An Analysis on the Awareness & Insight of Cryptocurrency

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ABSTRACT

Cryptocurrency being a digital currency is formed with the aim of transaction as a traditional currency. It uses Cryptography and Block chain technology to watch its exchanges and limit the assembly of a selected kind of cryptocurrency and keep track of every and each transaction in whole network. The Cryptocurrency laden with newest age technologies and a large market presence everywhere the globe, but still, even after a decade of its existence, it's not attained a longtime image as a replacement age currency system among majority of the countries within the world and other people are still skeptical about its worth. It's almost a decade that Cryptocurrencies are existing all told over world but still its status has not been identified as whether it'll ever attain the particular currency status or it'll remain as an element of investment portfolio. to grasp the notice and perception level of cryptocurrency, Primary data via sample survey is taken & the study has been administered.

Keywords: *Cryptocurrency, Bitcoin, Digital currency, Economy, Exchanges, Investment, Modern investing*

INTRODUCTION

Bitcoin is that the first decentralized digital currency introduced by an unknown person named Satoshi Nakamoto (Nakamoto, 2008). That paper published by Satoshi Nakamoto was revolutionary and began the new era of completely decentralized cryptocurrency in 2009. The identity of the individual or societies behind the creation or starting the Bitcoin network remains unknown. After its inception, the responsibility of developing its code and network is being taken by a thriving group of volunteers. The network of Bitcoin isn't controlled by a person or authority including Satoshi Nakamoto (Antonopoulos, 2017).

WHAT IS CRYPTO CURRENCY?

Cryptocurrency is that the completely decentralized payment system employing a well-defined network (not only internet). it's a pool of technical concepts that form the premise of digital payment ecosystem. This pool of technology mainly includes cryptography, public key, private key, the blockchain, function. The cryptocurrency (like Bitcoin, Ethereum, Ripple, EOS, Litecoin etc.) accustomed transfer value among its users primarily via the net, however other transference networks can even be used. the full ecosystem of cryptocurrency is developed within the open source environment. These open source programs are often run and maintained on a good type of computer and mobile devices (Antonopoulos, 2017).

DIFFERENT TYPES OF CRYPTOCURRENCY

In all over the globe, there are many cryptocurrencies available till date and also the number is growing every passing day. a number of the various cryptocurrencies are explained as follow:

- **Bitcoins** could be a reasonably digital currency where cryptography rules are accustomed control and generate the unit of currency. Bitcoin comes under umbrella of cryptocurrency and it had been the primary and most beneficial among

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knowns cryptocurrency. this is often also called decentralized digital currency.

- **Litecoins** is additionally a style of cryptocurrency, this is often called peer-to-peer cryptocurrency. It is available as an open-source software project; it had been released under the MIT/X11 license just in case of Litecoin the creation and transfer of coins follows open source cryptography protocol and algorithm. By technical comparison litecoin is sort of clone of bitcoin. The minor difference is processing speed of network in both the cases. In Litecoin network speed is quicker than bitcoin. Also the algorithm employed in litecoin is different than bitcoin.
- **Ethereum** is an open source software platform which uses blockchain technology. This open source one can accustomed build and deploy decentralize applications. kind of like Bitcoin, Ethereum is additionally distributed to public to use as a blockchain network. The most important difference between Bitcoin and Ethereum is that the way blockchain application platform is employed in both the cases. The Bitcoin work for one particular application where peer to see transaction happen and just for bitcoins but just in case of Ethereum the blockchain technology/ platform may be used for any decentralized application.
- **Namecoin** is additionally falls under cryptocurrency preview and this can be an experimental open source where it uses technology which might improve the safety, the way decentralization occur and might also control the speed of internet for a few of the network infrastructure. It uses key/value pair registration and follows the bitcoin technology for transfer system.
- **Ripple** is well-known for digital payment system instead of for cryptocurrency. Ripple functions on peer to see decentralize platform and it too uses the open source technology. It allows flawless money transfer independent of kind of currency like bitcoin, litecoin, Yen and USD.

TERMS IN CRYPTOCURRENCY ECOSYSTEM

- **Public Key and personal Key:** Public key with a mathematic algorithm is employed to encrypt the message and personal key with a mathematic algorithm are to decrypt the message.
- **Cryptography:** In simple words, it's a way of sending a message securely through unsecure channel i.e. when the communicating channel is controlled by the third party. Using the elliptic curves and their properties and a mathematical trick the message is coded in such the way in order that it may well be decoded by the receiver using the private key. The sender is additionally recognized and can't deny its responsibility
- **Cryptocurrency network:** Cryptocurrency is using Peer to peer (P2P) specification. which means anyone can participate within the network and people who participate within the network is peers to every other. In cryptocurrency P2P network all the system is equal and there's no server no hierarchy, all the nods are connected employing a mesh network with a flat topology. (Nakamoto, 2008).
- A full node possesses (i) network rooting (ii) wallet (iii) full blockchain and (iv) mining (Antonopoulos, 2017). Other than crypto, another popular example of a P2P network is Bit Torrent file-sharing network.
- **Blockchain**: we can consider blockchain as decentralized and distributed open ledger where all the transactions are stored during a block. So fully blockchain database all the transaction from the start is on the market and open for all. Anyone can look at the transaction but cannot alter/modify it. This blockchain model has inbuilt immune to change and if anyone wants to hack the database then, in this case, she/ he needs to hack over 50% of the node that's unimaginable. Because the identical database is offered in every full cryptocurrency node and every one participate within the validation process (Armstrong, 2016).
- **Mining:** Validating the transaction is termed mining within the world of virtual currency or cryptocurrency, during this validation process, one or more computer jointly may take participation. The validation process uses a fancy mathematical algorithm that become more complex because the new member joins the network and validation process. during this process of mining, the participant gets the transaction fee as a present. In another case during this mining process the participant release new unit of cryptocurrency as receive it as an award.

REVIEW OF LITERATURE

1. **Akshay A. et. al (2017)-** "A Study On Security Issues in Investments and Transactions in Bitcoins and Cryptocurrencies" Authors have focused on the unique feature of Bitcoin as a Cryptocurrency and core security issues related with the transaction and investment of Bitcoins. The security of the Bitcoins is the core area of research. As its origin is mainly technology based but it is still vulnerable during transaction process. The security issue is not related only to the mining and transaction of Bitcoins but its online storage also poses major security threat. Paper also pointed out the other risks associated with Bitcoins like no regulation regarding its transaction in India.
2. **Everett J. et. all (2020) -** "Risks and Vulnerabilities of Virtual Currency- Cryptocurrency as a Payment Method" In this paper, authors have explored the risks and challenges for the use of cryptocurrencies as an alternative to traditional currencies for illicit users, consumers, the official sector, and Financial institutions. The occurrence of cryptocurrencies as a new method of payment has broaden the usage for all the sectors.
3. **Jeffrey Mazer et. Al (2017) –** "Demystifying Cryptocurrencies, Blockchain, and ICOs" Author is a Freelancer Financial Expert in USA. In this article he has explained each and every concept related with Cryptocurrency like what is cryptocurrency technology used in Cryptocurrency like Blockchain and cryptography. How transaction process takes place in cryptocurrency through blockchain system, how miners complete the process of transactions. He has also explained the various kinds of cryptocurrencies and market capitalization of Bitcoins and other altcoins along with Initial Coin Offering (ICOs). He has also discussed the issues related with cryptocurrencies all across the world and also discussed about its regulation by Governmental agencies across the globe.
4. **Christian Catalini (2016)** - "Blockchain, explained" In this Blog (MIT Digital), the author has explained in detail about the Blockchain Technology and its origin linked with the origin of cryptocurrency. He has emphasized that blockchain technology has provided the basic inherent values to Cryptocurrency like low cost of verification and networking, privacy and security etc. He has predicted that the blockchain technology will be booming all over the globe in coming decade.
5. **World Crypto Index:** This platform is available online which provides all the basic as well as extensive knowledge about cryptocurrency and daily updates of the Cryptocurrency. It also keeps track records of cryptocurrency market where all the cryptocurrencies are being traded. The cryptography technology is very well explained here and how this technology makes cryptocurrencies the most secure form of transaction system all across globe. Further, it has been explained that how Cryptography technology can change the future of Central Banking and Financial Institutions Safety and Security system.
6. **Sudhir Khatwani (Coin Sutra) (2016) –** "Future of Bitcoin and other Cryptocurrencies in India after RBI's Ban" In this article, it has been discussed that what is the scenario of Bitcoins and other Cryptocurrencies in Indian Market after the RBI's ban of transaction of these virtual currencies in INR (Fiat money) through its own entities like banks and other Financial institutions. Author has also emphasized on the innovative technology used in Cryptocurrency, i.e. Block chain which is going to be the new Dot Com Boom in the world in coming decade and by banning the Cryptocurrency in India, the millennial investors and technocrats will miss a chance to establish themselves in this Field. He has suggested that, though the case is pending in Supreme Court, the RBI will mend his stand on the cryptocurrency and try to regularize it as investment purpose for diversified Financial asset category to minimize its illegal trading in the black market.
7. **PeterDe DeVries (2016)–** "An Analysis of Cryptocurrency, Bitcoin and the Future" In this research paper, author has done the SWOT Analysis of Bitcoins along with the other Cryptocurrency and has given conclusion on its future perspective. The Strength of the bitcoins

lies within its design and limited number of its production which will never face inflation pressure. The Weakness of the Bitcoins, again lies in its transaction process where each and every transaction is visible to all public ledger chains which can be susceptible for some cyber-attacks and thefts. The Opportunity can be observed through, by extending the innovative technologies involved in Cryptocurrency like Cryptography and Block chain to current Banking and Financial System which can be made more secure and decentralized system.

THE PROBLEM OF THE STUDY

The Cryptocurrencies can be utilized just like our traditional currency for transaction purpose but still the Regulatory Authority as well as Government are skeptical about its use. It's almost a decade that Cryptocurrencies are existing all over world but still its status has not been determined as whether it will ever be like actual currency status or it will forever remain as investment tool. People are also not aware about the worth of cryptocurrency and mostly they perceive it as illegal means.

OBJECTIVES OF THE STUDY

The objective of this paper is to search out the precise status of the cryptocurrency within the light of legislation and literature review. This paper is trying to search out how much aware this generation is with the cryptocurrency and what is there perception towards the crypto market. We aim,

1. To study the awareness and insight of cryptocurrency.
2. To determine the willingness of people to choose Cryptocurrency as an investment tool.
3. To study the future prospect of cryptocurrency in India through people's perception.

SCOPE OF THE STUDY

As Cryptocurrency is a digital currency which has not been perceived as legal means of transaction for day to day activities till now in majority of the countries in the world. In India too, it has not been taken positively by the Government or Regulatory Authority, as currently RBI has issued notice to ban any transaction related to Cryptocurrency through any bank in the country. So AN ANALYSIS ON THE AWARENESS & INSIGHT OF CRYPTOCURRENCY will give some insight on how people have perceived its presence in our own country. The data represents the population of various category of people of our country. So this study will reflect the overall perception of Indian people. The samples under study were employed people in various public/private/educational institutions, Business community, unemployed categories and students. As survey was done through Google Survey Form, so it was restricted to the people who have online connectivity.

METHODOLOGY

The Research Design is primarily based on Exploratory Research method which involves qualitative investigation. Primary Data collection - Survey Method based on questionnaire is used for collection of data. The choices in each question is either multiple choice. Responses are collected through Google Survey Form, to measure the awareness and insight of cryptocurrency. Questionnaire is prepared keeping in mind to cover maximum things like male, female, age group starting from 18 years and above, working, business people, students etc. variety of annual income groups have been taken into account. The two variables which were under study have been measured accurately through tables and graphs and results have been interpreted. On the basis of results and interpretations, findings, conclusion and suggestions have been given. Along with Primary Data, Secondary Data is also being collected for the study of general growth trend among Cryptocurrency market in India and the world. The secondary data are mainly collected through online platforms like websites, blogs, articles etc. The data have also been collected from books, journals, newspaper etc.

SOURCES OF DATA

The data collected through Primary data which was collected for the first time through Survey Method (Exploratory Research) and Secondary sources which were already available through books, websites, journals, articles etc. were collected to understand the actual understanding of people towards Cryptocurrency at local and global level.

Limitations of the Study There are few limitations in the study like

1. As the sampling taken were convenience sampling, so it might not necessarily be the representation of the actual population of the country.
2. As the survey was circulated through Google Survey Forms, which require internet connection. So, this study is limited to the internet users only.
3. Some of the respondents of sampling units filled the survey without any interest and knowledge, which lead to sampling error to some extent.
4. Cryptocurrency is a global product, but this study is mainly based on the people who were in my contact, so it will not give clear picture of its adoption at larger platform as people really want to have this as currency or investment tool.

Learning Outcomes by carrying out this project, I learned many different things like

- Concepts related to the cryptocurrency and different technologies involved in it.
- All the issues linked with cryptocurrency in domestic and global context.
- The industry performance of cryptocurrency across the globe.
- The views of people and government regulatory agencies towards cryptocurrency at national and international level.
- Simultaneously I learned how to do a research analysis through survey method.
- Learnt the basic tools like creating Google Survey Forms, use of MS Excel as a tool in research study etc.

RESULT, ANALYSIS & DISCUSSION

The data analysis includes the processing of all the data collected through survey in form questionnaire, to convert it some usable form, so that required information can be extracted and conclusion can be drawn from that information. The data collected through primary data sources (questionnaire survey method) were tabulated and calculated in percentage form. Analysis were done on the basis of tabulated data. The further analysis of data was done either through bar graph (2D diagram) or Pie Chart and interpretations were carried out on the basis of those graphs. As the questionnaire consisted of 14 questions and had multiple choice questions so, accordingly tables have been created and graphs were plotted. On the basis of Tables and Graphs, the data has been analyzed and interpreted.

Data Analysis of all the questions of the questionnaire are given below:

Table 1.1 Shows number of respondents on the basis of Gender.

S. No	Response	No. of Response	% of response
1	Male	63	63%
2	Female	37	37%
3	Prefer not to say	0	0
Total		100	100

Analysis: Among all the respondents 63 are male and 37 are female.

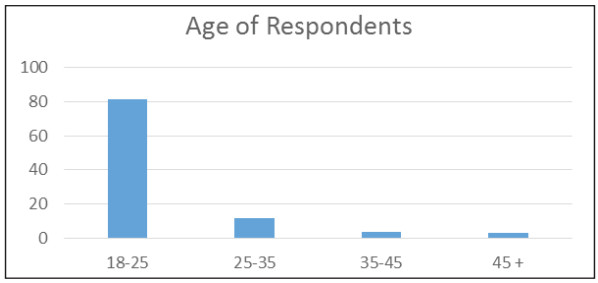

Fig. 1.2: Shows Number of Respondents on the Basis of Age Category.

Interpretation: Among all 100 respondents, 81 belong to the age category of 18-25 years, 12 belong to the 25-35 years' age category, 4 belong to the 35-45 years of age category and only 3 belong to the above 45 years.

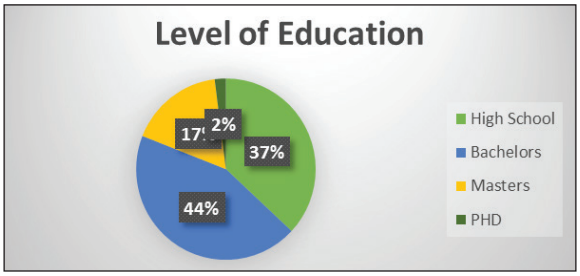

Fig. 1.3 Shows the level of education of the respondents

Interpretation: Among all 100 respondents, 37 respondents have High School as Educational Qualification, 44 respondents have Bachelor Degree and 17 respondents have Master Degree as their Educational Qualification and only 2 are PHD Qualified.

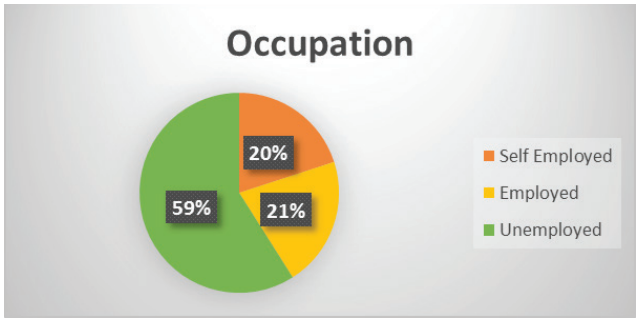

Fig. 1.4 Shows number of respondents on the basis of their Occupation.

Interpretation: Among all respondents, 20 are self-employed, 21 respondents are employed in various sectors, and 59 are unemployed.

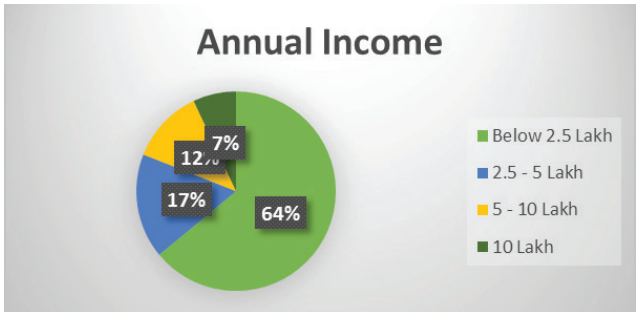

Fig. 1.5 Shows number of respondents on the basis of their annual income.

Interpretation: From the above graph, it can be observed that among all 100 respondents, 7% earn above 10 lakhs, 12% fall under 5-10 lakhs, 17% are in between 2.5-5 lakh and 64% are below 2.5Lakh.

Fig. 1.6 Shows number of responses on the basis of question "Do you think You are financially aware regarding your understanding of banking, finance and investment"?

Interpretation: From above graph, it can be observed that, among all respondents 47% are aware about their finances & investments, 23% respondents are not aware and rest 30% are not sure about it.

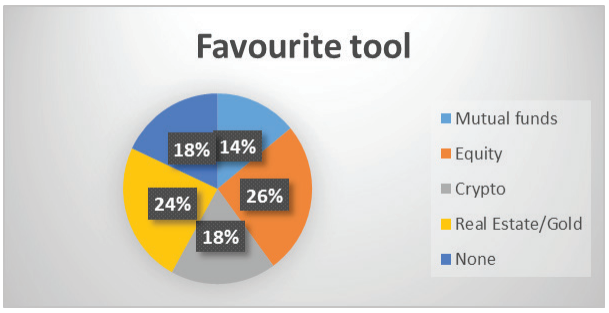

Fig. 1.7 Shows number of respondents on the basis of their favorites Investment tool

Interpretation: From the above Graph, it can be observed that 14% respondents have responded for Mutual Funds as their preferred investment then 26% as Equity, 18% in crypto, 24% in Real Estate/ Gold, and 18% have chosen None option, here choice is clearly Real estate or gold as preferred investment tool.

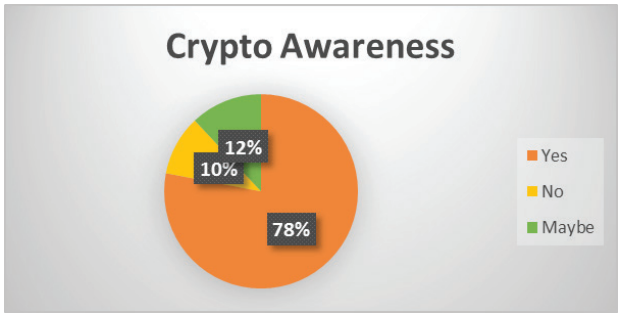

Fig. 1.8 Shows number of respondents on the basis of their Awareness of Cryptocurrency

Interpretation: From the above Graph, it is observed that 78% respondents are aware of Cryptocurrency, 10% do not know about it and 12% are not sure about Cryptocurrency.

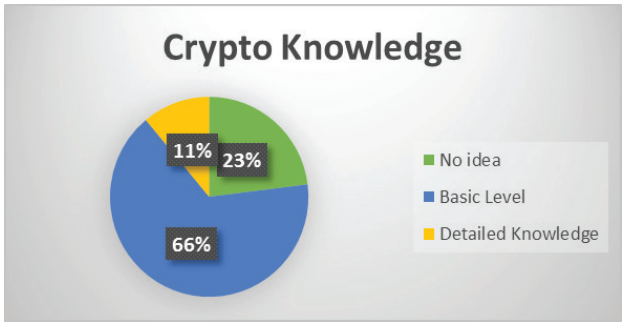

Fig. 1.9 Shows number of respondents on the basis of their knowledge of Cryptocurrency

Interpretation: From the above Table and Graph, it is observed that 23% respondents have no idea about Cryptocurrency, 66% respondents know about its basic framework and 11 are well knowledgeable in Cryptocurrency.

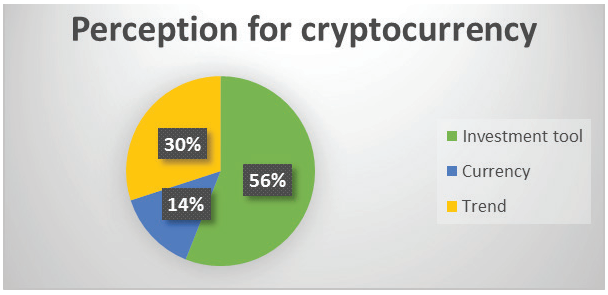

Fig. 1.10: Shows number of respondents on the basis of their preference to choose Cryptocurrency as.

Interpretation: From the above chart, it is observed that 14% of respondents want to see Cryptocurrency as Currency, 30% see it as a trend and rest 56% are in favor of Investment tool.

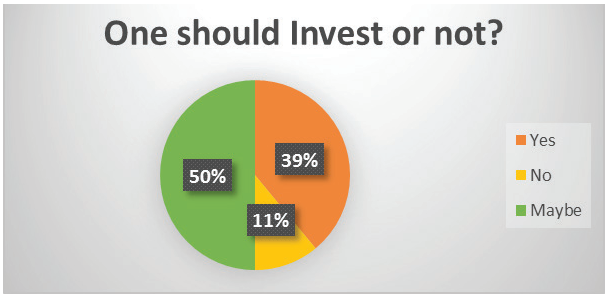

Fig. 1.11 Shows number of respondents on the basis of their choice whether to invest in Cryptocurrency or not.

Interpretation: From the above Pie chart, it can be observed that 39% respondents are agree to invest in Cryptocurrency, 11% respondents are not in favor of investment in Cryptocurrency and 50% are not sure about it.

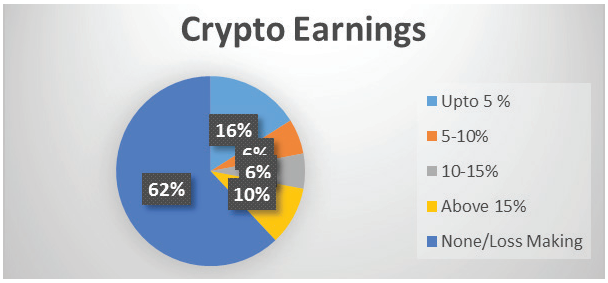

Fig. 1.12: Shows number of respondents on the basis of their Return on Investment in Cryptocurrency.

Interpretation: From the above chart, it is observed that 5% respondents got less than 16% of return on investment in cryptocurrency, 6% got in between the range of 5-10% of return and 6% got 10% - 15% of return on investment in Cryptocurrency, 10% earned above 15%. However, 62% of the respondents suffered with losses or no profits.

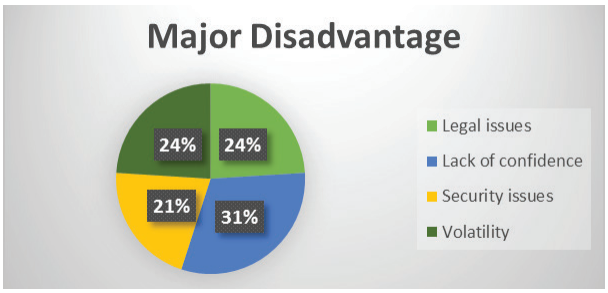

Fig. 1.13 Shows number of respondents on the basis of their indifference towards Cryptocurrency.

Interpretation: From the above Chart, it is observed that 24% respondents have shown their disinterest towards Cryptocurrency due to legal issues, 31% have shown their lack of confidence in Cryptocurrency, 21% see security reasons as their lack of interest towards cryptocurrency and 24% sought the reason of disinterest as volatile nature of Cryptocurrency.

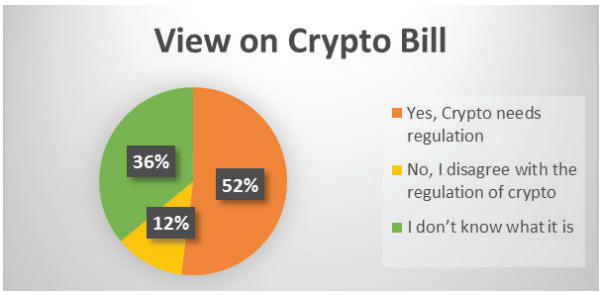

Fig. 1.14 Shows number of respondents on the basis of their view on regulation of Cryptocurrency / Crypto Bill

Interpretation: From the above chart, it is observed that, the Government of India and other Regulatory Authorities of India should regularize it or not, so for this 52% have shown their strong agreement, 12% have shown disagreement, 36% are in no opinion category.

KEY FINDINGS, SUGGESTION, CONCLUSION

FINDINGS OF THE STUDY

From the Data Analysis and Data Interpretation, following findings have emerged:

1. Majority of the respondents are Male.
2. Most of the respondents fall in the age category of 18-25 years.
3. Majority of the respondents are having Bachelor degree as their highest level of education.
4. Most of the respondents are in unemployed category.
5. Most of the respondents earn less than 2.5 lakhs of Annual Income.
6. Among all respondents, majority of the respondents are well aware about their finance, banking and investment area.
7. Equity investments are the most favorites investment tool for majority of the respondents followed by Gold/Real Estate.
8. Around 78% of the respondents are aware about the Cryptocurrency.
9. Almost 66% of the respondents have an idea about Cryptocurrency. Very limited number of respondents have extensive knowledge of Cryptocurrency.
10. Majority of the respondents feel that Cryptocurrency should be regularized as Investment tool.
11. Half of the respondents are not sure to invest in Cryptocurrency and rest 11% are not sure about it. Only 39% are ready to invest in cryptocurrency.
12. Among the respondents, those who have already invested in Cryptocurrency, majority have earned nothing or have suffered losses.
13. Those respondents who have not shown interest in Cryptocurrency have sought the reason as 'Lack of Confidence in Cryptocurrency' followed by volatility and legal issues.
14. Almost half of the respondents are in view that Government of India should regularize the use of Cryptocurrency.

CONCLUSION

From the findings, it can be concluded that people in general are aware of the Cryptocurrency and they would like to see it as part of their investment portfolio as it provides good return. But they are not willing to invest in Cryptocurrency due to lack of regulation from Government and regulatory authorities. If Government of India and its regulatory authorities will come forward to regulate its use and transaction in financial market, it can play a major role in entire investment portfolio.

As it is well known that Cryptocurrency is the product of all new age innovative technologies, and many countries of the world have already regulated its use in day to day business and many countries are coming forward to regulate its transaction in financial market. So, Indian Government and its regulatory authority should come forward and take steps to regulate the transactions of Cryptocurrency as investment option.

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