International Journal of Management, IT & Engineering
Vol. 9 Issue 6, June 2019,
ISSN: 2249-0558 Impact Factor: 7.119
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

HYPE AROUND BITCOIN: AWARENESS AND PROSPECTIVE IN INDIA

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Abstract

After demonetization, the emphasis was given on cashless economy by the Government of India. Keeping in view the concept of cashless economy, importance of Crypto currency can not be denied. Crypto currency (CC) is a virtual currency and it works as a medium of exchange by using cryptography for security. It comprises diverse currencies such as Bitcoin (BTC), Ethereum (ETH), Ripple (XRP), Litecoin (LTC), Cardano (ADA), Neo (NEO), Stellar Lumens (XLM) and so on. Many countries like Canada, Australia, Bulgaria, Chile, Denmark, Estonia, Finland, Germany and Luxembourg have adopted Bitcoin in order to moving towards a digital eco-system. The research was conducted to find out the awareness, perception and understanding about the functioning of bitcoin among individuals. This paper is all about awareness of bitcoin amongst Individuals and prospective if allowed by the Government of India.

Keywords: Crypto currency, Demonetization, Bitcoin, Economy and Virtual currency.

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Introduction

Bitcoin is the most functional currency as it is first decentralized currency and easy in transaction. It was launched by a person or cluster known under the alias, Satoshi Nakamoto in 2009. It is open-source software whereas one and all can participate individually. There is no requirement of central authority or administrator as it uses peer to peer technology. As of December 2018, there were 17 millions bitcoins in circulation which have global value amounted to approximately 10.1 trillion U.S. dollars. Also bitcoin index value amounted to 3,689.56 U.S. dollars and there was 4036 Bitcoin ATM worldwide at the end of December 2018.

Objectives of the study:-

1. To know about knowledge of bitcoin among individuals.
2. To identify the key factors which are indispensable for the adoption of bitcoin in India.
3. To find out the preference of the people for the transactions such as payment of bills, investment, transfer funds etc. via Bitcoins.
4. To evaluate the factors which influence buying decision of bitcoin.

Literature Review

B Eshwari, Ahamed Adeeba (2018), found in their study, which is empirical, on "A Study on Perception of Bitcoin and Their Awareness and Impact among investors in Asset Management Company With Reference To Bangalore City" that investors are aware about Bitcoin of Asset Management Company. All the investors' perceptions towards Bitcoin are more focusing on better returns which will be the reason to overcome other investment avenues in future and higher bracket investors are more focusing in investing on Bitcoin rather compared lesser bracket group. Also all the investors prefer Bitcoin to be regulated by regulatory body in India.

Mehrotra Anmol and R M Vanishree (2018), conducted a study on "A Study to Understand the Awareness about Bitcoins among the Youth Population in Bangalore". They researchers concluded that Bitcoin does have some scope in markets like India and it can be used in the future. For now, to use Bitcoins, India first needs to make sure that people do understand the basics of how digital currencies work and how they can use Bitcoins. It was also showed that there is very little correlation between Age and the knowledge of cryptocurrencies which means

that age is not a barrier when it comes to understanding. They also found little correlation between Gender and the knowledge of cryptocurrencies which again means that there's no big connection between both.

Sharma Kapil, Gupta Harshita et.al (2017) conducted exploratory research on "Role of Bit coin in Indian Economy-A brief study". They focused on the Bitcoin adoption in India and mentions brief information on the Bitcoin crypto currency, the scope of the adoption of Bitcoin in the country and some challenges to Bitcoin adoption concerning Rupee exchange as well as security and privacy concerns. They also discussed the issues on both sides of bitcoin mainly in interest of financial organizations and economists with a prospective transformation, with an application of advanced technology, and revolution with a digital currency.

Mittal Alka (2017), analyzed in the study on "An Analytical Study Of Present Position Of Bitcoins", the Indian Tax and legal considerations regarding Bit coins, the problems and risks related with Bitcoins such as Cyber Attacks and Hacking, Price Fluctuation and Inflation, Fraud, Uncertainties in the Government Policies, and risks related with Bitcoins such as Money Laundering, Drug Trafficking, Tax Avoidance and Evasion and Terrorist Financing.

Pandey Kumar Pramod (2017), discussed in his study on "Bitcoin" As Emerging Virtual Currency and Its Related Impact on India, that Bitcoins may have generated handsome returns but at the same time it has high risk with uncertain future. It is still in infancy stage and a long way to go before it matures. He also showed the comparative performance evaluation of Bitcoin from 2013 to 2017. Further since Bitcoin is not backed by anything (Kevin Dowd and Martin Hutchinson, 2015) and as such extra precaution is needed till it occupies legal status and proper regulations are prescribed regarding its operations and control. The greatest challenge for regulators will be whether to classify Bitcoin as currency or commodity.

Tamradaman Akshaya and Nagpure Sangeeta (2017), discussed about the problems in their study on "Bitcoin in India" , which can be foresee is the pace of change in regulations; change in regulation usually takes a route of develop, propose and adopt which generally takes a period. Regulations or regulatory changes typically evolve at a slower pace than innovation thereby

killing it by declaring it illegitimate. Also as its not been governed by a central authority Bitcoin tends to fluctuate widely and to be used globally its volatility needs to settle down.

Research Methodology

Research design:

This study is descriptive in nature. The questionnaire, comprised of 20 statements, was sent to respondents through online by Google forms. Likert 5 point scale was used to know the knowledge and opinion of people about the bitcoin. The collected data was analyzed through SPSS to test the hypothesis and present the conclusion.

Hypothesis:

H1o: There is no significant difference between male and female regarding the knowledge of bitcoin.

H1a: There is a significant difference between male and female regarding the knowledge of bitcoin.

H2o: There is no significance in the key factors for adoption of bitcoin in India with regard to people having different occupation.

H2a: There is significance in the key factors for adoption of bitcoin in India with regard to people having different occupation.

H3o: There is no significant difference in the opinion of buying bitcoin by people belonging to different age groups.

H3a: There is a significant difference in the opinion of buying bitcoin in people belonging to different age groups.

H4o: There is no significant difference in educational qualification with regard to preference of usage of bitcoin

H4a: There is a significant difference in educational qualification with regard to preference of usage of bitcoin

Method of data collection

The present study is based on both primary data and secondary data. The primary data was collected from 53 respondents through the google questionnaire and secondary data was collected from magazines, online journals and internet**.** Also respondents were categorized on the basis of their gender, age, occupation and qualification For this study, **purposive sampling** method is adopted as it emphasis on specific features of a population that are of interest, which help to get the appropriate answers of the questionnaire.

Tools for Data Analysis: (SPSS 21.0 used for analysis of the data.)

- Mean
- Frequency Table
- t-test
- ANOVA (Analysis of Variances)

Limitations of the study: Only few people who have information about bitcoin that is why sample size is only 53. Also some of the respondents did not fill the questionnaire properly which becomes invalid.

Interpretation of outcomes

1. Reliability Analysis: - To check the authenticity of that data on 20 items, Reliability test is applied on **53** respondents.

Table 1:- RELIABILITY TEST

Case Processing Summary

		N	%
Cases	Valid	53	100.0
	Excluded[a]	0	.0
	Total	53	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.918	20

The result represents the Cronbach's Alpha value for 20 items i.e. **.918**. In general, the acceptable alpha ranges from 0.70 to 0.95. It means the reliability of the data is **more than high.**

2. Knowledge of people about bitcoin: - To know the significant difference between male and female regarding the knowledge of bitcoin, t-test is applied.

TABLE 2: Knowledge of bitcoin between male and female

Variables	Gender	Mean	N	D.F	t-value	Sig(2 –tailed)	Significant or Not
Easy to use	Male	3.88	40	51	1.313	.195	Not Significant
	Female	3.46	13				
No third party required	Male	3.58	40	51	.795	.430	Not Significant
	Female	3.31	13				
Low transaction fees	Male	3.48	40	51	-.431	.668	Not Significant
	Female	3.62	13				
International payment speedy	Male	4.15	40	51	1.393	.185	Not Significant
	Female	3.62	13				
Irreversible transactions	Male	3.65	40	51	1.473	.147	Not Significant
	Female	3.15	13				
Accept by few merchants	Male	3.55	40	51	.905	.370	Not Significant
	Female	3.23	13				
Highly Volatile	Male	4.18	40	51	1.116	.270	Not Significant
	Female	3.85	13				

The above table 2 shows the results of t- test which indicates that the P value of all the variables is more than 0.05 at 5% significance level. Hence the null hypothesis is accepted that means there is no significant difference between male and female regarding knowledge of bitcoin. All possess similar information related to bitcoin.

3. Essential key factors required for adoption of bitcoin in India: - To know the significant difference among the essential key factors for adoption of bitcoin in India with respect to people who belongs to different occupation, ANOVA is applied.

TABLE 3: ANOVA for significant difference among essential key factors for adoption of bitcoin in India with respect to people belonging to different occupation

Key Factors		**Sum of Squares**	**Df**	**Mean Square**	**F**	**P Value**	**Significant or not**
Price stability would be important factor for adoption of bitcoin in India	Between Groups	7.907	3	2.636	2.382	.081	Not Significant
	Within Groups	54.207	49	1.106			
	Total	62.113	52				
Awareness of bitcoin should be increased	Between Groups	5.511	3	1.837	2.334	.085	Not Significant
	Within Groups	38.564	49	.787			
	Total	44.075	52				
Bitcoin should be a part of curriculum	Between Groups	9.983	3	3.328	3.538	.021*	**Significant**
	Within Groups	46.092	49	.941			
	Total	56.075	52				
Government should add bitcoin in legislation to accept it in India	Between Groups	10.922	3	3.641	5.381	.003*	**Significant**
	Within Groups	33.153	49	.677			
	Total	44.075	52				

* Significant at 5% level

The above table 3 reveals that P value of stability of bitcoin price (.081) and awareness of bitcoin (.085) are more than 0.05, it means that there is no significant difference in both the factors. While the P value of bitcoin should be a part of curriculum (.021) and government should add bitcoin in legislation (.003) are less than 0.05 which indicates that there is a significant difference in the bitcoin should be a part of curriculum and it should be added in legislation in respect to people belonging to different occupation .

To know further which group has highest difference among the groups, t-test is calculated.

i. Bitcoin should be part of curriculum

Table 3.1 Calculation of t- value within groups

Groups	**t- value**	**Level of significance at 5%**	**Significant or not**
Business to Salaried	0.2864	2.056	Not Significant
Business to Professional	0.2906	2.306	Not Significant
Business to Others	1.909	2.045	Not Significant
Salaried to Professional	.2339	2.086	Not Significant
Salaried to Others	**2.854**	**2.018**	**Significant**
Professional to Others	.6349	2.069	Not Significant

In among 6 groups, value of t is found significant in only one group i.e. Salaried to Others. It signifies that there is highest difference in Salaried to Others group about the bitcoin should be a part of curriculum.

ii. Government should add bitcoin in legislation to accept it in India

Table 3.2Calculation of t- value within groups

Groups	**t- value**	**Level of significance at 5%**	**Significant or not**
Business to Salaried	.8183	2.056	Not Significant
Business to Professional	1.0315	2.306	Not Significant
Business to Others	1.990	2.045	Not Significant
Salaried to Professional	.4740	2.086	Not Significant
Salaried to Others	**2.8434**	**2.018**	**Significant**
Professional to Others	**4.5624**	**2.069**	**Significant**

In among 6 groups, the values of t of two groups are seen significant which indicates that these groups have more difference in the area of Salaried to Others and Professional to Others. The group which has high mean value is considered as the group having highest difference. The mean values of the areas are Salaried (3.9), Professional (4) and Others (4.61). It means Professional to Others have higher mean value as compared to Salaried to Others, So there is highest difference lies in Professional to Others group in regards to that government should add bitcoin in legislation for the acceptance of it in India.

4. Factors influence the people to buy bitcoin: - To identify the significant difference for the buying views of people about bitcoin who belongs to different age groups, ANOVA is applied.

Table 4: ANOVA for significant difference among age groups with respect to buying views of people about bitcoin

Key Factors		**Sum of Squares**	**Df**	**Mean Square**	**F**	**P Value**	**Significant or not**
Availability of Bitcoin	Between Groups	14.303	3	4.768	5.091	0.004*	**Significant**
	Within Groups	45.885	49	.936			
	Total	60.189	52				
Security	Between Groups	7.121	3	2.374	1.907	0.141	Not Significant
	Within Groups	60.993	49	1.245			
	Total	68.113	52				
Government Regulations	Between Groups	6.608	3	2.203	1.671	0.185	Not Significant
	Within Groups	64.600	49	1.318			
	Total	71.208	52				

* Significant at 5% level

The result of table 4 represents that there is no significant difference between security and government regulations in relation to their age groups as the P value of both the factors are more than 0.05. It means null hypothesis is accepted at 5 percent level of significance with regard to security and government regulations. While P value is less than 0.05 in the area of availability of bitcoin which reveals that availability of bitcoin encourages people of different age groups to purchase it. In order to know which group has highest difference in the area of availability of bitcoin, t-test is calculated.

Table 4.1 Calculation of t-value within groups (in the area of availability of bitcoin)

Groups	**t- value**	**Level of significance at 5%**	**Significant or not**
18-24 years and 24-34 years	1.556	2.015	Not Significant

18-24 years and 35-44 years	**2.580**	**2.032**	**Significant**
18-24 years and 45 years & above	**2.3029**	**2.037**	**Significant**
24-34 years and 35-44 years	1.7844	2.120	Not Significant
24-34 years and 45 years & above	1.2910	2.131	Not Significant
35-44 years and 45 years & above	.4956	2.571	Not Significant

In among 6 groups, the value of t of two groups are seen significant which denotes that there is more difference between these groups in their ages i.e. 18-24 years to 35-44 years and 18-24 years to 45 years & above. The group which has high mean value is considered as the group having highest difference. The mean values of the age groups are 18-24 years (3.97), 35-44 years (2.25) and 45 years & above (2.67). It clearly indicates that 18-24 years and 45 years & above has higher mean value as compared to 18-24 years and 35-44 years. It describes that availability of bitcoin encourages the people more who belong to 18-24 years and 45 years & above.

5. Preference of people in order to usage of bitcoin: - To recognize the significant difference among the preference of people regarding usage of bitcoin with their educational qualification. To analyse it, ANOVA is applied.

Table 5: ANOVA for significant difference among educational qualification with respect to preference of people in order to usage of bitcoin

Preferences		**Sum of Squares**	**Df**	**Mean Square**	**F**	**P Value**	**Significant or not**
To trading of bitcoin	Between Groups	2.926	2	1.463	1.758	.183	Not Significant
	Within Groups	41.602	50	.832			
	Total	44.528	52				
To make online	Between Groups	4.505	2	2.252	1.779	.179	Not

payments	Within Groups	63.307	50	1.266			Significant
	Total	67.811	52				
To transfer the funds globally	Between Groups	.831	2	.415	.434	.651	Not Significant
	Within Groups	47.886	50	.958			
	Total	48.717	52				

The result of Table 5 demonstrates that P value is more than 0.05, it means null hypothesis is accepted at 5 percent level of significance and hence it is concluded that there is no significant difference between educational qualifications with respect to bitcoin trading (0.183), online payment (0.179) and transfer the funds globally (0.651). In other words, qualifications of people show no difference in the preferences while using of bitcoin.

6. Government's concern of citizen viewpoint regarding bitcoin: To analyze the results that government will consider or not the citizens' attitude in order to draft the legislation policy related to bitcoin, the frequency table is framed by the researchers according to the answers of the people which is stated below.

Table 6: Viewpoints of citizens

	Frequency	**Percentage**	**Cumulative Percent**
Strongly Disagree	2	3.8	3.8
Disagree	2	3.8	7.5
Neutral	9	17.0	24.5
Agree	19	35.8	60.4
Strongly Agree	21	39.6	100.0
Total	53	100.0	

The table 6 clarifies that majority people (75.4%) want that government should consider their viewpoints while drafting legislation policy related to bitcoin. Only 7.6% people do not agree with this statement, while remaining 17% are neutral.

Conclusion and Findings

Every currency contains its pros and cons. Bitcoin is a virtual currency which is accepted by many countries but Indian government has banned this currency. The study reveals that male and female both are familiar with this currency and have basic information related to bitcoin such as low transaction fees, easy to use, make international payment speedy, no requirement of third party, highly volatile, irreversible transaction, etc. The awareness of bitcoin is not related to individual's occupation. According to them, it should be part of curriculum so that awareness can be increased and individual can take advantage to enhance their knowledge. Also it should be added in legislation. Furthermore 75.4% people want that government should consider their viewpoints while drafting legislation policy related to bitcoin.

Government regulations and security do not have any repercussion on the people, even though they belong to different age; availability of bitcoin encourages people to buy it especially those who are between the age of 18 to 24 years and 45 years & above. Also qualification of people does not modify their preferences like bitcoin trading, online payment and transfer the funds globally.

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