

A STUDY ON GOING CASHLESS WITH CRYPTOCURRENCY IN INDIA AND ITS IMPACT IN BANKING INDUSTRY

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Abstract: India is a developing country and one such development is transforming to be a Digital India. With the announcement of demonetisation in 2016, India took a huge step of transforming to Cashless Economy. The idea of transforming into digitalization was to eliminate black money in the country. Banking system has faced a major change in this transformation by introducing Net Banking, Mobile Banking. Being the industry with the most leading financial sector of the country and one of the most important reasons for economic development, with the innovation of certain digital currencies the banks was not satisfied. One of the digital transformations is the evolution of Crypto currency. Cryptocurrency is a digital or virtual currency which is moulded to use as a medium of exchange used by a strong cryptography (used for solving codes) to secure financial transactions and verify the transfer of assets. They are considered to be one such future development of Block chain technology. But the awareness regarding to cryptocurrencies is not appreciated. The Banking sector is opposing to investment or transactions with cryptocurrencies as the banks do not earn much profits with the innovation of cryptocurrency. The objective of the study is (i) To assess the level of awareness among the investors on investment in crypto currency (ii) To suggest measures on bringing new form of crypto currencies for progressing towards a cashless society

Keywords: Digital India, Block Chain Technology, Cryptography, financial transactions

1. Introduction

India's one kind of development was the announcement of Demonetisation to evade black currency and to make every citizens of the country by paying regular taxes. Thus, Digital India movement was initiated in order to make the society a Cashless society. Through Digital movement, many Banks, Corporate companies, Educational institutions and many other profit making organisations started with the usage on online transactions.

Through the adoption of digitalization in banking sector, it has helped them in converting data into digital format and also

provides enhanced customer services and helps in saving time. Many banks introduced Mobile banking applications as they could make digital payments easy and customer could track their investments. Google Pay, UPI and many more of these applications were made in support of this banking system to make payments and transactions in much easier way. Many public and private sector banks have linked themselves with certain applications for easy transactions and to track proper transactions.

With more usage of digitalization, Artificial Intelligence was introduced to make more technology prone and easier for working environment. Through AI, banks introduced many facilities like robots, Chat – bots and many virtual currencies. One such virtual currency was Crypto currency.

1.1 Crypto Currency

Crypto currency is a digital based function that allows secure payments through online in terms of virtual 'tokens' represented by ledger entries to the system. It is a digital money created from code and operates as a medium of exchange. The first ever crypto currency was Bitcoin invented by Satoshi nakamoto in 2009. This invention was not to create a currency but for a decentralized cash system. Satoshi wanted to invent this as this could help payment network with account, balances and transactions. But this invention is not been encouraged by many as it involves a lot of illegal activities like tax evasion and money laundering. This technology is been welcomed with advantages, disadvantages and criticisms by many. Indian banks are not comfortable in introducing crypto currencies in India and has always been a debate to encourage these virtual currencies or not.

2. Review Of Literature

Singh Aarti and Nidhi Chawla (2016) in their study titled **Review on Strategies for growing E commerce in India**, predicted that emerging new technologies, awareness regarding new technology and frauds, Reduced search and transaction cost, Reduced lead-time and faster time to market, Increased customer service, Improved convenience and shopping experience, Increased information transparency, Knowledge generation, Novel products and services will be the trends that will be followed in crypto currency

Dr. Alka Mittal.(2017) on his study titled “**An analytical study of present position of bitcoins.**” focuses on merchants and traders who accept this digital currency as a medium of exchange to overcome its problem of volatility. This will boost the market of Bitcoins not only in India but also in other developing economies. This emphasizes that to survive in the system; Bitcoin has to adapt itself to the required technical and operational innovations. In addition to this, government should impose proper legal framework, to protect the consumers or users of these digital currencies, as the progress seen in the transactions in this currency during the past few months is tremendous.

Dr. Anita Sharma (2018) in their study titled “**Crypto currency: Evolution, Impacts and Future in India**” focuses on the introduction of Crptocurrency and its impacts at the present. The study clearly states the positive and the negative sides of the virtual currency and has predicted the future of crypto currency in India. This emphasis encourage individuals to earn profits and make more investments. The legal position of crypto currency in India is neither accepted nor denied.

C.V Smalley (2017) on article **Crypto currency and taxes** explains about the workings of Crypto currency and the process to transact the currency with the miners, traders and investors involved. It also clearly specifies about trading with crypto currency as a Taxable event but converting cash to virtual currency to be Money Laundering.The article also mentioned the IRS notice about the recommendations on updating the guidance for requirements and its tax treatments.

Xin Li and Chong Alex Wang (2017) in their study titled “**The technology and economic determinants of crypto currency exchange rates: The case of Bitcoin**” details on one particular crypto currency, Bitcoin. The study explains on Bitcoin exchange rates against USD, its technology and economic factors. It has also analyzed that the bitcoin exchange rates has adjusted to economic fundamentals and market conditions and also identified the significant impact of mining technology and difficulty in Bitcoin exchange price determination.

3. Research Methodology

3.1 Research Design

The study prefers to use Descriptive Research design to project the insights of cashless economy and crypto currencies

3.2 Sources of Data

Primary and secondary data are to be used in the study. The primary data is to be tested through a structured questionnaire, Secondary data is obtained from internet websites and links, Journals to develop an insight into research problem.

3.3 Sampling Method

The study has preferred to use Convenience Sampling Technique.

3.4 Sample Size

Sample is a subset of population which meets the inclusion criteria for participation in the study. The study has collected response from 91 respondents.

4. Analysis And Interpretation

The study has used percentage analysis and Chi-square for interpretation of results.

Hypotheses 4.1 Ho: There is no association between Gender and the opinion to divide the crypto currencies according to locations for the purpose of creating awareness

H1: There is an association between Gender and the opinion to divide the crypto currencies

according to locations for the purpose of creating awareness

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Do you think currencies should get divided by Geographical locations?	91	100.0%	0	0.0%	91	100.0%

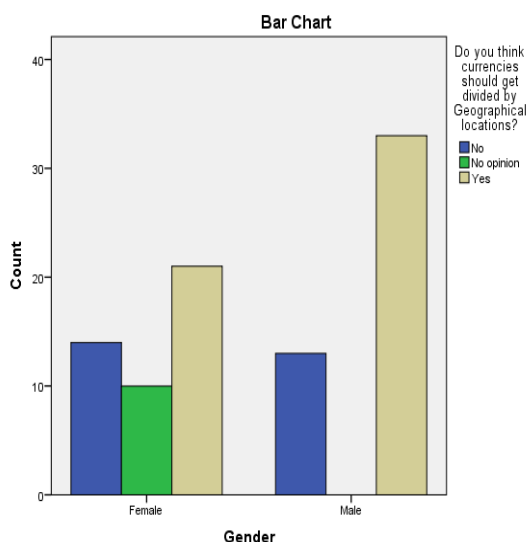
H1: There is an association between Gender and the opinion to divide the crypto currencies

according to locations for the purpose of creating awareness

			Do you think currencies should get divided by Geographical locations?			Total
			No	No opinion	Yes	
Gender	Female	Count	14	10	21	45
		Expected Count	13.4	4.9	26.7	45.0
	Male	Count	13	0	33	46
		Expected Count	13.6	5.1	27.3	46.0
Total	Count	27	10	54	91	
	Expected Count	27.0	10.0	54.0	91.0	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.694 ^a	2	.002
Likelihood Ratio	16.578	2	.000
N of Valid Cases	91		

Opinion on division of currencies according to Geographical Locations



Decision: The calculated Pearson Chi-square value is 12.694 and the corresponding p-value is 0.002 which is less than 0.05. Hence the Ho is rejected.

Conclusion: There is an association between Gender and the opinion to divide the crypto currencies according to locations for the purpose of creating awareness

Hypotheses 4.2 Ho: There is no association between Gender and level of trust in crypto currency technology.

H1: There is an association between Gender and level of trust in crypto currency technology .

Table 4.4 Gender and level of trust in technology

		No	No opinion	Yes	Total	
Gender	Female	Count	20	10	15	45
		Expected Count	20.8	5.4	18.8	45.0
	Male	Count	22	1	23	46
		Expected Count	21.2	5.6	19.2	46.0
Total		Count	42	11	38	91
		Expected Count	42	11.0	38.0	91.0

Table 4.5 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.438 ^a	3	.010
Likelihood Ratio	13.406	3	.004
N of Valid Cases	91		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .99.

Decision: The calculated Pearson Chi-square value is 11.438 and the corresponding p-value is 0.010 which is less than 0.05. Hence the Ho is rejected.

Conclusion: There is an association between Gender and level of trust in crypto currency technology.

5. Findings

- Out of 91 respondents, 49.5% of respondents were female and 50.5% were male respondents.
- Relating to the nature of work, 14.3% of respondents work for Public sector, 35.2% of respondents work for Private sector, 16.5% are self-employed and 34.1% belong to employees other than public, private and self-employed category.
- Among the respondents participated in the survey, 48.4% are of the age group of 20-30 and 29.7% are in the age group of 30-40.
- 42% of the respondents have an understanding of crypto currency.
- 79% of respondents are of the view that the authorities should involve in monetary policy regulation prior to inception of various types of crypto currency.
- 59.3% of respondents are of the opinion that currency should be divided by Geographical locations
- 70% of respondents stated that crypto currency should be regulated by public authorities.
- Only 40% of the respondent are willing to invest in crypto currency.
- Speculation and intention in faster multiplication of money had made respondents to invest in crypto currency
- 32% of the respondents consider extreme volatility as a main constraint to invest in crypto currency
- 40% of the respondents are of the view that bitcoin will be a predominant currency in a couple of years.
- 55% of the respondents are of the view that bitcoin will be a predominant currency in a decade.
- 43% of the respondents has a trust on the technology of the crypto currency
- 52% of the respondents are of the view that crypto currencies will be an acceptable mode of currency in the day to day transactions of individuals.
- 64% are of the view that the currencies should be regulated by authorities to protect theft and loss
- 36% of the respondents consider bitcoin as a currency.

6. Suggestions

- Measures should be taken through awareness programs to facilitate investment in crypto currency
- Regulatory measures and conditions should be in an understandable manner to promote and create a path for investment in crypto currency
- Security and trust factors should be strengthened with the help of banks and regulatory authorities to create

confidence in the minds of investors to invest in crypto currencies

- Complexities should be simplified and more literacy level will have to be increased to enhance awareness.
- Investment and use relating to crypto currency(purchase and sale) should be made easy to facilitate the use of currency in day to day transactions
- Protection aspect should be strengthened to prevent theft and loss.
- Steps should be taken to make bitcoin as a currency first and as an asset in subsequent stages.

7. Conclusion

From India's perspective, an important point is to introduce virtual currency. This further brings focus on a big question that why can't India not regulate these currencies similar to other countries by amending taxation laws, Foreign Exchange Management Act (FEMA), etc, and also appointing an authority like RBI or (Securities and Exchange Board of India) SEBI over this business, as just the introduction of digital rupee does not guarantee that there will be no frauds or laundering. The future of crypto currency lies totally in the hands of legislature, whether to ban the currency or not. Apart from this, a decision to be taken for the way forward is the introduction of digital rupee or to regularize the sector. This is the need of the hour to make it a viable opportunity for investors and consumers.

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