

Project Topic A study on Crypto currency With Reference To Bitcoins in India

Mr. Balamurugan.V, Dr. Savita Trivedi
Research Scholar DSCASC
Prof. DSCASC Bangalore

Date of Submission: 08-07-2020

Date of Acceptance: 23-07-2020

ABSTRACT:

Satoshi Nakamoto is considered the most enigmatic character in cryptocurrency. Bitcoin is the most popular cryptocurrency in the present world. It has emerged as the most successful cryptocurrency since its appearance back in 2009. Two main properties have probably been its key success: anonymity and decentralization. The decentralized digital currency Bitcoin presents an anonymous alternative to the centralized banking system and indeed enjoys widespread and increasing adoption. Meteoric rise of Bitcoins has led to heightened investment, academic, commercial, transactional and practitioner interest in that cryptocurrency as well as in the growing array of such instruments worldwide. Bitcoins, with its market value among cryptocurrencies and being the biggest in terms of its processing volume, carries great potential in terms of low cost, speedy processing and low-level risk, while also bringing with it important global-level change and transformation. This paper is mainly conducted to understand cryptocurrency with reference to bitcoins in India. Since transaction through cryptocurrencies are not approved by the RBI, many people in India are still not aware about cryptocurrencies like Bitcoins which can be used as an alternative payment system. Usage of Bitcoins for transaction mainly depends on the security issues and approval by the Government of India. Due to the rapid development of Bitcoins and other cryptocurrencies, it is needed to understand the working procedure and adaptability of Bitcoins among the people in future in India.

KEYWORDS: Cryptocurrency, Bitcoins, Satoshi Nakamoto, Alternative Payment System

I. INTRODUCTION:

Bitcoin is one of the most interesting digital currencies that is available on the market, and with a current increase in popularity of this thrilling cryptocurrency, there are a number of people who are interested in determining where the Bitcoin actually came from. The journey and evolution of the Bitcoin is as interesting as the currency itself, and with it still being in its infancy having only first been thought of back in 2007, we are certain to see a huge number of developments due to be implemented in recent times. From Bitcoin being introduced in stores, to the revolutionary Bitcoin casinos that we are so fond of here at Bitcoin Casino Pro, we're taking a deeper look into the evolution of the Bitcoin. Bitcoin is a currency based on digital signatures. The owner transfers Bitcoins to the receiver by signing the hash of the previous transaction and public key of the receiver. The verification of ownership can be carried out by checking the signatures.

STATEMENT OF PROBLEMS:

Bitcoins is a parallel money or private money as against the normal money of central bank i.e., RBI. Where it works through encryption of currency in digital form. As a researcher, the study aims to know the working of bitcoins in India. In the phase of non – approval from the RBI even then whether people are ready to deal with Bitcoin. These and other issues called for a thorough research program.

OBJECTIVES OF THE STUDY:

1. To understand the concept of Bitcoins market thoroughly.
2. To analyses the current status of Bitcoin penetration in India and
3. To examine the acceptance of Bitcoin transactions in Indian context

RESEARCH METHODOLOGY:

- **Exploratory study:**

The project work aims to assess the perceptions and explore positive or negative impact arising out of growing Bitcoins market in India. Therefore, the present study comes under exploratory research.

- **Survey method:**

On the topic questionnaires were administered to the sample respondents i.e., traders, investors, exchangers and expert in the field of Bitcoin operations.

- **Descriptive method:**

In the present study the researcher has examined the present scenario and the acceptance of Bitcoins in India, the study does not have the control over future variables. Therefore, the study comes under descriptive method.

SOURCES OF DATA COLLECTION:

- **Primary data:**

Primary data have been collected with the help of well-structured Questionnaire and Personal Interview of the sample respondents.

- **Secondary data:**

For the purpose of the project report the secondary data have been collected with the help of Books, Articles, Reports, Journals, Magazines, Newspaper, Web resources, and others.

DATA ANALYSIS PROCEDURE:

The quantitative data collected through structured questionnaire was analyzed through percentages to address the research objectives and presented in the form of tables and graphs, while qualitative data collected through unstructured questionnaire was analyzed through content analysis.

II. REVIEW OF LITERATURE

- **Wonglimpiyarat, Jaruneein** their research paper published in Journal of payment strategy & System titled '**Bitcoin: The revolution of the payment system?**'(2015-2016) submits whether Bitcoin could revolutionize our payment system and replace our cash-based society. The analysis, in an attempt to understand the process of technological change, is based on the technology s-curves.

- **Prateek Pathakin** his research article '**Bitcoins, Virtual Money and the Changing Dimensions of Indian Financial Law and Policy**'(2014) explores the legal and policy issues raised by use of virtual currency in India and suggests a way forward to Indian policymakersto regulate them by developing inter-disciplinary frameworks.

- **David Yermackin** his research article entitled '**Is Bitcoin a Real Currency? An Economic Appraisal**' (2014) alludes as a bona fide currency functions as a medium of exchange, store of value, and a unit of account, but Bitcoin largely fails to satisfy these criteria. Bitcoin has achieved only scant consumer transaction volume, with an average well below one daily transaction for the few merchants who accept it. Its volatility is greatly higher than the volatilities of widely used currencies, imposing large short-term risk upon users.

- **KarthiHegadekatti, Yatish S Gin** in their research entitled '**Examining Taxation of Fiat Money and Bitcoins vis-à-vis Regulated Cryptocurrencies**' (2016)alludes that they examine the Taxation aspects of Fiat money and Bitcoins vis-à-vis Regulated cryptocurrencies. It discusses the concept of cryptocurrencies (also referred to as cryptocurrencies in this paper). Even discusses the concept of Regulated and Sovereign Backed Cryptocurrencies (RNBCs). Then they envisage a scenario where cryptocurrencies are the main medium of exchange.

- **Marc Gronwaldin** his research article '**The Economics of Bitcoin Market Characteristics and Price Jumps**' states that, this paper deals with the economics of bitcoins in two ways. First, broadens the discussion on how to capture bitcoins using economic terms. Centre stage in this analysis takes the discussion of some unique characteristics of this market as well as the comparison of bitcoins and gold. Second, the paper empirically analyses bitcoin prices using an autoregressive jump- intensity GARCH model; a model tested and proven by the empirical finance community. Results suggest those bitcoin prices are particularly marked by extreme price movements; the behavior generally observed in immature markets.

- **Nicholas Plassarsin** his research book '**Regulating Digital Currencies: Bringing Bitcoins within the Reach of the IMF**' (2013) studies the potentially destabilizing effects of emerging digital currencies on the international foreign currency exchange. Specifically, it examines "Bitcoins," a decentralized, partially anonymous, and largely unregulated digital currency that has become particularly popular in the last few years. The paper argues that the international monetary fund, the institution responsible for coordinating the stability of foreign exchange rates, is ill-equipped to handle the widespread use of Bitcoins into the foreign

exchange market. It highlights the inability of the fund to intervene in the event of a speculative attack on a currency by Bitcoin users. The paper concludes by suggesting two interpretations of the funds incorporating documents, the Articles of Agreement, which would allow it to intervene in the event of such an attack.

- **James J. Angel, Douglas M. McCabe** in their research article entitled ‘**The Ethics of Payments: Paper, Plastic, or Bitcoin?**’ (2014) submits that, Individuals and businesses make numerous payments every day. They sometimes have choices about what forms of
-

payment to make or accept, and at other times are effectively forced to use a particular form. Often there is an asymmetric power relationship between payer and payee that raises the issue of whether one side unfairly exploits the other. Is it unethical exploitation for an employer to pay employees with a fee-laden payroll card over other more convenient forms of payment? Does the fee structure of payment networks such as Visa and MasterCard unfairly exploit merchants? The bitcoin payment system is an ethical as well as technological evolution as it was designed to be an electronic payment system that does not rely upon trust.

III. DATA ANALYSIS AND INTERPRETATION

TABLE NO. 1

Table Showing Gender-Wise classification of respondents

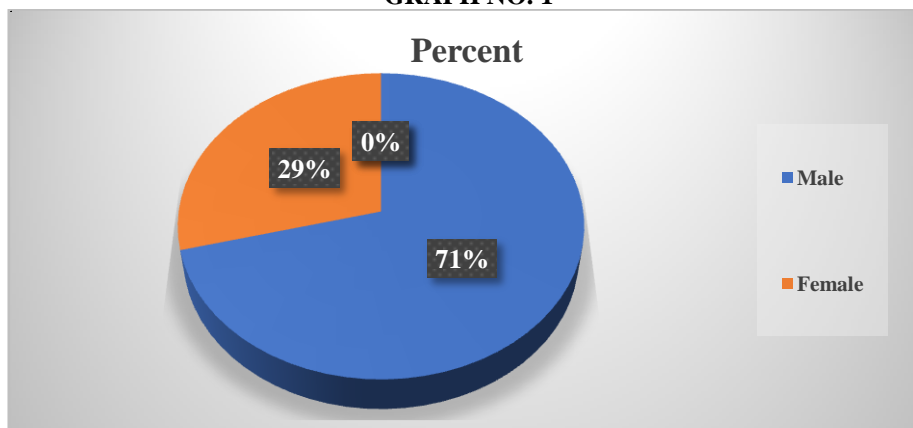
GENDER	NO OF MEMBERS	% OF MEMBERS
MALE	142	71
FEMALE	58	29
TOTAL	200	100

(Source: Primary Data)

Analysis: Here the number of respondents were 200 in total. Out of which 142 respondents were male and 58 respondents were female. Under this study 71 percent of the respondents are male

and remaining percent of respondents are female. This is to elicit opinion from both male and female on Bitcoins.

GRAPH NO. 1



Interpretation: Gender classification under the study helps to muster the variety of opinion both from male and female. Sometime opinion may

agree or sometime difference of opinion can be listed out based on the gender classification of respondent.

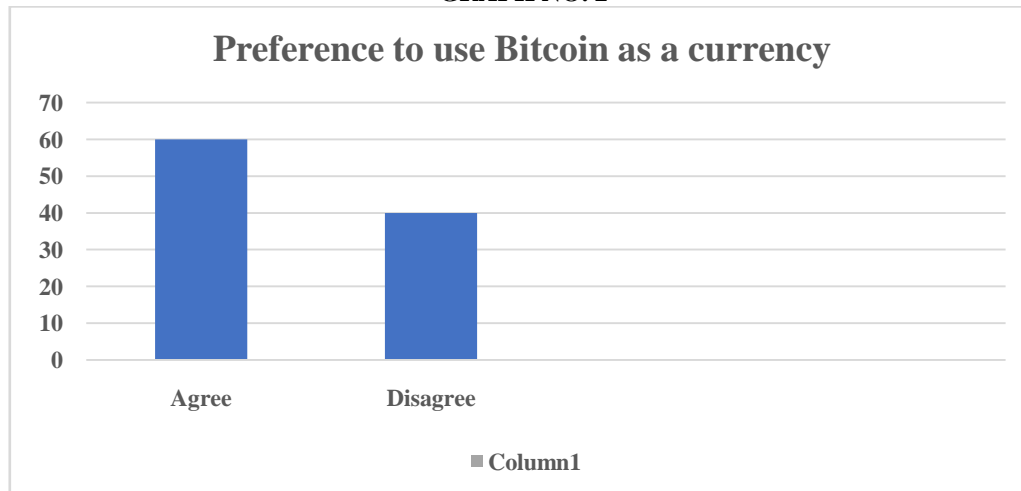
TABLE NO. 2

PREFERENCE TO USE BITCOIN AS A CURRENCY		
SCALE	RESPONSES	
	NO OF RESPONDETS	% OF RESPONDENTS
AGREE	120	60
DISAGREE	80	40
TOTAL	200	100

(Source: Primary Data)

Analysis: The table no. 2 shows that out of 100% sample respondents, 60 % of respondents are ready to use Bitcoins as a currency and preferring to adopt using bitcoin as a medium of exchange and the rest 40% of respondents are not ready to adopt bitcoin as a currency for usage.

GRAPH NO. 2



Interpretation: According to the above graph it is clear that majority of sample respondents i.e., 60% are ready to welcome the change of digital economy and agreeing to prefer bitcoins to use as a

currency in India and the rest of 40% of respondents are not ready to accept the bitcoins as a medium of exchange. Overall people of India are willing to change for the virtual currency adoption.

TABLE NO. 3

Demonetization Led To Positive Impact On Bitcoins Trade Hike In Bangalore		
Scale	Responses	
	No of Respondents	% of Respondents
Strongly agree	66	33
Agree	60	30
Neutral	58	29
Disagree	4	2
Strongly disagree	12	6
Total	200	100

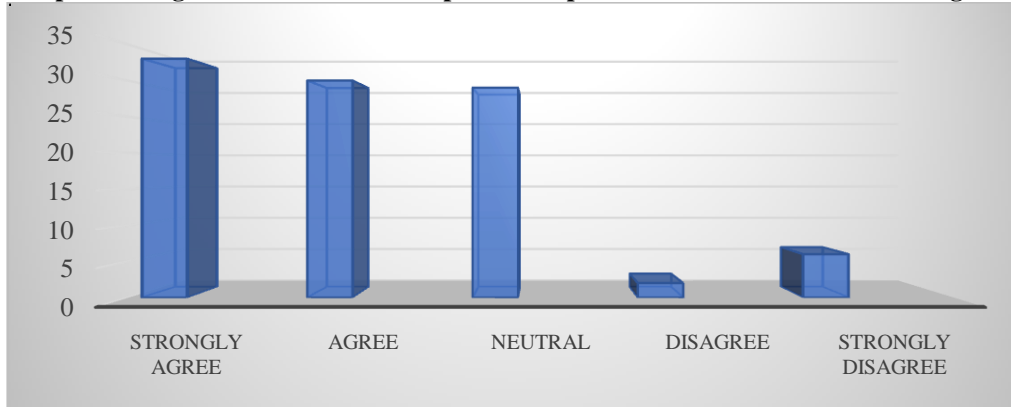
(Source: Primary Data)

Analysis: According to survey, 33% of the respondents have agreed strongly to the statement that demonetization led to positive impact on substantial increase in Bitcoins trade. 30% of respondents just agree it and the 29% respondents

are in a dilemma to decide for the statement. Whereas 2% of respondents, states that they do not agree to the statement and 6% respondents strongly disagree to the statement. The survey proves post demonetization bitcoins trade hike.

GRAPH NO. 3

Graph showing demonetization led to positive impact on bitcoins trade hike in Bangalore



Interpretation: From the above graph 33% respondents strongly agree to the statement saying that demonetization led to the positive impact in the bitcoins trade and even 30% respondents agreed to

the statement feeling it's true. Demonetization led to the surge in the prices of bitcoins and the value proliferated to its double and people rushed to exchange their notes into bitcoins.

TABLE NO. 4

Response towards facing threat for using bitcoins as not yet approved by the Government

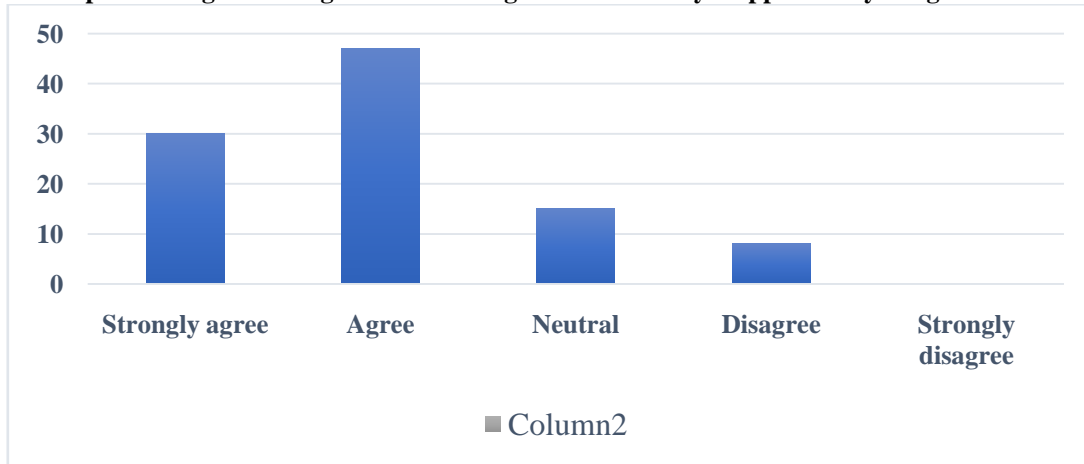
Scale	Responses	
	No of Respondents	% of Respondents
Strongly agree	60	30
Agree	94	47
Neutral	30	15
Disagree	16	8
Strongly disagree	0	0
Total	200	100

(Source: Primary Data)

Analysis: The above table points that, governments non-approval is one of the threat for the bitcoins users is the statement where 30% respondents strongly agree, 47% respondents just agree for the statement.

GRAPH NO. 4

Graph showing the facing threat for using bitcoins as not yet approved by the government



Interpretation: This graph clears that predominantly respondents perceive facing challenges as bitcoin not yet got approved by the government. Various governments have been skeptical over bitcoin usage as they have no control

over it. Ending years of wait and watch policy, the government is set to take steps soon to regulate the use of virtual currency. The panel of government authority went on discussion to approve bitcoins trade in India.

TABLE NO. 5

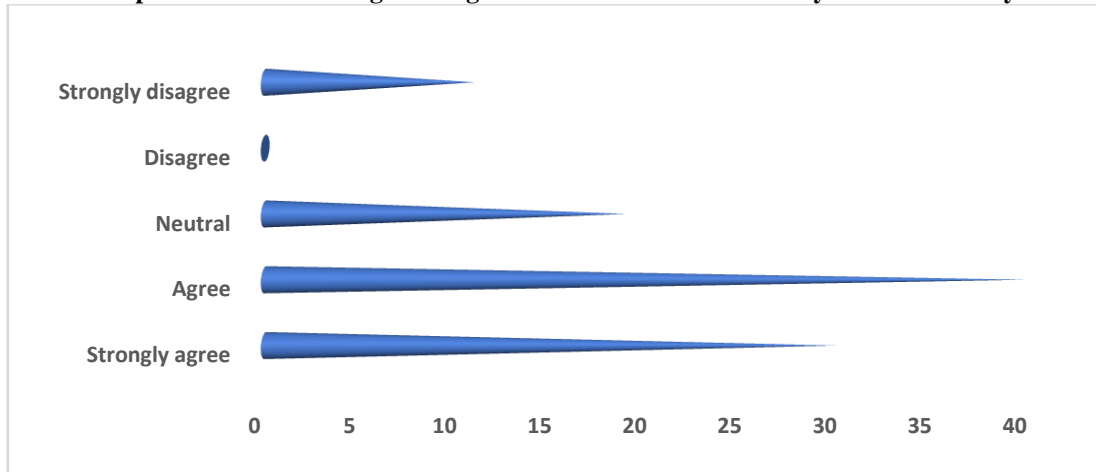
Responses towards willingness to get involved with bitcoins safely & successfully		
Scale	Responses	
	No of Responses	% of Responses
Strongly agree	60	30
Agree	80	40
Neutral	38	19
Disagree	0	0
Strongly disagree	22	11
Total	200	100

(Source: Primary Data)

Analysis: 30% of the respondents agrees strongly for the statement that willingness to get involved safely and successfully with bitcoins, 40% of respondents merely agree to the statement, 19% stated it neutral for the statement

who are in a dilemma to decide for its. Whereas 11% of the respondents strongly disagreed for the statement of safe and successful involvement with bitcoins.

GRAPH NO. 5
Response towards willingness to get involved with bitcoins safely and successfully



Interpretation: 40% respondents stated agreeing with the statement and needs to have a willingness to go involved safely & successfully with bitcoin.

This depicts the zeal towards the security levels required by the respondents for using Bitcoins.

TABLE NO. 6

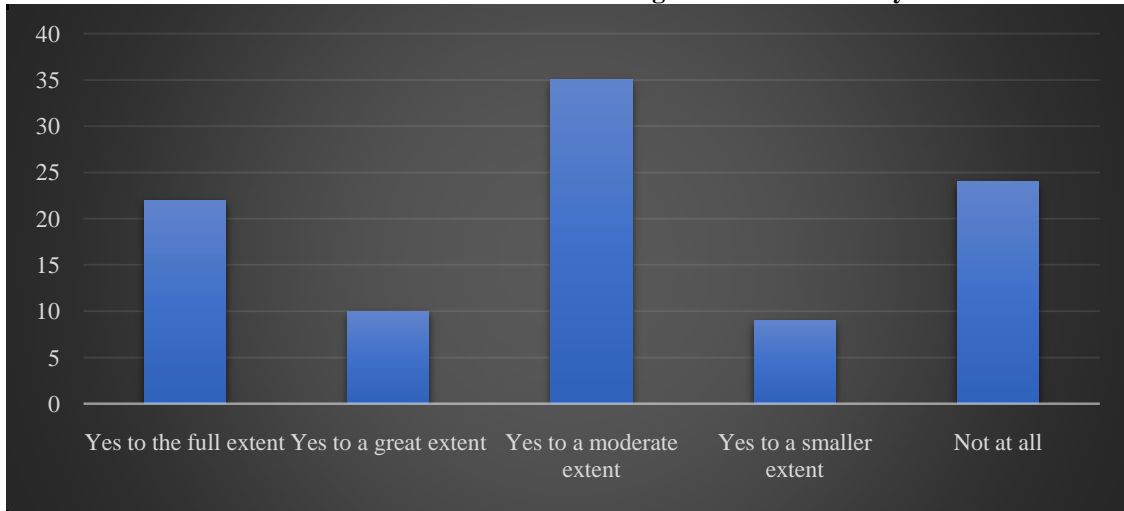
Response for bitcoins usage as advantageous for Indian economy		
Scale	Responses	
	No of respondents	% of respondents
Yes to the full extent	44	22
Yes to a great extent	20	10
Yes to a moderate extent	70	35
Yes to a smaller extent	18	9
Not at all	48	24
Total	200	100

(Source: Primary Data)

Analysis: Table no. 6 view that, 35% respondents agree to a moderate extent for the statement of utilizing bitcoins is advantage to the Indian economy, 24% respondents' feels it is not at all advantageous one. 22% respondents feel the

statement is agreeable to the full extent, 10% respondents felt it is a merit to a great extent. However, the 9% respondents say it is agreeable only to a small extent.

GRAPH NO. 6
Utilization of bitcoins will be advantage for Indian economy



Interpretation: As bitcoins are like baby in the cradle for developing country like India as compared with that of other developed countries where virtual currencies are recognized and regulated. Most of the respondents felt it might not

be an advantage to the Indian economy. As most of the people are still unaware about emergence itself so the survey indicates at present they do not know its significance.

TABLE NO.7

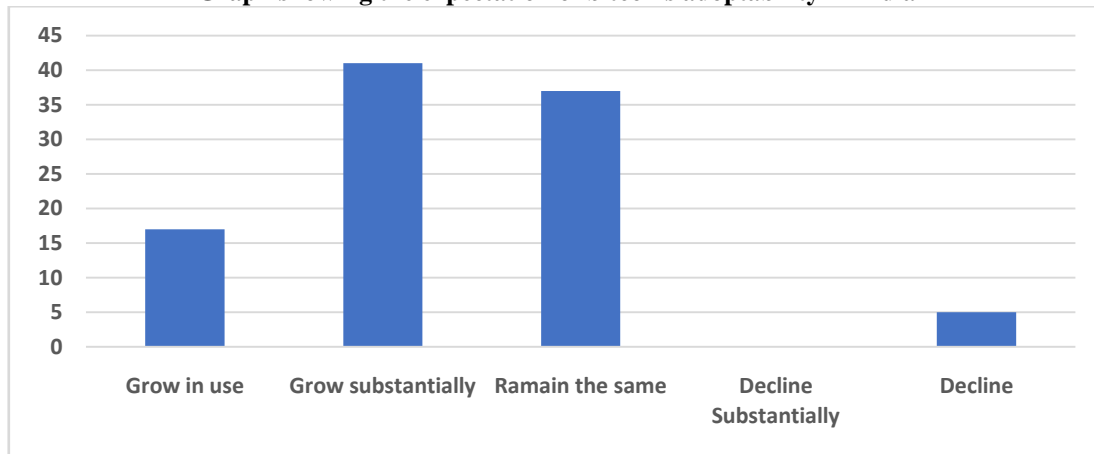
Expectation of bitcoins adoptability in India will		
Scale	Responses	
	No of respondents	% of respondents
Grow in use	34	17
Grow substantially	82	41
Remain the same	74	37
Decline substantially	0	0
Decline	10	5
Total	200	100

(Source: Primary Data)

Analysis: The table no. 7 indicates that, 17% respondents felt that bitcoins adoptability in India will grow in use, 41% respondents thinks its adoptability will grow substantially, 37%

respondents felt that its adoptability will remain the same to that of now and the left out 5% respondent mentioned its adoptability in next 5 years will completely decline.

GRAPH NO. 7
Graph showing the expectation of bitcoins adoptability in India



Interpretation: To have a complete adoptability it is up to the government and RBI to lead the way by bringing forward-looking regulations for virtual currencies sooner rather than later, because there is already much catching-up to do. If the Indian government is serious about its cashless drive, it will have to consider virtual currencies are an integral part of the panacea being touted for our archaic economy. With this step it can be expected to grow the adoptability among the Indians.

IV. FINDINGS:

- Bitcoins has started penetration in India in recent days when compared to other developed countries such as US & UK. The digital currency started to step its footprints in developing countries to some extent i.e., India. People here and there are aware about the virtual currency especially Bitcoins.
- Although Indians are willing to accept first cryptocurrency which is of peer-to-peer approach, but not ready to replace the present conventional currency wholly due to various reasons.
- Demonetization led to a positive impact of proliferation of value of its multiple. Thus, the change resulted in e-wallet transaction and other major alternatives of digital currency which are popping in India.
- Though the RBI's move towards regulating the Bitcoins, but it's not of immediate step. Still it has shy-away approach to regulate and recognize the bitcoins in India.
- Bitcoins value getting snow-balled after the demonetization in India. In near future its adoptability might grow which majorly depend upon the governments regulatory measures undertaken.

V. CONCLUSION:

Growing Bitcoins market in India is gaining much of popularity among Indians. General public are just merely aware about the virtual currencies but they lack in understanding of Bitcoins which is seen as of a biggest road blocks for its wider spread all over the nation. The development of bitcoin is on complying with regulation of bitcoins by the central bank and the keen interest among the public. The progression of bitcoin would revamp and enhance the globalism, security, democracy, virtual approach. Among all the different digital currencies in this space, bitcoin is inarguably the most successful currency to hit the market and to create a disruptive new economy. Bitcoin has forced the world to stand up and take notice. Bitcoin grasped the attention of regulatory bodies and financial institutions due to its huge potential to become a new prominent financial payment mechanism. But after demonetization people started to rush towards exchanging their old notes into bitcoins, with that great move by the government it even impacted on bitcoins market and its value burgeon with that of earlier.

Finally, I would like to conclude that bitcoin is reaching a financial maturity phase. It is growing from a merely internet phenomena to a recognized carrier of value for the real economy. Due to the nature of bitcoins network, it will be nearly impossible to shut down this payment system in future.

REFERENCES:

- [1]. Finney, H., 2004. RPOW—Reusable Proofs of Work, s.l.: s.n. Retrieved from <http://cryptome.org/rpow.htm>

- [2]. Hileman, G., 2014. From bitcoin to the Brixton pound: history and prospects for alternative currencies (poster abstract). In: Böhme, R., Brenner, M., Moore, T., Smith, M. (Eds.), Springer, Berlin pp 163–165.
- [3]. Kaplanov, N.M., 2012. Nerdy money: bitcoin, the private digital currency, and the case against its regulation. Retrieved from <http://ssrn.com/abstract/42115203>.
- [4]. LocalBitcoins, 2014. Buy and sell bitcoins near you. Retrieved from <https://localbitcoins.com/>.
- [5]. Matonis, J., 2013. Bitcoin gaining market-based legitimacy as XBT. Retrieved from CoinDesk: <http://www.coindesk.com/bitcoin-gaining-market-based-legitimacy-xbt/>.
- [6]. May, T., 1992. The Crypto Anarchist Manifesto. s.l.: s.n. Retrieved from <http://www.activism.net/cypherpunk/crypto-anarchy.html> (accessed 25.01.15).
- [7]. Nakamoto, S., 2008. Bitcoin: a peer-to-peer electronic cash system. Retrieved from <https://bitcoin.org/bitcoin.pdf>.

WEBSITES:

- [8]. <https://bitcoin.org/en/faq>
- [9]. <https://www.investopedia.com/terms/b/bitcoin.asp>
- [10]. <http://howtobuybitcoins.info>
- [11]. <https://play.google.com/store/apps/details?id=piuk.blockchain.android>
- [12]. <https://news.bitcoin.com/indian-cryptocurrency-regulation/>
- [13]. <https://en.wikipedia.org/wiki/Bitcoin>



**International Journal of Advances in
Engineering and Management**

ISSN: 2395-5252



IJAEM

Volume: 02

Issue: 01

DOI: 10.35629/5252

www.ijaem.net

Email id: ijaem.paper@gmail.com