcoin to be not a legal tender and has banned the Bitcoin transactions.

Figure 4: Pie chart showing expected growth in usage of bitcoin after 5 years



From the survey it was found that respondents preference towards usage of Bitcoin is very much neutral. 33 respondents are neutral and 13 disagree preferring Bitcoin. 12 respondents prefer the usage of Bitcoin.

Figure 5: Bar chart showing respondents preference towards Bitcoin



HYPOTHESIS TEST

Hypothesis were framed to find whether there is a significant relationship between various demographic factors and variables like awareness towards bitcoin, its riskiness, usage, preference and satisfaction. SPSS was used to analyze the data and conclude the results. It was observed that there is no significant relationship between age and awareness and their approach towards risk of the virtual currency. This indicates that people of any age are aware. This is because the young age group respondents are more in this study. So naturally they will be more aware and their approach towards risk of the virtual currency will be similar.

As per chi square test, the significant value of gender with awareness and risk is less than 0.05, hence the null hypothesis cannot be accepted. Similarly for occupation also the significant value is less than 0.05 and hence the null hypothesis cannot be accepted and so there is relation between occupation and awareness and approach towards risk of the virtual currency.

Table No. 1 Chi square values

Variable	wareness	Risk	Results
Age	0.943	0.392	Accept the null hypothesis
Gender	0.000	0.000	Cannot accept the null hypothesis
Occupation	0.000	0.000	Cannot accept the null hypothesis

Variable	Usage	Preference	Satisfaction level	Results
Age	0.816	0.061	0.245	Accept the null hypothesis
Gender	0.000	0.000	0.000	Cannot accept the null hypothesis

These demographic factors are also checked with variables like usage, preference and satisfaction and it was found there is no relationship of demographic age with variables like usage, preference and satisfaction level where the significant value is more than 0.05. In the case of gender, the significant relation is less than 0.05 which indicates that the null hypothesis cannot be accepted and so there is significant relation of gender with usage, preference and satisfaction level.

From the above analysis it can be found that respondents do not prefer the bitcoin usage. Transactions in bitcoin are still considered as risky. People are worried about the security of the virtual currency since it is a decentralized currency and operated by software only. Also the identity of the user of bitcoin always remains hidden so there are also chances that the use of bitcoin can be for any illegal activity.

CONCLUSION

People do not prefer to use bitcoin. Most of the people are aware about virtual currency but the usage is shallow since the transactions are not considered legal in India. Countries like Japan, Germany, Switzerland, Holland etc. have accepted the use of Bitcoin. Many countries have adopted it as a commodity and taxed accordingly. But in India, the government has not officially legalized the use of Bitcoin. RBI has many times warned people for trading and investing in Bitcoin. Recently, Indian Government has announced to frame the rules for cryptocurrency which may in future develop the demand and use of such a cryptocurrency. Day by day after the developments of technology it is possible that Bitcoin can emerge as a safe mode for transacting.

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